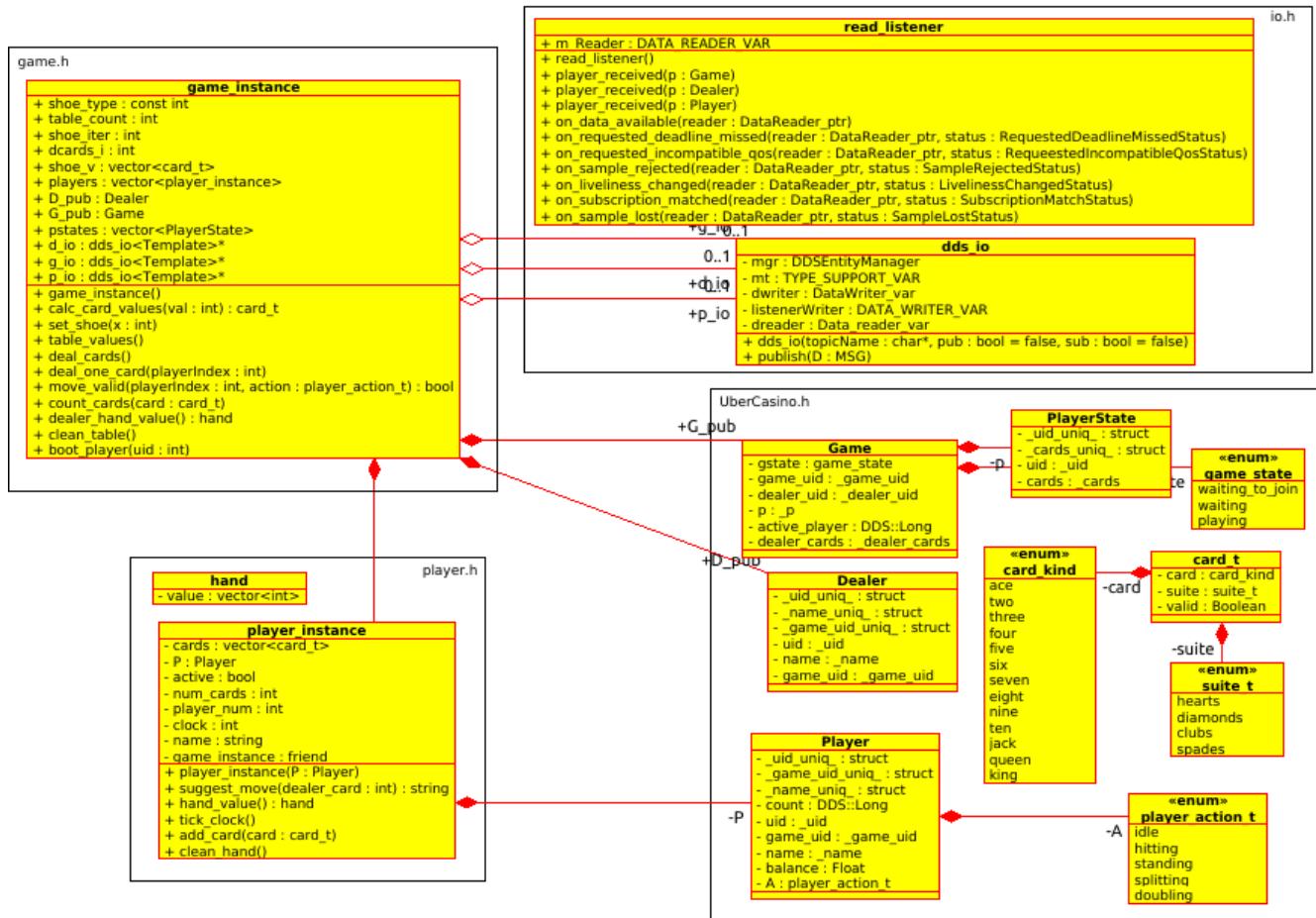


Team 3
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Design and Implementation

Class Diagram



Code Descriptions

player.h – “player.h” is the header file that contains our `player_instance` class as well as a structure called `hand` which will be explained below.

hand – `hand` is a structure that holds a vector of integers. This vector contains the possible hand values of a player, due to the fact that an ace can be a 1 or an 11, you can have multiple values per hand. This vector is in a structure for naming purposes, to make it easier for the programmer to interpret.

player_instance – This class contains all the necessary information for our players as well as functions that manipulate the object. This class provides overhead that the idl version of Player did not provide.

-player_instance() - The class constructor takes the player object from the idl file when a new player joins and pulls the data into our player object for manipulation.

-suggest_move() - This function looks at all the cards currently in the dealer and player's hand, and uses the look up table to return the suggested move for that player.

-hand_value() - This takes the cards sitting in the player's hand and returns a hand struct that contains the possible hand values of the player's current cards.

-tick_clock() - Starting with an integer value of 7 this function will decrement that integer until it either reaches 0, which it will then boot the player from the game, or the player makes a move.

-add_card() - Pushes a card onto the player's card vector.

-clean_hand() - At the end of each hand this function is called on every player object. This function removes all the cards from a player's hand and gets it ready for the next deal.

-vector<card_t> cards – This vector holds all the cards that sit in a player's hand at any given point in time.

-Player P – Holds the idl Player object for communication purposes.

-bool active – Tells whether a player is an active participant in the game.

-int player_num – Contains the player's index in relation to the game (i.e. Player 1, Player 2, ...)

-int clock – Stores the player's time to make a move before they get removed from the game.

-string name – Stores the player's name for display purposes on the GUI.

game.h – This header file contains the game_instance class.

game_instance – Similar to the player_instance class, this class holds on the overhead needed to keep track of all users and table information.

-calc_card_value() - Upon receiving an integer value between 1-52, this function determines the suite and value a card and returns a card_t object.

-set_shoe() - When the type of shoe is selected from the open screen, this function will set the shoe type to 8-deck when passed in a 1, and set it to an infinite shoe when passed in a 2.

-table_values() - Gets the hand values of each user including the dealer for display purposes on the GUI.

-deal_cards() - When called this function provides the initial deal of cards to the whole table of active players as well as set the GUI to display cards at the start of every round.

-deal_one_card() - When a player hits and requests a new card from the dealer this function will deal a card to the player at the index passed into it.

-move_valid() - Checks the player at the passed in player index's current cards to see if the move they are trying to make is valid.

-count_cards() - Updates the count on the table every time a card is dealt.

-dealer_hand_value() - returns the hand value of the dealer (i.e. 21)

-clean_table() - When a hand is complete this function gets called to removes all cards from the users and remove gui objects.

-boot_player() - This is called when a players time to make a move has run out and removes that player from the game.

-const int shoe_type – hold the value for the type of shoe that was selected from the open screen. 0 = Test Suite, 1 = 8-Deck Shoe, 2 = Infinite Shoe.

-int table_count – Holds the current card count on the table.

-int shoe_iter – This variable is only used when we have an 8-deck shoe. The way our program is designed is we fill a vector with integer values 1-52, 8 times then shuffle those values. The shoe_iter variable starts at zero and every time a card is dealt, this value is incremented to move through the shoe.

-int dcards_i – Keeps track of the size of the dealer array so that when a new card is dealt we know where in the array to place the card.

-vector<card_t> shoe_v – The vector that holds all the cards in an 8-deck shoe.

-vector<player_instance> players – Holds all the player_instance objects for every player currently in the game.

-Dealer D_pub – Open splice object that is responsible for holding the Dealer's information used for publishing.

-Game G_pub – Open splice object that holds the game information used for publishing.

-vector<PlayerState> pstates – Vector containing the idl states of each player in the game.

-dds_io d_io – dds_io object that sends information about the dealer over open splice.

-dds_io g_io – dds_io object that sends information about the game over open splice.

-dds_io p_io - dds_io object that receives information about the players in the game over open splice.

io.h – Contains all the relevant classes and functions necessary to send and receive information over OpenSplice

read_listener – Receives and pulls information from OpenSplice for use in the game.

-player_received(Game p) – Receives a Game object from OpenSplice

-player_received(Dealer p) – Receives a Dealer object from OpenSplice. Not used in program but added for exemption handling, and to removed compile warnings.

-player_received(Player p) – Receives a Player object from OpenSplice.

Game received_game – Static global variable that holds the game object received from a player program.

bool game_rec – Boolean for if a Game object was received.

bool waiting_f - Global event flag that triggers when the game status changes to waiting and a game is being hosted.

bool playing_f – Global event flag that triggers when the game status changes to playing.

bool action_f – Global event flag for when an action is received and will be set to false until a single action is received from the active player.

vector<Player> *P_rec – Buffer for holding incoming Players objects.

pthread_mutex_t mutex1 – Global mutex variable for accessing P_rec.

Callbacks and global functions in gui.h

update_players_gui() – Updates all the displayable information for the player at the given index.

set_players_gui() – Sets the initial displayable information for the player at the given index.

publish_game() - Sends out the game state over open splice.

itos() – Helper function that takes an integer and returns a string using streams.

play_game() - The main function that allows a game to be played. Responsible for dealing cards to the table and taking in player actions.

wait_for_players() – Once the shoe type has been chosen and the game has transitioned to the game screen, this function will loop and allow players to join and be added to the game.

undisplay_cards() - Resets and hides all the card widgets from the GUI.

display_cards() - Sets the image of the card widget to the dealt card value and displays it to the GUI.

test_suite() - Callback for the “Test shoe” button. Sets the game shoe type and environment

eight_shoe() - Callback for the “8-Deck shoe” button. Sets the game shoe type and environment variables.

infinite_shoe() - Callback for the “Infinite shoe” button. Sets the game shoe type and environment variables.

start_game() - Callback for the “Start game” button. Sets the start_button_clicked variable and calls the play game function

end_game() - Callback for the “End game” button. Exits the program.

next_hand() – Callback for the “deal next hand” button that deals the next hand when clicked.

deal_auto() – Callback for the “deal-auto” button, deals every hand automatically, without intervention from the user.

Requirements

Date Added	Req_ID	Description	Last Modified	Source	F/NF	Mod/Del	Reason for Mod/Del
2/17/18	001	The system will be written in the C++ programming language	2/24/18	From Requirements Doc	NF		
2/17/18	002	The system will use the fltk library for implementation of GUI	2/24/18	From Requirements Doc	NF		
2/17/18	003	This program will cleanly compile with the use of the -Wall flag	2/24/18	From Requirements Doc	NF		
2/17/18	004	The program shall be stable enough to run for at least one full game of blackjack (defined as enough hands to go through an entire 8 deck shoe)	2/24/18	From Requirements Doc	F	MOD	Poor wording, and unclear
2/17/18	005	The program shall use a blackjack strategy look up table to provide move suggestions to the user	2/24/18	From Requirements Doc	NF	MOD	Requirement was too vague and non-specific
2/17/18	006	Each game instance shall allow one to seven players and one dealer to play a game of blackjack	2/24/18	From Requirements Doc	F		
2/17/18	007	The system shall be implemented with 2 separate programs, a Dealer, and a Player	2/24/18	From Requirements Doc	NF	MOD	no more Pit Boss program
2/17/18	008	The communication between programs shall be implemented using the pub/sub middleware package OpenSplice	4/23/18	From Requirements Doc	F	MOD	Re-worded to be more accurate
2/17/18	009	This system shall communicate in accordance with one IDL file used by all instances	2/24/18	From Requirements Doc	F		
2/17/18	010	The Player shall begin the game with a balance of \$500USD to be used for bets	4/23/18	From Requirements Doc	F	DEL	Does not pertain to the system being implemented
2/17/18	011	The Player shall be allowed to play a game until their balance is \$0 or their balance is less than the min bet	4/23/18	Derived from Requirements	F	DEL	Does not pertain to the system being implemented
2/17/18	012	A Player's balance shall not at any point be below \$0, or negative	4/23/18	Derived from Requirements	F	DEL	Does not pertain to the system being implemented

2/17/18	013	The Dealer instance shall support 3 different kinds of shoes: Test, Infinite, and 8 Deck	2/24/18	Derived from Requirements	F		
2/17/18	014	The Test Shoe shall support 10 pre-defined scenarios and will act as a specific test sequence designed for system verification.	2/24/18	Derived from Requirements	F		
2/17/18	015	Each player shall receive the same card in Test mode	2/24/18	Derived from Requirements	F		
2/17/18	016	The Infinite Shoe shall deal cards by selecting a randomly generated number in the range of 1 - 52, and assigning a card value based off of that number	2/24/18	Derived from Requirements	F		
2/17/18	017	The 8-Deck Shoe shall consist of 8 standard, 52 card decks	2/24/18	Derived from Requirements	F		
2/17/18	018	The Dealer GUI shall show the dealer's dealt cards face up and sometimes face down, each player's dealt cards, the point value of each players hand, the current count at the table, and the expected action from each player following basic strategy	4/23/18	Derived from Requirements	F	MOD	
2/17/18	019	The Dealer shall check each player's move before committing it to the game to see if that move is valid	4/23/18	From Requirements Doc	F	MOD	
2/17/18	020	The Dealer shall not allow any Players to split cards unless the two cards being split are of the same card value	4/23/18	Derived	F	DEL	Card splitting no longer needs to be dealt with
2/17/18	021	The Dealer shall not allow the Player to take any further action once they have been dealt a Blackjack	2/24/18	Derived	F		
2/17/18	022	The Player program shall allow 5 strategies of play: Manual, By the Book, Conservative, Reckless, and Card Counting	4/23/18	Derived from Requirements	F	DEL	Does not pertain to the system being implemented
2/17/18	023	Manual strategy for the player shall let the user make all decisions of play via the GUI interactions	4/23/18	Derived from Requirements	F	DEL	Does not pertain to the system being implemented
2/17/18	024	By the Book strategy for the Player shall automatically make decisions and actions in the game for the user following basic blackjack strategy	4/23/18	Derived from Requirements	F	DEL	Does not pertain to the system being implemented
2/17/18	025	Conservative strategy for the Player shall automatically make decisions and actions in the game for the user where it never takes a card when the Player's current hand value is 12 or more, and takes a card otherwise	4/23/18	Derived from Requirements	F	DEL	Does not pertain to the system being implemented
2/17/18	026	Reckless strategy for the Player shall automatically make decisions and actions in the game for the user where it takes a card when the Player's current hand value is 20 or less	4/23/18	Derived from Requirements	F	DEL	Does not pertain to the system being implemented
2/17/18	027	Card Counting Strategy for the Player shall automatically make decisions and actions in the game for the user where a card counting strategy chosen by the specific user is implemented	4/23/18	Derived from Requirements	F	DEL	Does not pertain to the system being implemented
2/17/18	028	The Player GUI shall display the Dealer's cards, the player's cards, and the player's own financial situation	4/23/18	From Requirements	F	DEL	Does not pertain to the system being implemented
2/17/18	029	The minimum table bet allowed to be placed by the Player shall be \$5USD	4/23/18	From Discussion Questions	F	DEL	Does not pertain to the system being implemented
2/17/18	030	The Dealer shall publish the type of shoe being used to all Players at the table	4/28/18	From Discussion Questions	F	DEL	Not possible with current IDL configuration
2/17/18	031	The Player shall display the cards of all other active players, the dealer, as well as their own.	4/23/18	From Discussion Questions	F	DEL	Does not pertain to the system being implemented

2/17/18	032	All instances of the table shall display the current card count of the table.	4/23/18	From Discussion Questions	F	DEL	Duplicate of req 18
2/17/18	033	The balances in the game will be represented in USD.	4/23/18	From Discussion Questions	NF	DEL	Program doesn't deal with player balances
2/17/18	034	The Dealer shall only allow the Player to split cards of the same value a maximum of 2 times per hand.	4/23/18	From Discussion Questions	F	DEL	Splitting is no longer handled
2/17/18	035	The Player shall be allowed to leave the game when a hand is done being dealt.	4/23/18	From Discussion Questions	F	DEL	A player can leave the game at any time but will be removed after 7 seconds
2/17/18	036	The Dealer shall allow the Player currently being dealt a maximum of 7 seconds from the time their turn begins to make a decision before removing them from the game and moving on to the next player.	2/24/18	From Discussion Questions	F		
2/17/18	037	The Player shall place wagers in fixed increments of \$1USD	4/23/18	From Discussion Questions	F	DEL	Does not pertain to the system being implemented
2/17/18	038	The Player shall be allowed to place a wager up to the amount of their current balance.	4/23/18	From Discussion Questions	F	DEL	Does not pertain to the system being implemented
2/17/18	039	The standard 52 card deck shall consist of 4 Suits (Hearts, Clubs, Diamonds, Spades) that will be evenly distributed, and each suit will have one card for each value of 2-10, jack, king, queen, and ace.	2/24/18	From Video	NF		
2/17/18	040	The cards shall be represented in the card_t object, passed over open splice	4/23/18	From Video	NF	MOD	Implementation called for this to change
2/24/18	041	A card's value during the game will be equal to: 2-10 will hold their face value, face cards will be worth 10, and aces will be worth 1 or 11 based on what benefits the Player	2/24/18	From Video	NF		
2/24/18	042	The Dealer shall not allow the Player to change the amount of their initial bet once the hand has been dealt.	4/23/18	From Video	F	DEL	Dealer doesn't deal with player bets
2/24/18	043	The Dealer shall deal 2 cards to each player to start the hand	2/24/18	From Video	F		
2/24/18	044	The Dealer shall deal themselves 1 card face up to be seen by the Players, and 1 card face down	2/24/18	From Video	F		
2/24/18	045	Only the Dealer shall be allowed to change the face up Boolean attribute during a game	4/23/18	Derived	F	DEL	Requirement is weak and does not affect the system at all
2/24/18	046	The game is won by the Player if the combined value of their cards is higher than the combined value of the dealer's cards, given the Players value is not higher than 21 and the Dealer's value has either exceeded 21 or is greater than 16.	2/24/18	Derived	NF		
2/24/18	047	When any player wins, the player shall receive an addition to their balance in the amount equal to their bet, and receive their bet back into their balance excluding when a player wins with Blackjack	4/23/18	Derived	F	DEL	Does not pertain to the system being implemented
2/24/18	048	When the Player receives Blackjack, which is their 2 first cards being valued at 21, they shall receive an addition to their balance in the amount of 150% their bet, as well as their bet back in their balance immediately as long as the Dealer's value is not also 21.	4/23/18	Derived	F	DEL	Does not pertain to the system being implemented

2/24/18	049	When the hand is over and the Dealer's cards value is equal to the Player's cards value, the game will result in a push. Meaning no winner, and no loser.	4/23/18	Derived	NF	MOD	
2/24/18	050	When the Player's combined card value exceeds 21, they shall automatically lose, and the Dealer moves on to the next Player or ends the hand.	4/23/18	From Video	F	MOD	
2/24/18	051	The Dealer shall deal cards to the current Player until either the value of their hand exceeds 21, they choose to stand, or the maximum number of cards has been dealt.	4/26/18	Derived	F	MOD	Updated for accuracy
2/24/18	052	The Dealer shall deal cards to the rightmost Player first, dealing each player 1 card, then itself, before dealing the second round of cards.	4/23/18	Derived	F	MOD	
2/24/18	053	The Dealer shall start giving cards to the rightmost Player first, before moving to each existing Player to the left, dealing themselves last	4/23/18	From Video	F	DEL	Duplicate of req 52
2/24/18	054	The Player shall be allowed to Double Down; Doubling their bet and only receiving one additional card for that hand.	4/23/18	From Video	F	DEL	Does not pertain to the system being implemented
2/24/18	055	The Player shall notify the Pit Boss when Doubling Down with a bet lower than their initial bet	4/23/18	From Video	F	DEL	The system does not have a pit boss
2/24/18	056	The Player shall notify the Pit Boss when Doubling Down on a hand that is worth 12 or higher	4/23/18	From Video	F	DEL	The system does not have a pit boss
2/24/18	057	The Player shall be allowed to Surrender after receiving their first two cards, but not after receiving additional cards.	4/23/18	From Video	F	DEL	IDL does not allow for a surrender move
2/24/18	058	When a Player Surrenders, they shall receive half of their bet back in their balance, their hand is over, and their cards will be removed.	4/23/18	From Video	F	DEL	IDL does not allow for a surrender move
2/24/18	059	After the initial deal, the Dealer shall deal all Players before themselves.	4/23/18	From Video	F	DEL	Duplicate of req 52
2/24/18	060	The Dealer shall follow the same procedure every time when dealing themselves.	4/23/18	From Video	F	DEL	Requirement does not specify what the procedure is and it unnecessary
2/24/18	061	The Dealer's procedure for dealing itself will be as follows: takes a card on all hands 16 and lower, must stand on 17-21, if hand exceeds 21 after taking a card, Dealer busts and all remaining Players win.	4/23/18	From Video	F	MOD	
2/24/18	062	The Dealer shall not be allowed to change the shoe type once a game has started.	2/24/18	Derived from Requirements	F		
2/24/18	063	The maximum number of cards 1 user shall be allowed to receive is 7.	4/23/18	From IDL	F	MOD	
2/24/18	064	The Dealer UI shall have an End Game button that shall end the game and quit the program.	2/24/18	Derived	F		
2/24/18	065	The GUI shall display a clock for each Player showing their remaining time to take action.	4/26/18	Derived	F	MOD	
2/24/18	066	The Dealer GUI shall display the current status of all Player's in the game.	2/24/18	Derived	F		
2/24/18	067	The Player GUI shall have a widget that allows a bet to be decided.	4/23/18	Derived	F	DEL	Does not pertain to the system being implemented
2/24/18	068	The GUI for all users shall display the UID of all users in the current game.	4/23/18	Derived	F	DEL	UID is too large to display on the screen
2/25/18	069	The Player shall be allowed use the GUI to make decisions on whether to take a card, stand, double down, or split.	4/23/18	Derived	F	DEL	Does not pertain to the system being implemented

2/25/18	070	The game shall begin once at least 1 Player has joined the game.	4/23/18	Derived	F	MOD	
2/25/18	071	The Player shall be able to see all available games being published by Dealers.	4/23/18	Derived	F	DEL	Does not pertain to the system being implemented
2/25/18	072	The Player shall have the button to leave a game displayed at all time when in a game.	4/23/18	Derived	F	DEL	Does not pertain to the system being implemented
2/25/18	073	The Dealer shall have a button for each shoe option to host a table on the opening screen.	4/26/18	Derived	F	MOD	Updated for accuracy
2/25/18	074	The Dealer shall deal 1 card to the Player upon a hit action, after the initial deal.	4/23/18	Derived	F	MOD	
2/25/18	075	If the Dealer deals a card and the Player's hand is lower than 19, the dealer shall wait for the Player's next request.	4/23/18	Derived	F	MOD	
2/25/18	076	The UI shall display all user's current hand values.	4/23/18	Derived	F	MOD	
2/25/18	077	When the Player's publishes that it is hitting, the player_action_t shall be changed from "idle" to "hitting".	4/23/18	Derived	F	MOD	
2/25/18	078	When the Player's publishes that it is standing, the player_action_t shall be changed from "idle" to "standing".	4/23/18	Derived	F	MOD	
2/25/18	079	When the Player click's the Button to split, the player_action_t shall be changed from "idle" to "standing" and published, changed back to "idle", and the Player shall increase their bet by 100%.	4/23/18	Derived	F	DEL	Splitting is no longer handled, improperly worded
2/25/18	080	When the Player's publishes that it is doubling down, the player_action_t shall be changed from "idle" to "doubling".	4/23/18	Derived	F	MOD	
2/25/18	081	When the shoe type has been selected the Dealer shall create and publish a Game instance (game state, UID, dealer UID, and player states) and set the game_state to waiting_to_join to allow players to see the game being published.	4/23/18	Derived	F	MOD	
2/25/18	082	When at least 1 player has joined the Dealers game, the start button shall appear to start the game when clicked, and the game_state shall be changed to waiting.	4/26/18	Derived	F	MOD	
2/25/18	083	Once the Dealer clicks the start game button, the game_state shall be changed to playing.	3/11/18	Derived	F	MOD	Poor Wording
2/25/18	084	Once the Dealer changes the game state to playing, the first hand shall be dealt, and the game will begin.	4/23/18	Derived	F	MOD	
2/25/18	085	The system shall support at least 3 separate hands per Player.	4/23/18	Derived	F	MOD	
2/25/18	086	If the Player has been dealt 7 cards and publishes a hit action, the Player shall automatically win the hand and cards will be removed.	4/23/18	Derived	F	MOD	Max number of cards reduced to fit screen
2/25/18	087	The Dealer shall only be allowed to host 1 game at a time.	3/15/18	Derived	F		
2/25/18	088	When the game state is 'playing', the Dealer shall publish the index of the current active player	3/16/18	Derived	F		
2/25/18	089	The Player shall have 'player action' set to 'idle' until the Dealer publishes that Player's index in the current game as the 'active_player'	3/17/18	Derived	F		
2/25/18	090	The game shall keep track of and display all cards currently in the game.	4/23/18	Derived	F	MOD	
2/25/18	091	The Dealer shall publish the state of the entire game at all times.	3/19/18	Derived	F		

2/25/18	092	The Dealer shall display game feedback to all current Players of the game.	4/23/18	Derived	F	DEL	Unspecific and vague with no relevance to system implementation														
2/25/18	093	The Dealer shall shuffle the deck when there are 45 cards remaining in an 8-deck shoe.	4/26/18	Derived	F	MOD	Changed the minimum number of cards to 45														
2/25/18	094	The cards drawn shall be shuffled/sorted with the use of a random number generator.	4/28/18	Derived	F	MOD	Updated for accuracy														
2/25/18	095	The Dealer shall only play out the remaining hand and then reshuffle once there is 25 cards remaining in the 8-deck shoe	4/23/18	Derived	F	DEL	Redundant/Conflicting with req 93														
2/25/18	096	The cards in the shoe shall be updated when each card is dealt.	3/24/18	Derived																	
2/25/18	097	When the Dealer ends the game, the players shall receive back the current bet in their balance if the hand had not completed.	4/23/18	Derived	F	DEL	Does not pertain to the system being implemented														
2/25/18	098	The shoe type shall be displayed to all users over OpenSplice.	4/28/18	Derived	F	DEL	Duplicate requirement of req 30, also not possible with current IDL configuration														
2/25/18	099	The Player shall be shown options for all 3 playing type at all times during game play.	4/23/18	Derived	F	DEL	Does not pertain to the system being implemented														
2/25/18	100	The Player shall be allowed to switch between playing types at any point during the game.	4/23/18	Derived	F	DEL	Does not pertain to the system being implemented														
2/25/18	101	The table count shall be implemented using the High-Low Card Counting Strategy	3/29/18	Derived	F																
2/26/18	102	<p>The High-Low Card Counting Strategy shall be calculated as follows:</p> <table> <thead> <tr> <th>RANK VALUE</th> </tr> </thead> <tbody> <tr> <td>2 +1</td> </tr> <tr> <td>3 +1</td> </tr> <tr> <td>4 +1</td> </tr> <tr> <td>5 +1</td> </tr> <tr> <td>6 +1</td> </tr> <tr> <td>7 0</td> </tr> <tr> <td>8 0</td> </tr> <tr> <td>9 0</td> </tr> <tr> <td>10 -1</td> </tr> <tr> <td>J -1</td> </tr> <tr> <td>Q -1</td> </tr> <tr> <td>K -1</td> </tr> <tr> <td>A -1</td> </tr> </tbody> </table> <p>For example, if the first ten cards to come out of the shoe were 3, 5, K, 7, Q, A, 8, 5, 4, 2, then the running count would be $1+1-1+0-1-1+0+1+1+1=+2$.</p>	RANK VALUE	2 +1	3 +1	4 +1	5 +1	6 +1	7 0	8 0	9 0	10 -1	J -1	Q -1	K -1	A -1	3/30/18	Derived	F		
RANK VALUE																					
2 +1																					
3 +1																					
4 +1																					
5 +1																					
6 +1																					
7 0																					
8 0																					
9 0																					
10 -1																					
J -1																					
Q -1																					
K -1																					
A -1																					
2/26/18	103	Once the game has started, the dealer instance will automatically deal at least one hand of blackjack.	4/23/18	Derived	F	MOD	Design changed to add functionality														
4/23/18	104	At the end of each hand the game screen shall display the winners and losers of that hand	4/23/18	Derived	F	MOD															
4/23/18	105	When the deal one hand button is pressed the game will play one hand of blackjack	4/23/18	Student addition	F																

4/23/18	106	When auto deal is selected the game shall deal each hand one after another until the end game button is selected.	4/23/18	Student addition	F		
4/26/18	107	A player shall not be allowed to hit after they have doubled down.	4/26/18	Student addition	F		
4/26/18	108	A player shall not be allowed to hit after they have chosen to stand	4/26/18	Student addition	F		
4/26/18	109	The game screen shall display the number of cards left in the shoe, on an 8-Deck shoe type	4/26/18	Student addition	F		

Source Code

gamr.h

```
#include <iostream>
#include <algorithm>
#include <vector>
#include <ctime>
#include <cstdlib>
#include "player.h"
#include "ccpp_UberCasino.h"

#ifndef __GAME_H
#define __GAME_H

using namespace std;

//The game_instance class holds on the overhead needed to keep track of all
//users and table information in the game.
//
//No constructor nessessary, so no need to argument constraints
class game_instance
{
public:
    Dealer D_pub; //object used to publish dealer information
    Game G_pub; //object used to publish the game information
    std::vector<PlayerState> pstates; //holds the states of the player

    game_instance();
    UberCasino::card_t calc_card_value(int val); //calculates the cards suite and card value
                                                //based on int val 1-52
    void set_shoe(int x); //sets the shoe type for determining how the game functions
    vector<hand> table_values(); //calculate hand values for all users
    void deal_cards(); //dealer cards to the table
    void deal_one_card(int playerIndex); //deal a single card
    bool move_valid(int playerIndex, player_action_t action);
    void count_cards(card_t card); //keep track of the table count
    hand dealer_hand_value(); //returns the dealers hand value
    void clean_table(); //remove cards from the table
    void boot_player(long uid); //kick player out of a game
}
```

```

dds_io<Dealer,DealerSeq,DealerTypeSupport_var,DealerTypeSupport,DealerDataWriter_var,
DealerDataWriter,DealerDataReader_var,DealerDataReader> *d_io;

dds_io<Game,GameSeq,GameTypeSupport_var,GameTypeSupport,GameDataWriter_var,
GameDataWriter,GameDataReader_var,GameDataReader> *g_io;

dds_io<Player,PlayerSeq,PlayerTypeSupport_var,PlayerTypeSupport,PlayerDataWriter_var,
PlayerDataWriter,PlayerDataReader_var,PlayerDataReader> *p_io;

int shoe_type;
int table_count;
int shoe_iter; //iterator that tells where to deal the next card in the shoe
int dcards_i; //tracks the number of cards in the dealers hand
vector<card_t> shoe_v;//vector containing all cards in the shoe
std::vector<player_instance> players;
};

//extern game_instance game;
#endif

```

game.cpp

```

#include "game.h"
#include <iostream>
#include <string>
#include <cstdlib>
#include <algorithm>
#include "time.h"
#include "sys/time.h"

using namespace std;

//declaration of functions in gui.cpp
void undisplay_cards(int playerIndex, int cardIndex);
void display_cards(int playerIndex, int cardIndex, card_t card);

//generated unique user id from given function for game_id
//must pass in shoe type; 0 = Test, 1 = 8deck, 2 = Infinite
game_instance::game_instance() : table_count(0), shoe_iter(0), dcards_i(0)
{
    d_io = new
    dds_io<Dealer,DealerSeq,DealerTypeSupport_var,DealerTypeSupport,DealerDataWriter_var,
    DealerDataWriter,DealerDataReader_var,DealerDataReader>
    ( (char*) "dealer", true, false );
}

```

```

g_io = new
dds_io<Game,GameSeq,GameTypeSupport_var,GameTypeSupport,GameDataWriter_var,
    GameDataWriter,GameDataReader_var,GameDataReader>
( (char*) "game", true, false );

p_io = new
dds_io<Player,PlayerSeq,PlayerTypeSupport_var,PlayerTypeSupport,PlayerDataWriter_var,
    PlayerDataWriter,PlayerDataReader_var,PlayerDataReader>
( (char*) "player", false, true );
}

//set the shoe type
void game_instance::set_shoe(int x)
{
    shoe_type = x;
    if (shoe_type == 0) {
        //Run Test Suite
    }else if (shoe_type == 1)
    {
        //Fill shoe with 8 Decks
        shoe_v.reserve(416);
        for(int k = 0;k < 8;k++)
        {
            for(int i = 1;i<=52;i++)
            {
                UberCasino::card_t temp_card;
                //temp_card.set_face(true);//defaults cards to face up
                temp_card = calc_card_value(i);//calculates a card val & suite based on 1-52
                shoe_v.push_back(temp_card);
            }
        }
        random_shuffle(shoe_v.begin(),shoe_v.end() );
        //Randomly shuffle deck. See "random_shuffle" library
    }
}

// calculates hand values for all users
// will return a 2D vector of each players hand values
// use vector.end() to get the best hand value for that player
// all possible hand values will be in the vector from worst[0] to best[end]
// Dealer's hand value will be placed in index 0
vector<hand> game_instance::table_values()
{
    vector< hand > table_values;

    //Calculate hand for dealer, place in index 0
    int result = 0;
    int aces = 0;
}

```

```

hand handval;
for (int i = 0; i < (dcards_i+1); i++)
{
    if (G_pub.dealer_cards[i].card == ace)
    {
        aces += 1;
        result += 1;
    }else if( G_pub.dealer_cards[i].card == king || G_pub.dealer_cards[i].card == queen ||
        G_pub.dealer_cards[i].card == jack )
    {
        result += 10;
    }else
    {
        result += ((int)G_pub.dealer_cards[i].card + 1);//casts enum index to int + 1
    }
}
handval.value.push_back(result);//saves least hand val to index 0
if (aces)
{//will save all possible values with aces less than 22 to hand, ascending order
    for (int i = 0; i<aces; i++)
    {
        if ((result + 10) < 22)
            handval.value.push_back(result + 10);
        else
            break;
    }
}
table_values.push_back( handval ); //Saves all possible hand values for dealer to row 0, best at end()

//adds row with all player's possible hand values < 22 to 2D table values
for (unsigned int i = 0; i < players.size(); i++)
{
    table_values.push_back( players[i].hand_value() );
}
return table_values;
}

//calculates the cards suite and card value based on int val 1-52
//val 1-13 = clubs; 14-26 = diamonds; 27-39 = hearts; 40-52 = spades
UberCasino::card_t game_instance::calc_card_value(int val)
{
    UberCasino::card_t temp;
    if (val <= 13)
    {
        temp.suite = clubs;
        temp.card = (card_kind) (val - 1);
    }else if (val <= 26)
    {
        temp.suite = diamonds;
    }
}

```

```

    temp.card = (card_kind) ( (val - 1) - 13 );
}else if (val <= 39)
{
    temp.suite = hearts;
    temp.card = (card_kind) ( (val - 1) - 26 );
}else
{
    temp.suite = hearts;
    temp.card = (card_kind) ( (val - 1) - 39 );
}
return temp;
}

//deal cards to the table
void game_instance::deal_cards()
{
    int N = (int)this->players.size();
    switch (this->shoe_type)
    {
        case 1://8-deck shoe
            UberCasino::card_t dealtCard;
            for (int i = N - 1; i > -1; i--)
            {
                if(this->players[i].active == false)
                    continue;

                dealtCard = this->shoe_v[this->shoe_iter];
                dealtCard.valid = true;
                this->players[i].add_card(dealtCard);
                display_cards(i, 0, dealtCard);
                this->shoe_iter++;
                this->players[i].num_cards++;
                this->count_cards(dealtCard);
            }
            this->G_pub.dealer_cards[this->dcards_i] = this->shoe_v[this->shoe_iter];
            this->G_pub.dealer_cards[this->dcards_i].valid = false;
            display_cards(7, 0, this->G_pub.dealer_cards[this->dcards_i]);
            this->shoe_iter++;
            this->count_cards(this->G_pub.dealer_cards[this->dcards_i++]);

            for (int i = N - 1; i > -1; i--)
            {
                if(this->players[i].active == false)
                    continue;

                card_t dealtCard = this->shoe_v[this->shoe_iter];
                dealtCard.valid = true;
                this->players[i].add_card(dealtCard);
                display_cards(i, 1, dealtCard);
            }
        }
    }
}
```

```

        this->shoe_iter++;
        this->players[i].num_cards++;
        this->count_cards(dealtCard);
    }
    this->G_pub.dealer_cards[dcards_i] = this->shoe_v[this->shoe_iter];
    this->G_pub.dealer_cards[this->dcards_i].valid = true;
    display_cards( 7, 1, this->G_pub.dealer_cards[this->dcards_i]);
    this->shoe_iter++;
    this->count_cards(this->G_pub.dealer_cards[this->dcards_i++]);
    break;
case 2://Infinite Shoe
UberCasino::card_t new_card;
int value;
for (int i = N; i >-1; i--)
{
    value = ( rand()%52 + 1); //generates random number between 1-52
    new_card = this->calc_card_value(value);//calculates card value based on 52 possible cards
in a deck
    if (i != N)
    {
        if(this->players[i].active == false)
            continue;

        new_card.valid = true;
        this->players[i].add_card(new_card);
        display_cards(i, 0, new_card);
        this->count_cards(new_card);
        this->players[i].num_cards++;
    }else
    {
        new_card.valid = false;
        this->G_pub.dealer_cards[this->dcards_i++] = (new_card);
        display_cards(i, 0, new_card);
        this->count_cards(new_card);
    }
}

for (int i = N; i >-1; i--)
{
    value = ( rand()%52 + 1); //generates random number between 1-52
    new_card = this->calc_card_value(value);//calculates card value based on 52 possible cards
in a deck
    new_card.valid = true;
    if (i != N)
    {
        if(this->players[i].active == false)
            continue;

        this->players[i].add_card(new_card);
    }
}

```

```

        display_cards(i, 1, new_card);
        this->count_cards(new_card);
        this->players[i].num_cards++;
    }else
    {
        this->G_pub.dealer_cards[this->dcards_i++] = (new_card);
        display_cards(i, 1, new_card);
        this->count_cards(new_card);
    }
}
break;
}

void game_instance::deal_one_card(int playerIndex)
{
    switch (this->shoe_type)
    {
        case 1://8-deck shoe
            UberCasino::card_t dealtCard;
            if (playerIndex == 7)
            {
                this->G_pub.dealer_cards[this->dcards_i] = this->shoe_v[this->shoe_iter];
                this->G_pub.dealer_cards[this->dcards_i].valid = true;
                display_cards(7, this->dcards_i, this->G_pub.dealer_cards[this->dcards_i]);
                this->shoe_iter++;
                this->count_cards(this->G_pub.dealer_cards[this->dcards_i++]);
            }
            else
            {
                if(this->players[playerIndex].active == false)
                    return;
                dealtCard = this->shoe_v[this->shoe_iter];
                dealtCard.valid = true;
                this->players[playerIndex].add_card(dealtCard);
                display_cards(playerIndex, this->players[playerIndex].num_cards++, dealtCard);
                this->shoe_iter++;
                count_cards(dealtCard);
            }
            break;
        case 2://Infinite Shoe
            int value = (rand()%52 + 1); //generates random number between 1-52
            UberCasino::card_t new_card = calc_card_value(value);//calculates card value based on 52
            possible cards in a deck
            new_card.valid = true;
            if (playerIndex == 7)
            {
                this->G_pub.dealer_cards[this->dcards_i] = (new_card);

```

```

        display_cards(playerIndex, ++this->dcards_i, new_card);
        count_cards(new_card);
    }
    else
    {
        if(this->players[playerIndex].active == false)
            return;

        this->players[playerIndex].add_card(new_card);
        display_cards(playerIndex, this->players[playerIndex].num_cards++, new_card);
        count_cards(new_card);
    }
    break;
}
}

hand game_instance::dealer_hand_value()
{
    int result = 0;
    int aces = 0;
    hand handval;
    for (int i = 0; i < this->dcards_i; i++)
    {
        if (this->G_pub.dealer_cards[i].card == ace)
        {
            aces += 1;
            result += 1;
        }else if( this->G_pub.dealer_cards[i].card == king || this->G_pub.dealer_cards[i].card == queen
                  || this->G_pub.dealer_cards[i].card == jack )
        {
            result += 10;
        }else
        {
            result += ((int)this->G_pub.dealer_cards[i].card + 1); //casts enum index to int + 1
        }
    }
    handval.value.push_back(result); //saves least hand val to index 0
    if (aces) //will save all possible values with aces less than 22 to hand, ascending order
    {
        for (int i = 0; i<aces; i++)
        {
            if ((result + 10) < 22)
                handval.value.push_back(result + 10);
            else
                break;
        }
    }
    return handval;
}

```

```

//keep track of the running table count
// 2 - 6 = count +1, 10 - A = count - 1, else is 0
void game_instance::count_cards(card_t c)
{
    if ( c.card == two || c.card == three || c.card == four || c.card == five || c.card == six )
    {
        table_count += 1;
    }
    else if (c.card == ten || c.card == jack || c.card == queen || c.card == king || c.card == ace )
    {
        table_count -= 1;
    }
}

//check to see if a players move is valid
bool game_instance::move_valid(int playerIndex, player_action_t action)
{
    hand pHand = players[playerIndex].hand_value();

    if ( action == standing )
        return true;

    if ( action == splitting )
        return false;

    if ( pHand.value.size() == 1 )
    {
        if ( action == hitting )
        {
            if ( pHand.value[0] > 19 )
                return false;
        }
        else if ( action == doubling )
        {
            if ( players[playerIndex].cards.size() > 2 )
            {
                return false;
            }
            if ( players[playerIndex].cards[0].card != players[playerIndex].cards[1].card )
            {
                return false;
            }
        }
    }
    else if ( pHand.value.size() >= 2 )
    {
        if ( action == hitting )
        {

```

```

        if ( pHand.value.back() > 19 )
            return false;
    }
    else if ( action == doubling )
    {
        if ( players[playerIndex].cards.size() > 2 )
            return false;
        else if ( players[playerIndex].cards[0].card !=
players[playerIndex].cards[1].card )
            return false;
    }
}

return true;
}

void game_instance::clean_table()
{
    for (unsigned int i = 0; i < this->players.size(); i++)
    {
        if(this->players[i].active == false)
        continue;

        for (unsigned int j = this->players[i].cards.size() - 1; j > 0; j--)
        {
            undisplay_cards(i, j);
            this->players[i].cards.pop_back();
        }
        this->players[i].cards.clear();
        this->players[i].num_cards = 0;
    }
    for (int i = 0; i < this->dcards_i; i++)
    {
        card_t blankCard;
        undisplay_cards(7, i);
        this->G_pub.dealer_cards[i] = blankCard;
    }
    this->dcards_i = 0;
}

//kick player out of a game
void game_instance::boot_player(long index)
{
    this->players[ index ].active = false;
    this->players[ index ].clean_hand();
    return;
}

```

io.h

```

#ifndef IO_H
#define IO_H
#include <string>
#include <sstream>
#include <iostream>
#include <functional>
#include <vector>
#include "time.h"
#include <pthread.h>

#include "DDSEntityManager.h"
#include "ccpp_UberCasino.h"

static UberCasino::Game received_game;
static bool game_rec = false;
extern bool waiting_f;
extern bool playing_f;
extern bool action_f;
extern vector<UberCasino::Player> *P_rec;
extern pthread_mutex_t mutex1;

using namespace DDS;
using namespace UberCasino;

// Interfaces to the pub/sub network
// this code is derived (copied!) from the opensplice examples
// Then copied & derived from Instructor!

// this is a terrible hack. was unable to use a polymorphic
// function signature through all of the generics and with
// a 'pointer to member' callback.
//
// thus, the reversion to the simplest static approach

//Receives and pulls information from OpenSplice for use in the game.
template <typename DATA_READER_VAR,typename SEQ,typename MSG>
class read_listener: public virtual DDS::DataReaderListener
{
public:
    read_listener() {}
    DATA_READER_VAR m_Reader;
    void player_received( Game p )
    {
        if( game_rec == false )
        {
            received_game = p;
            game_rec = true;
        }
    }
}

```

```

        return;
    }
void player_received( Dealer p ) {}
void player_received ( Player P )
{
    if( waiting_f == false )
        return;
    if( playing_f == false )
    {
        if( P_rec->empty() )
        {
            P_rec->push_back( P );
        }
        else
        {
            for( unsigned int i = 0;i< P_rec->size();i++ )
            {
                if( strncmp( (*P_rec)[i].uid, P.uid,SIZE_OF_UUID ) == 0 )
                    return;
            }
            pthread_mutex_lock( &mutex1 );
            P_rec->push_back( P );
            pthread_mutex_unlock( &mutex1 );
        }
    }
    else
    {
        if( action_f == false )
        {
            action_f = true;
            P_rec->push_back( P );
        }
    }
    return;
}

/* Callback method implementation. */
virtual void on_data_available(DDS::DataReader_ptr reader)
{
    DDS::ReturnCode_t status;
    SEQ msgList;

    SampleInfoSeq infoSeq;
    status = m_Reader->take(msgList, infoSeq, LENGTH_UNLIMITED,
    ANY_SAMPLE_STATE, ANY_VIEW_STATE, ANY_INSTANCE_STATE);
    checkStatus(status, "MsgDataReader::read");
    for (DDS::ULong i = 0; i < msgList.length(); i++)
    {
        if (msgList.length()>0) // you can get callback with no actual data payload

```

```

        {
            player_received( msgList[i] );

        }
    }
    status = m_Reader->return_loan(msgList, infoSeq);
    checkStatus(status, "MsgDataReader::return_loan");
}

virtual void on_requested_deadline_missed(DDS::DataReader_ptr reader,
                                         const DDS::RequestedDeadlineMissedStatus &status) {}

virtual void on_requested_incompatible_qos(DDS::DataReader_ptr reader,
                                         const DDS::RequestedIncompatibleQosStatus &status) {}

virtual void on_sample_rejected(DDS::DataReader_ptr reader, const DDS
                               ::SampleRejectedStatus &status){ }

virtual void on_liveliness_changed(DDS::DataReader_ptr reader, const DDS
                                   ::LivelinessChangedStatus &status) {}

virtual void on_subscription_matched(DDS::DataReader_ptr reader, const DDS
                                    ::SubscriptionMatchedStatus &status) {}

virtual void on_sample_lost(DDS::DataReader_ptr reader, const DDS
                           ::SampleLostStatus &status) {}

};

//OpenSplice IO object
template <typename MSG, typename SEQ, typename TYPE_SUPPORT_VAR, class
TYPE_SUPPORT, typename DATA_WRITER_VAR, class DATA_WRITER, typename
DATA_READER_VAR, class DATA_READER>
class dds_io
{
    typedef void (*cb_func_type)( MSG );
    private:
        DDSEntityManager mgr;
        TYPE_SUPPORT_VAR mt;
        DataWriter_var dwriter;
        DATA_WRITER_VAR listenerWriter;
        DataReader_var dreader;

    public:
        dds_io ( char *topicName, bool pub = false, bool sub = false )
        {
            DDSEntityManager mgr;

            // create domain participant

```

```

char partition_name[] = "";
mgr.createParticipant(partition_name);

//create type
mt = new TYPE_SUPPORT();
mgr.registerType(mt.in());

//create Topic
mgr.createTopic( topicName );

if (pub) // meaning we intend to publish from this object
{
    //create Publisher
    mgr.createPublisher();

    // create DataWriter
    mgr.createWriter();

    // Publish Events
    dwriter = mgr.getWriter();
    listenerWriter = DATA_WRITER::_narrow(dwriter.in());
}

if (sub) // meaning we intend to subscribe
{
    // this is a subscription
    //create Subscriber
    mgr.createSubscriber();

    // create DataReader
    mgr.createReader();

    DataReader_var dreader = mgr.getReader();

    read_listener<DATA_READER_VAR,SEQ,MSG> *myListener = new
read_listener<DATA_READER_VAR,SEQ,MSG> ();

    myListener->m_Reader = DATA_READER::_narrow(dreader.in());
    checkHandle(myListener->m_Reader.in(), "MsgDataReader::_narrow");

    DDS::StatusMask mask = DDS::DATA_AVAILABLE_STATUS;
    myListener->m_Reader->set_listener(myListener, mask);
}

void publish ( MSG D )
{
    ReturnCode_t status = listenerWriter->write(D, DDS::HANDLE_NIL );
    checkStatus(status, "MsgDataWriter::write");
}

```

```
    }  
};
```

```
#endif
```

player.h

```
#include <string>  
#include <iostream>  
#include "ccpp_UberCasino.h"  
#include "io.h"  
  
#ifndef __PLAYER_H  
#define __PLAYER_H  
  
using namespace std;  
using namespace UberCasino;  
  
struct hand  
{  
    vector<int> value;  
}typedef hand;  
  
//declaration for linking purposes  
class game_instance;  
  
//This class provides overhead that the idl version of Player did not provide.  
//Constructor take in a Player object, defined in the IDL file, and converts it to  
//something we can use in our program  
class player_instance  
{  
public:  
    player_instance(Player P);  
    string suggest_move(int dealer_card); //based off the cards on the table suggest what the  
    player should do  
    hand hand_value(); // returns  
    void tick_clock(); //decrement clock by 1 every sec until zero  
    void add_card(card_t card); //add the cards the dealer has delt to the players hand  
    void clean_hand(); //empty cards from players hand at the end of the hand  
    vector<card_t> cards; //holds players cards  
    Player P; //holds the Player object received from oopen splice  
    bool active;  
    int num_cards; //number of cards in the players hand  
    int player_num; //index of the player (i.e. 0 == Player 1)  
    unsigned int clock; //holds the players time clock  
    string name; //The players name to be displayed in the GUI  
  
private:  
    friend game_instance;
```

};

#endif

player.cpp

```

{3, 3, 3, 3, 3, 3, 3, 3, 3, 3},  

{1, 1, 1, 1, 1, 1, 1, 1, 1, 1},  

{3, 3, 3, 3, 3, 1, 3, 3, 1, 1},  

{3, 3, 3, 3, 3, 3, 0, 0, 0, 0},  

{3, 3, 3, 3, 3, 0, 0, 0, 0, 0},  

{2, 2, 2, 2, 2, 2, 2, 2, 0, 0},  

{0, 0, 0, 3, 3, 0, 0, 0, 0, 0},  

{3, 3, 3, 3, 3, 0, 0, 0, 0, 0},  

{3, 3, 3, 3, 3, 0, 0, 0, 0}    };

```

```

int dealer_index = dealer_card - 2, hand_index = -1, hand_val;  

hand hand_vec = hand_value();  

hand_val = hand_vec.value[0];  

if (this->cards.size() == 2)  

{  

    if (this->cards[0].card == eight && this->cards[1].card == eight)  

        hand_index = 17;  

    else if (this->cards[0].card == ten && this->cards[1].card == ten)  

        hand_index = 18;  

    else if (this->cards[0].card == nine && this->cards[1].card == nine)  

        hand_index = 19;  

    else if (this->cards[0].card == seven && this->cards[1].card == seven)  

        hand_index = 20;  

    else if (this->cards[0].card == six && this->cards[1].card == six)  

        hand_index = 21;  

    else if (this->cards[0].card == five && this->cards[1].card == five)  

        hand_index = 22;  

    else if (this->cards[0].card == four && this->cards[1].card == four)  

        hand_index = 23;  

    else if (this->cards[0].card == three && this->cards[1].card == three)  

        hand_index = 24;  

    else if (this->cards[0].card == two && this->cards[1].card == two)  

        hand_index = 25;  

    if (this->cards[0].card == ace || this->cards[1].card == ace)  

    {  

        if (this->cards[0].card == ten || this->cards[1].card == ten)  

            hand_index = 10;  

        else if (this->cards[0].card == nine || this->cards[1].card == nine)  

            hand_index = 10;  

        else if (this->cards[0].card == eight || this->cards[1].card == eight)  

            hand_index = 10;  

        else if (this->cards[0].card == seven || this->cards[1].card == seven)  

            hand_index = 11;  

        else if (this->cards[0].card == six || this->cards[1].card == six)  

            hand_index = 12;  

        else if (this->cards[0].card == five || this->cards[1].card == five)

```

```

        hand_index = 13;
    else if (this->cards[0].card == four || this->cards[1].card == four)
        hand_index = 14;
    else if (this->cards[0].card == three || this->cards[1].card == three)
        hand_index = 15;
    else if (this->cards[0].card == two || this->cards[1].card == two)
        hand_index = 16;
    else if (this->cards[0].card == ace && this->cards[1].card == ace)
        hand_index = 17;
    }
}

if ( hand_index == -1 )
{
    if (hand_val >= 17)
        hand_index = 0;
    else if (hand_val == 16)
        hand_index = 1;
    else if (hand_val == 15)
        hand_index = 2;
    else if (hand_val == 14)
        hand_index = 3;
    else if (hand_val == 13)
        hand_index = 4;
    else if (hand_val == 12)
        hand_index = 5;
    else if (hand_val == 11)
        hand_index = 6;
    else if (hand_val == 10)
        hand_index = 7;
    else if (hand_val == 9)
        hand_index = 8;
    else if (hand_val <= 8 && hand_val >= 5)
        hand_index = 9;
}

return result + moves[lookup_table[hand_index][dealer_index]];
}

//return the value of the players hand ex. 21
//Will calculate all possible hand values with aces
//First vector index will be least possible hand value, up to highest possible value
//handval.back() will hold the best hand value less than 22
hand player_instance::hand_value()
{
    int result = 0;
    int aces = 0;
    hand handval;
    for (unsigned int i = 0; i < this->cards.size(); i++)

```

```

{
    if (this->cards[i].card == ace)
    {
        aces += 1;
        result += 1;
    }else if( this->cards[i].card == king || this->cards[i].card == queen || this->cards[i].card == jack )
    {
        result += 10;
    }else
    {
        result += ((int)this->cards[i].card + 1);//casts enum index to int + 1
    }
}
handval.value.push_back(result);//saves least hand val to index 0
if (aces)
{//will save all possible values with aces less than 22 to hand, ascending order
    for (int i = 0; i<aces; i++)
    {
        if ((result + 10) < 22)
            handval.value.push_back(result + 10);
        else
            break;
    }
}
return handval;
}

//decrement clock by 1 every sec until zero
void player_instance::tick_clock()
{
    clock = 7;//sets clock at 7 seconds
    while (clock != 0 && waiting_player_move == false)
    {
        sleep(1);
        clock--;
    }
}

//add the cards the dealer has dealt to the players hand
void player_instance::add_card(card_t card)
{
    this->cards.push_back(card);
}

//empty cards from players hand at the end of the hand
void player_instance::clean_hand()
{
    for (unsigned int i = 0; i < this->cards.size(); i++)
    {

```

```
    this->cards.pop_back();
}
this->cards.clear();
return;
}
```

gui.h

```
// Created by Kyle Teixeira on 4/4/18.
```

```
#ifndef gui_h
#define gui_h
```

```
///////////////
```

```
// FLTK WIDGET DECLARATIONS
```

```
///////////////
```

```
#include <FL/Fl.H>
#include <FL/Fl_Double_Window.H>
#include <FL/Fl_Return_Button.H>
#include <FL/Fl_Box.H>
#include <FL/Fl_Button.H>
#include <FL/Fl_Text_Display.H>
#include <FL/Fl_Group.H>
#include <FL/Fl_Output.H>
#include <FL/Fl_Progress.H>
#include <FL/Fl_PNG_Image.H>
#include "game.h"
```

```
using namespace std;
```

```
extern game_instance *game;
extern Fl_Double_Window* open_screen;
extern Fl_Double_Window* game_screen;
```

```
extern Fl_Box *background;
extern Fl_Button *Title;
extern Fl_Button *NextHand;
extern Fl_Button *DealAuto;
extern Fl_Button *StartButton;
extern Fl_Button *EndGame;
extern Fl_Group *Players;
extern Fl_Group *Player_1;
extern Fl_Output *P1_Status;
extern Fl_Text_Display *P1_Name;
extern Fl_Text_Display *P1_ID;
extern Fl_Text_Display *P1_clock;
extern Fl_Box *P1C1;
extern Fl_Box *P1C2;
extern Fl_Box *P1C3;
```

```
extern Fl_Box *P1C4;
extern Fl_Box *P1C5;
extern Fl_Box *P1C6;
extern Fl_Box *P1C7;
extern Fl_Text_Display *P1_hand_value;
extern Fl_Group *Player_2;
extern Fl_Output *P2_Status;
extern Fl_Text_Display *P2_Name;
extern Fl_Text_Display *P2_ID;
extern Fl_Text_Display *P2_clock;
extern Fl_Box *P2C1;
extern Fl_Box *P2C2;
extern Fl_Box *P2C3;
extern Fl_Box *P2C4;
extern Fl_Box *P2C5;
extern Fl_Box *P2C6;
extern Fl_Box *P2C7;
extern Fl_Text_Display *P2_hand_value;
extern Fl_Group *Player_3;
extern Fl_Output *P3_Status;
extern Fl_Text_Display *P3_Name;
extern Fl_Text_Display *P3_ID;
extern Fl_Text_Display *P3_clock;
extern Fl_Box *P3C1;
extern Fl_Box *P3C2;
extern Fl_Box *P3C3;
extern Fl_Box *P3C4;
extern Fl_Box *P3C5;
extern Fl_Box *P3C6;
extern Fl_Box *P3C7;
extern Fl_Text_Display *P3_hand_value;
extern Fl_Group *Player_4;
extern Fl_Output *P4_Status;
extern Fl_Text_Display *P4_Name;
extern Fl_Text_Display *P4_ID;
extern Fl_Text_Display *P4_clock;
extern Fl_Box *P4C1;
extern Fl_Box *P4C2;
extern Fl_Box *P4C3;
extern Fl_Box *P4C4;
extern Fl_Box *P4C5;
extern Fl_Box *P4C6;
extern Fl_Box *P4C7;
extern Fl_Text_Display *P4_hand_value;
extern Fl_Group *Player_5;
extern Fl_Output *P5_Status;
extern Fl_Text_Display *P5_Name;
extern Fl_Text_Display *P5_ID;
extern Fl_Text_Display *P5_clock;
```

```
extern Fl_Box *P5C1;
extern Fl_Box *P5C2;
extern Fl_Box *P5C3;
extern Fl_Box *P5C4;
extern Fl_Box *P5C5;
extern Fl_Box *P5C6;
extern Fl_Box *P5C7;
extern Fl_Text_Display *P5_hand_value;
extern Fl_Group *Player_6;
extern Fl_Output *P6_Status;
extern Fl_Text_Display *P6_Name;
extern Fl_Text_Display *P6_ID;
extern Fl_Text_Display *P6_clock;
extern Fl_Box *P6C1;
extern Fl_Box *P6C2;
extern Fl_Box *P6C3;
extern Fl_Box *P6C4;
extern Fl_Box *P6C5;
extern Fl_Box *P6C6;
extern Fl_Box *P6C7;
extern Fl_Text_Display *P6_hand_value;
extern Fl_Group *Player_7;
extern Fl_Output *P7_Status;
extern Fl_Text_Display *P7_Name;
extern Fl_Text_Display *P7_ID;
extern Fl_Text_Display *P7_clock;
extern Fl_Box *P7C1;
extern Fl_Box *P7C2;
extern Fl_Box *P7C3;
extern Fl_Box *P7C4;
extern Fl_Box *P7C5;
extern Fl_Box *P7C6;
extern Fl_Box *P7C7;
extern Fl_Text_Display *P7_hand_value;
extern Fl_Group *GUI_Dealer;
extern Fl_Box *DC1;
extern Fl_Box *DC2;
extern Fl_Box *DC3;
extern Fl_Box *DC4;
extern Fl_Box *DC5;
extern Fl_Box *DC6;
extern Fl_Box *DC7;
extern Fl_Text_Display *Suggestion_box;
extern Fl_Progress *shoe_bar;
extern Fl_Text_Buffer *P1NameBuff;
extern Fl_Text_Buffer *P1IDBuff;
extern Fl_Text_Buffer *P1ClockBuff;
extern Fl_Text_Buffer *P1HandBuff;
extern Fl_Text_Buffer *P2NameBuff;
```

```
extern Fl_Text_Buffer *P2IDBuff;
extern Fl_Text_Buffer *P2ClockBuff;
extern Fl_Text_Buffer *P2HandBuff;
extern Fl_Text_Buffer *P3NameBuff;
extern Fl_Text_Buffer *P3IDBuff;
extern Fl_Text_Buffer *P3ClockBuff;
extern Fl_Text_Buffer *P3HandBuff;
extern Fl_Text_Buffer *P4NameBuff;
extern Fl_Text_Buffer *P4IDBuff;
extern Fl_Text_Buffer *P4ClockBuff;
extern Fl_Text_Buffer *P4HandBuff;
extern Fl_Text_Buffer *P5NameBuff;
extern Fl_Text_Buffer *P5IDBuff;
extern Fl_Text_Buffer *P5ClockBuff;
extern Fl_Text_Buffer *P5HandBuff;
extern Fl_Text_Buffer *P6NameBuff;
extern Fl_Text_Buffer *P6IDBuff;
extern Fl_Text_Buffer *P6ClockBuff;
extern Fl_Text_Buffer *P6HandBuff;
extern Fl_Text_Buffer *P7NameBuff;
extern Fl_Text_Buffer *P7IDBuff;
extern Fl_Text_Buffer *P7ClockBuff;
extern Fl_Text_Buffer *P7HandBuff;
extern Fl_Text_Buffer *duidBuffer;
extern Fl_Text_Buffer *shoeTypeBuff;
extern Fl_Text_Buffer *countBuff;
extern Fl_Text_Display *duid;
extern Fl_Text_Display *shoeTypeDisplay;
extern Fl_Text_Display *countDisplay;
extern Fl_Text_Buffer *DHandBuff;
extern Fl_Text_Display *DHandDisplay;
extern Fl_Text_Buffer *suggestionBuff;
extern Fl_Text_Buffer *playersBuff;
extern Fl_Text_Display *playersDisplay;
extern Fl_Text_Buffer *statusBuff;
extern Fl_Text_Display *statusDisplay;
```

```
///////////////
```

```
///
```

```
///      GLOBAL FUNCTIONS
```

```
///
```

```
///////////////
```

```
void update_players_gui(int x);
void set_players_gui(int x);
void publish_game();
string itos(int num);
void* play_game(void *arg);
string itos(int num);
```

```

void* wait_for_players(void *arg);
void undisplay_cards(int playerIndex, int cardIndex);
void display_cards(int playerIndex, int cardIndex, card_t card);

///////////
/// 
///  CALLBACKS
///
///////////

```

```

void test_suite(Fl_Widget *w, void *p);
void eight_shoe(Fl_Widget *w, void *p);
void infinite_shoe(Fl_Widget *w, void *p);
void start_game(Fl_Widget *w, void *p);
void end_game(Fl_Widget *w, void *p);
void next_hand(Fl_Widget *w, void *p);
void deal_auto(Fl_Widget *w, void *p);

#endif /* gui_h */

```

gui.cpp

```

/*
    image file from http://acbl.mybigcommerce.com/52-playing-cards/

```

These images can be used to enhance your marketing materials or website. Add them to fliers, handouts, newspaper ads and more to attract attendees to your event. For digital marketing materials (web) download the png version. For print marketing materials (fliers, handouts and newspaper ads) download the jpg version.

```
*/
```

```

#include <iostream>
#include <pthread.h>
#include <algorithm>
#include <cstring>
#include <string>
#include "sys/time.h"
#include "gui.h"
#include "enum_helpers.h"

vector<UberCasino::Player> *P_rec = new vector<UberCasino::Player>;
static unsigned int received_player_i;
bool start_botton_clicked;
bool player_rec = false;
bool game_over = false;
bool waiting_f = false;
bool playing_f = false;
bool action_f = false;
bool next_hand_f = false;

```

```
bool auto_deal = false;
pthread_mutex_t mutex1;

using namespace std;

Fl_Box *background=(Fl_Box *)0;
Fl_Button *Title=(Fl_Button *)0;
Fl_Group *Players=(Fl_Group *)0;
Fl_Group *Player_1=(Fl_Group *)0;
Fl_Output *P1_Status=(Fl_Output *)0;
Fl_Text_Display *P1_Name=(Fl_Text_Display *)0;
Fl_Text_Display *P1_ID=(Fl_Text_Display *)0;
Fl_Text_Display *P1_clock=(Fl_Text_Display *)0;
Fl_Box *P1C1=(Fl_Box *)0;
Fl_Box *P1C2=(Fl_Box *)0;
Fl_Box *P1C3=(Fl_Box *)0;
Fl_Box *P1C4=(Fl_Box *)0;
Fl_Box *P1C5=(Fl_Box *)0;
Fl_Box *P1C6=(Fl_Box *)0;
Fl_Box *P1C7=(Fl_Box *)0;
Fl_Text_Display *P1_hand_value=(Fl_Text_Display *)0;
Fl_Group *Player_2=(Fl_Group *)0;
Fl_Output *P2_Status=(Fl_Output *)0;
Fl_Text_Display *P2_Name=(Fl_Text_Display *)0;
Fl_Text_Display *P2_ID=(Fl_Text_Display *)0;
Fl_Text_Display *P2_clock=(Fl_Text_Display *)0;
Fl_Box *P2C1=(Fl_Box *)0;
Fl_Box *P2C2=(Fl_Box *)0;
Fl_Box *P2C3=(Fl_Box *)0;
Fl_Box *P2C4=(Fl_Box *)0;
Fl_Box *P2C5=(Fl_Box *)0;
Fl_Box *P2C6=(Fl_Box *)0;
Fl_Box *P2C7=(Fl_Box *)0;
Fl_Text_Display *P2_hand_value=(Fl_Text_Display *)0;
Fl_Group *Player_3=(Fl_Group *)0;
Fl_Output *P3_Status=(Fl_Output *)0;
Fl_Text_Display *P3_Name=(Fl_Text_Display *)0;
Fl_Text_Display *P3_ID=(Fl_Text_Display *)0;
Fl_Text_Display *P3_clock=(Fl_Text_Display *)0;
Fl_Box *P3C1=(Fl_Box *)0;
Fl_Box *P3C2=(Fl_Box *)0;
Fl_Box *P3C3=(Fl_Box *)0;
Fl_Box *P3C4=(Fl_Box *)0;
Fl_Box *P3C5=(Fl_Box *)0;
Fl_Box *P3C6=(Fl_Box *)0;
Fl_Box *P3C7=(Fl_Box *)0;
Fl_Text_Display *P3_hand_value=(Fl_Text_Display *)0;
Fl_Group *Player_4=(Fl_Group *)0;
Fl_Output *P4_Status=(Fl_Output *)0;
```

```
Fl_Text_Display *P4_Name=(Fl_Text_Display *)0;
Fl_Text_Display *P4_ID=(Fl_Text_Display *)0;
Fl_Text_Display *P4_clock=(Fl_Text_Display *)0;
Fl_Box *P4C1=(Fl_Box *)0;
Fl_Box *P4C2=(Fl_Box *)0;
Fl_Box *P4C3=(Fl_Box *)0;
Fl_Box *P4C4=(Fl_Box *)0;
Fl_Box *P4C5=(Fl_Box *)0;
Fl_Box *P4C6=(Fl_Box *)0;
Fl_Box *P4C7=(Fl_Box *)0;
Fl_Text_Display *P4_hand_value=(Fl_Text_Display *)0;
Fl_Group *Player_5=(Fl_Group *)0;
Fl_Output *P5_Status=(Fl_Output *)0;
Fl_Text_Display *P5_Name=(Fl_Text_Display *)0;
Fl_Text_Display *P5_ID=(Fl_Text_Display *)0;
Fl_Text_Display *P5_clock=(Fl_Text_Display *)0;
Fl_Box *P5C1=(Fl_Box *)0;
Fl_Box *P5C2=(Fl_Box *)0;
Fl_Box *P5C3=(Fl_Box *)0;
Fl_Box *P5C4=(Fl_Box *)0;
Fl_Box *P5C5=(Fl_Box *)0;
Fl_Box *P5C6=(Fl_Box *)0;
Fl_Box *P5C7=(Fl_Box *)0;
Fl_Text_Display *P5_hand_value=(Fl_Text_Display *)0;
Fl_Group *Player_6=(Fl_Group *)0;
Fl_Output *P6_Status=(Fl_Output *)0;
Fl_Text_Display *P6_Name=(Fl_Text_Display *)0;
Fl_Text_Display *P6_ID=(Fl_Text_Display *)0;
Fl_Text_Display *P6_clock=(Fl_Text_Display *)0;
Fl_Box *P6C1=(Fl_Box *)0;
Fl_Box *P6C2=(Fl_Box *)0;
Fl_Box *P6C3=(Fl_Box *)0;
Fl_Box *P6C4=(Fl_Box *)0;
Fl_Box *P6C5=(Fl_Box *)0;
Fl_Box *P6C6=(Fl_Box *)0;
Fl_Box *P6C7=(Fl_Box *)0;
Fl_Text_Display *P6_hand_value=(Fl_Text_Display *)0;
Fl_Group *Player_7=(Fl_Group *)0;
Fl_Output *P7_Status=(Fl_Output *)0;
Fl_Text_Display *P7_Name=(Fl_Text_Display *)0;
Fl_Text_Display *P7_ID=(Fl_Text_Display *)0;
Fl_Text_Display *P7_clock=(Fl_Text_Display *)0;
Fl_Box *P7C1=(Fl_Box *)0;
Fl_Box *P7C2=(Fl_Box *)0;
Fl_Box *P7C3=(Fl_Box *)0;
Fl_Box *P7C4=(Fl_Box *)0;
Fl_Box *P7C5=(Fl_Box *)0;
Fl_Box *P7C6=(Fl_Box *)0;
Fl_Box *P7C7=(Fl_Box *)0;
```

```
Fl_Text_Display *P7_hand_value=(Fl_Text_Display *)0;
Fl_Group *GUI_Dealer=(Fl_Group *)0;
Fl_Box *DC1=(Fl_Box *)0;
Fl_Box *DC2=(Fl_Box *)0;
Fl_Box *DC3=(Fl_Box *)0;
Fl_Box *DC4=(Fl_Box *)0;
Fl_Box *DC5=(Fl_Box *)0;
Fl_Box *DC6=(Fl_Box *)0;
Fl_Box *DC7=(Fl_Box *)0;
Fl_Text_Display *Suggestion_box=(Fl_Text_Display *)0;
Fl_Progress *shoe_bar=(Fl_Progress *)0;
Fl_Text_Buffer *P1NameBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P1IDBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P1ClockBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P1HandBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P2NameBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P2IDBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P2ClockBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P2HandBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P3NameBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P3IDBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P3ClockBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P3HandBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P4NameBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P4IDBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P4ClockBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P4HandBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P5NameBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P5IDBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P5ClockBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P5HandBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P6NameBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P6IDBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P6ClockBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P6HandBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P7NameBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P7IDBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P7ClockBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *P7HandBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *duidBuffer=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *countBuff=(Fl_Text_Buffer *)0;
Fl_Text_Display *duid=(Fl_Text_Display *)0;
Fl_Text_Display *shoeTypeDisplay=(Fl_Text_Display *)0;
Fl_Text_Buffer *shoeTypeBuff=(Fl_Text_Buffer *)0;
Fl_Text_Display *countDisplay=(Fl_Text_Display *)0;
Fl_Text_Buffer *DHandBuff=(Fl_Text_Buffer *)0;
Fl_Text_Display *DHandDisplay=(Fl_Text_Display *)0;
Fl_Text_Buffer *suggestionBuff=(Fl_Text_Buffer *)0;
Fl_Text_Buffer *playersBuff=(Fl_Text_Buffer *)0;
```

```

Fl_Text_Display *playersDisplay=(Fl_Text_Display *)0;
Fl_Text_Buffer *statusBuff=(Fl_Text_Buffer *)0;
Fl_Text_Display *statusDisplay=(Fl_Text_Display *)0;

///////////////////
///
///      CALLBACKS
///
///////////////////

pthread_attr_t attr1;
pthread_attr_t attr2;

void test_suite(Fl_Widget *w, void *p)
{
    game->set_shoe(0);
    shoeTypeBuff->text("Test");
    game_screen->show();
    open_screen->hide();
    //run test suite
}

void eight_shoe(Fl_Widget *w, void *p)
{
    game->set_shoe(1);
    shoeTypeBuff->text("8-Deck");
    game_screen->show();
    open_screen->hide();
    shoe_bar->show();
    pthread_attr_init(&attr1);
    pthread_t thread1;
    pthread_create(&thread1,&attr1, wait_for_players, NULL );
}

void infinite_shoe(Fl_Widget *w, void *p)
{
    game->set_shoe(2);
    shoeTypeBuff->text("Infinite");
    game_screen->show();
    open_screen->hide();
    pthread_attr_init(&attr1);
    pthread_t thread1;
    pthread_create(&thread1,&attr1, wait_for_players, NULL );
}

void start_game(Fl_Widget *w, void *p)
{
    if(start_botton_clicked == false)

```

```

    {
        start_botton_clicked = true;
        EndGame->show();
        StartButton->hide();
        pthread_attr_init(&attr2);
        pthread_t thread2;
        pthread_create(&thread2,&attr2, play_game, NULL );
    }
}

void next_hand(Fl_Widget *w, void *p)
{
    next_hand_f = true;
}

void deal_auto(Fl_Widget *w, void *p)
{
    NextHand->hide();
    DealAuto->hide();
    next_hand_f = true;
    auto_deal = true;
}

void end_game(Fl_Widget *w, void *p)
{
    game_over = true;
    delete game;
    delete P_rec;
    game_screen->hide();
    exit(0);
}

void publish_game()
{
    if(start_botton_clicked)
    {
        for(unsigned int i = 0;i < game->players.size();i++)
        {
            for(unsigned int k = 0; k< game->players[i].cards.size();k++ )
            {
                game->pstates[i].cards[k] = game->players[i].cards[k];
            }
            game->G_pub.p[i] = game->pstates[i];
        }
    }
    game->d_io->publish(game->D_pub);
    game->g_io->publish(game->G_pub);
    return;
}

```

```

void* wait_for_players( void *arg)
{
    game->G_pub.gstate = waiting_to_join;
    received_player_i = 0;
    start_botton_clicked = false;
    waiting_f = true;
    while(start_botton_clicked == false)
    {
        publish_game();//move to thread to publish over interval TODO
        while( received_player_i < P_rec->size())
        {
            pthread_mutex_lock(&mutex1);
            if( strncmp((*P_rec)[received_player_i].game_uid,game->G_pub.game_uid,
SIZE_OF_UUID) == 0 )
            {
                bool exists = false;
                for(unsigned int k =0;k< game->players.size(); k++)
                {
                    if( strncmp((*P_rec)[received_player_i].uid,
game->players[k].P.uid, SIZE_OF_UUID) == 0 )
                    {
                        exists = true;
                        break;
                    }
                }
                if(exists == false)
                {
                    if(game->players.size() == 0)
                        StartButton->show();
                    PlayerState pstate;
                    memcpy( pstate.uid, &(*P_rec)[received_player_i].uid, sizeof
( pstate.uid ) );
                    game->pstates.push_back( pstate );
                    player_instance temp =
player_instance((*P_rec)[received_player_i]);
                    temp.player_num = (int)game->players.size();
                    game->players.push_back(temp);
                    set_players_gui(game->players.size());//set players gui
enviorment
                    pthread_mutex_unlock(&mutex1);
                    received_player_i++;
                    Fl::lock();
                    Fl::check();
                    Fl::unlock();
                    break;
                }
            }
        }
        pthread_mutex_unlock(&mutex1);
    }
}

```

```

        received_player_i++;
    }
    if(start_botton_clicked)
    {
        pthread_exit(0);
        break;
    }
}
pthread_exit(0);
}

string itos(int num)
{
    stringstream ss;
    ss << num;
    return ss.str();
}

void* play_game(void *arg)
{
    game->G_pub.gstate = playing;
    statusBuff->text( "Playing" );
    game_screen->redraw();
    playing_f = true;
    bool action_rec = false;
    Player received_player;
    publish_game();
    time_t start;
    time_t now;
    while(game_over == false)
    {
        NextHand->hide();
        game->deal_cards();
        shoe_bar->value( (float)( 416 - game->shoe_iter ) );
        countBuff->text( itos( game->table_count ).c_str() );
        game->G_pub.active_player = (game->players.size() - 1);
        publish_game();
        Fl::lock();
        Fl::check();
        Fl::unlock();
        hand_vals = game->dealer_hand_value();
        bool D_won = false;
        if(vals.value.back() == 21)//Dealer wins Blackjack
        {
            string dwin21 = "Dealer wins with Blackjack.";
            suggestionBuff->text( dwin21.c_str() );
            D_won = true;
        }
        while(game->G_pub.active_player >= 0 && D_won == false)

```

```

{
    time(&start);
    time(&now);
    action_rec = false;
    //if player has been booted, active will be false
    if(game->players[game->G_pub.active_player].active == false)
    {
        game->G_pub.active_player--;
        continue;
    }
    string playerSuggestedMove;
    if(game->G_pub.dealer_cards[1].card == ace)
    {
        playerSuggestedMove =
game->players[game->G_pub.active_player].suggest_move( 11 );
    }
    else
    {
        playerSuggestedMove =
game->players[game->G_pub.active_player].suggest_move(
            (int)(game->G_pub.dealer_cards[1].card) );
    }
    suggestionBuff->text( playerSuggestedMove.c_str() );
    while( action_rec == false )
    {
        if(game->players[game->G_pub.active_player].clock - (int)(7 -
(int)difftime(now,start)) != 0)
        {
            game->players[game->G_pub.active_player].clock = (int)(7 -
difftime(now,start));
            update_players_gui(game->G_pub.active_player);
            Fl::lock();
            Fl::check();
            Fl::unlock();
        }
        if( difftime(now,start) < 7 )//TODO change back to 7
        {
            if( action_f == true)
            {
                if( strncmp( (*P_rec).back().game_uid,
game->G_pub.game_uid, SIZE_OF_UUID) == 0 )
                {

                    if( strncmp((*P_rec).back().uid,game->G_pub.p[game->G_pub.active_player].uid,SIZE_OF_U
UID)
                        == 0 && (*P_rec).back().A != idle )
                    {
                        received_player = (*P_rec).back();
                        player_rec = true;

```



```

        string win21 =
t_win21.str();

    suggestionBuff->text( win21.c_str() );
}

game->G_pub.active_player-
-;
}else if(current_value.value.size() <
2)
{

update_players_gui(game->G_pub.active_player);
game->G_pub.active_player-
-;
}else if(current_value.value[0] > 21)
{
game->G_pub.active_player-
-;
}

}
break;
case standing :
printf("Player
Standing: %s\n",received_player.name);

update_players_gui(game->G_pub.active_player);
game->G_pub.active_player--;
break;
case doubling :
printf("Player
Doubling: %s\n",received_player.name);

game->deal_one_card( (int)game->G_pub.active_player );
shoe_bar->value( (float)( 416 -
game->shoe_iter ) );

countBuff->text( itos( game->table_count ).c_str() );

update_players_gui(game->G_pub.active_player);
game->G_pub.active_player--;
break;
case splitting :
break;
}

player_rec = false;
Fl::lock();
Fl::check();
Fl::unlock();

```

```

        }
    }else
    {
        for(unsigned int i = 0; i <
game->players[game->G_pub.active_player].cards.size(); i++)
        {
            undisplay_cards(game->G_pub.active_player, i);
        }
        game->boot_player(game->G_pub.active_player);
        update_players_gui(game->G_pub.active_player);
        game->G_pub.active_player--;
        Fl::lock();
        Fl::check();
        Fl::unlock();
        break;
    }
    time(&now);
}
publish_game();
}
game->G_pub.dealer_cards[0].valid = true;
display_cards(7, 0, game->G_pub.dealer_cards[0]);
update_players_gui(7);
while(1)
{
    if( vals.value.back() < 22 && vals.value.back() > 17 )//dealer is done
    {
        break;
    }else if(vals.value.back() == 17 && vals.value.size() > 1 && vals.value[0] < 17)
    {
        game->deal_one_card(7);
        shoe_bar->value( (float)( 416 - game->shoe_iter ) );
        countBuff->text( itos( game->table_count ).c_str() );
        update_players_gui(7);
        break;
    }else if(vals.value.back() > 21)
    {
        break;
    }else
    {
        game->deal_one_card(7);
        shoe_bar->value( (float)( 416 - game->shoe_iter ) );
        countBuff->text( itos( game->table_count ).c_str() );
        update_players_gui(7);
    }
    vals = game->dealer_hand_value();
    Fl::lock();
    Fl::check();
    Fl::unlock();
}

```

```

        sleep(1);//change to a mutex with publish_game TODO
        publish_game();
    }
    NextHand->show();
    Fl::lock();
    Fl::check();
    Fl::unlock();
    if(auto_deal == true)//will sleep for 2 seconds before next hand on auto
    {
        next_hand_f = true;
        sleep(2);
    }
    while(next_hand_f == false ){ sleep(1); }
    next_hand_f = false;
    game->clean_table();
    for(unsigned int i = 0;i< game->players.size(); i++)
    {
        if(game->players[i].active == false)
        continue;
        game->players[i].P.A = idle;
        update_players_gui(i);
    }
    //Shuffle if <46 cards in deck
    if( (game->shoe_v.size() - game->shoe_iter ) <= 45)
    {
        //Display Shuffling & Completed an 8 deck shoe! TODO
        srand(time(0));
        random_shuffle(game->shoe_v.begin(),game->shoe_v.end() );
        game->shoe_iter = 0;
    }
    action_f = true;//removes deadlock condition
    pthread_mutex_lock(&mutex1);
    P_rec->clear();
    pthread_mutex_unlock(&mutex1);
    action_f = false;
    //Display new deck
}
return NULL;
}
void update_players_gui(int x)
{
    //set gui environment
    stringstream tempstring;
    tempstring << game->players.size();
    string playersString = tempstring.str();
    playersBuff->text(playersString.c_str());
    char text_handvalue[50],clock_val[50];
    if(x != 7)
        sprintf(text_handvalue,"%d",game->players[x].hand_value().value.back());
}

```

```

sprintf(clock_val,"%d",game->players[x].clock);
x++;
switch ( x )
{
    case 1 :
        P1ClockBuff->text( clock_val );
        P1HandBuff->text( text_handvalue );
        if(game->players[ 0 ].active == false)
            P1_Status->value( " Removed" );
        else
            P1_Status->value( to_string( game->players[0].P.A ).c_str() );

        game_screen->redraw();
        break;
    case 2 :
        P2ClockBuff->text( clock_val );
        P2HandBuff->text( text_handvalue );
        if(game->players[ 1 ].active == false)
            P2_Status->value( " Removed" );
        else
            P2_Status->value( to_string( game->players[1].P.A ).c_str() );

        game_screen->redraw();
        break;
    case 3 :
        P3ClockBuff->text( clock_val );
        P3HandBuff->text( text_handvalue );
        if(game->players[ 2 ].active == false)
            P3_Status->value( " Removed" );
        else
            P3_Status->value( to_string( game->players[2].P.A ).c_str() );

        game_screen->redraw();
        break;
    case 4 :
        P4ClockBuff->text( clock_val );
        P4HandBuff->text( text_handvalue );
        if(game->players[ 3 ].active == false)
            P4_Status->value( " Removed" );
        else
            P4_Status->value( to_string( game->players[3].P.A ).c_str() );

        game_screen->redraw();
        break;
    case 5 :
        P5ClockBuff->text( clock_val );
        P5HandBuff->text( text_handvalue );
        if(game->players[ 4 ].active == false)

```

```

        P5_Status->value( " Removed" );
    else
        P5_Status->value( to_string( game->players[4].P.A ).c_str() );

        game_screen->redraw();
        break;
case 6 :
    P6ClockBuff->text( clock_val );
    P6HandBuff->text( text_handvalue );
    if(game->players[ 5 ].active == false)
        P6_Status->value( " Removed" );
    else
        P6_Status->value( to_string( game->players[5].P.A ).c_str() );

        game_screen->redraw();
        break;
case 7 :
    P7ClockBuff->text( clock_val );
    P7HandBuff->text( text_handvalue );
    if(game->players[ 6 ].active == false)
        P7_Status->value( " Removed" );
    else
        P7_Status->value( to_string( game->players[6].P.A ).c_str() );

        game_screen->redraw();
        break;
case 8 :
    sprintf(text_handvalue,"%d",game->dealer_hand_value().value.back());
    DHandBuff->text( text_handvalue );
    game_screen->redraw();
    break;
}
}

void set_players_gui(int x)
{
    //set gui environment
    stringstream tempstring;
    tempstring << game->players.size();
    string playersString = tempstring.str();
    playersBuff->text(playersString.c_str());
    string name = game->players[x-1].name;
    switch ( x )
    {
        case 1 :
            P1NameBuff->text( name.c_str() );
            P1ClockBuff->text( "7" );
            P1HandBuff->text( "0" );
            P1_Status->value( to_string( game->players[0].P.A ).c_str() );
}

```

```

        game_screen->redraw();
        break;
    case 2 :
        P2NameBuff->text( name.c_str() );
        P2ClockBuff->text( "7" );
        P2HandBuff->text( "0" );
        P2_Status->value( to_string( game->players[1].P.A ).c_str() );
        game_screen->redraw();
        break;
    case 3 :
        P3NameBuff->text( name.c_str() );
        P3ClockBuff->text( "7" );
        P3HandBuff->text( "0" );
        P3_Status->value( to_string( game->players[2].P.A ).c_str() );
        game_screen->redraw();
        break;
    case 4 :
        P4NameBuff->text( name.c_str() );
        P4ClockBuff->text( "7" );
        P4HandBuff->text( "0" );
        P4_Status->value( to_string( game->players[3].P.A ).c_str() );
        game_screen->redraw();
        break;
    case 5 :
        P5NameBuff->text( name.c_str() );
        P5ClockBuff->text( "7" );
        P5HandBuff->text( "0" );
        P5_Status->value( to_string( game->players[4].P.A ).c_str() );
        game_screen->redraw();
        break;
    case 6 :
        P6NameBuff->text( name.c_str() );
        P6ClockBuff->text( "7" );
        P6HandBuff->text( "0" );
        P6_Status->value( to_string( game->players[5].P.A ).c_str() );
        game_screen->redraw();
        break;
    case 7 :
        P7NameBuff->text( name.c_str() );
        P7ClockBuff->text( "7" );
        P7HandBuff->text( "0" );
        P7_Status->value( to_string( game->players[6].P.A ).c_str() );
        game_screen->redraw();
        break;
    }
}

void undisplay_cards(int playerIndex, int cardIndex)
{

```

```

switch ( playerIndex )
{
    case 0 : //player 1
        switch ( cardIndex )
        {
            case 0 : //card 1
                P1C1->hide();
                break;
            case 1 : //card 2
                P1C2->hide();
                break;
            case 2 : //card 3
                P1C3->hide();
                break;
            case 3 : //card 4
                P1C4->hide();
                break;
            case 4 : //card 5
                P1C5->hide();
                break;
            case 5 : //card 6
                P1C6->hide();
                break;
            case 6 : //card 7
                P1C7->hide();
                break;
        }
        break;
    case 1 : //player 2
        switch ( cardIndex )
        {
            case 0 : //card 1
                P2C1->hide();
                break;
            case 1 : //card 2
                P2C2->hide();
                break;
            case 2 : //card 3
                P2C3->hide();
                break;
            case 3 : //card 4
                P2C4->hide();
                break;
            case 4 : //card 5
                P2C5->hide();
                break;
            case 5 : //card 6
                P2C6->hide();
                break;
        }
}

```

```

        case 6 : //card 7
            P2C7->hide();
            break;
        }
        break;
    case 2 : //player 3
        switch ( cardIndex )
        {
            case 0 : //card 1
                P3C1->hide();
                break;
            case 1 : //card 2
                P3C2->hide();
                break;
            case 2 : //card 3
                P3C3->hide();
                break;
            case 3 : //card 4
                P3C4->hide();
                break;
            case 4 : //card 5
                P3C5->hide();
                break;
            case 5 : //card 6
                P3C6->hide();
                break;
            case 6 : //card 7
                P3C7->hide();
                break;
        }
        break;
    case 3 : //player 4
        switch ( cardIndex )
        {
            case 0 : //card 1
                P4C1->hide();
                break;
            case 1 : //card 2
                P4C2->hide();
                break;
            case 2 : //card 3
                P4C3->hide();
                break;
            case 3 : //card 4
                P4C4->hide();
                break;
            case 4 : //card 5
                P4C5->hide();
                break;
        }

```

```

        case 5 : //card 6
            P4C6->hide();
            break;
        case 6 : //card 7
            P4C7->hide();
            break;
    }
    break;
case 4 : //player 5
    switch ( cardIndex )
    {
        case 0 : //card 1
            P5C1->hide();
            break;
        case 1 : //card 2
            P5C2->hide();
            break;
        case 2 : //card 3
            P5C3->hide();
            break;
        case 3 : //card 4
            P5C4->hide();
            break;
        case 4 : //card 5
            P5C5->hide();
            break;
        case 5 : //card 6
            P5C6->hide();
            break;
        case 6 : //card 7
            P5C7->hide();
            break;
    }
    break;
case 5 : //player 6
    switch ( cardIndex )
    {
        case 0 : //card 1
            P6C1->hide();
            break;
        case 1 : //card 2
            P6C2->hide();
            break;
        case 2 : //card 3
            P6C3->hide();
            break;
        case 3 : //card 4
            P6C4->hide();
            break;
    }
}

```

```

        case 4 : //card 5
            P6C5->hide();
            break;
        case 5 : //card 6
            P6C6->hide();
            break;
        case 6 : //card 7
            P6C7->hide();
            break;
        }
        break;
    case 6 : //player 7
        switch ( cardIndex )
        {
            case 0 : //card 1
                P7C1->hide();
                break;
            case 1 : //card 2
                P7C2->hide();
                break;
            case 2 : //card 3
                P7C3->hide();
                break;
            case 3 : //card 4
                P7C4->hide();
                break;
            case 4 : //card 5
                P7C5->hide();
                break;
            case 5 : //card 6
                P7C6->hide();
                break;
            case 6 : //card 7
                P7C7->hide();
                break;
        }
        break;
    case 7 : //Dealer
        switch ( cardIndex )
        {
            case 0 : //card 1
                DC1->hide();
                break;
            case 1 : //card 2
                DC2->hide();
                break;
            case 2 : //card 3
                DC3->hide();
                break;

```

```

        case 3 : //card 4
            DC4->hide();
            break;
        case 4 : //card 5
            DC5->hide();
            break;
        case 5 : //card 6
            DC6->hide();
            break;
        case 6 : //card 7
            DC7->hide();
            break;
        }
        break;
    }
}

void display_cards(int playerIndex, int cardIndex, card_t card)
{
    Fl_Box *widget;
    switch ( playerIndex )
    {
        case 0 : //Player 1
            switch ( cardIndex )
            {
                case 0 : //card 1
                    widget = P1C1;
                    switch ( card.suite )
                    {
                        case hearts :
                            switch ( card.card )
                            {
                                case ace :
                                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                                    widget->show();
                                    break;
                                case two :
                                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                                    widget->show();
                                    break;
                                case three :
                                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                                    widget->show();
                                    break;
                                case four :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
        widget->show();
        break;
case five :
        widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;

```

```
        }
        break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();
                    break;
            case eight :
                widget->image( new
                    widget->show();
                    break;
            case nine :
                widget->image( new
                    widget->show();
                    break;
        }
    Fl_PNG_Image( "../cards/AD.png" );
    Fl_PNG_Image( "../cards/2D.png" );
    Fl_PNG_Image( "../cards/3D.png" );
    Fl_PNG_Image( "../cards/4D.png" );
    Fl_PNG_Image( "../cards/5D.png" );
    Fl_PNG_Image( "../cards/6D.png" );
    Fl_PNG_Image( "../cards/7D.png" );
    Fl_PNG_Image( "../cards/8D.png" );
    Fl_PNG_Image( "../cards/9D.png" );
}
```

```

Fl_PNG_Image( "../cards/10D.png" ) );
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->image( new
        widget->show();
        break;
}
break;
case clubs :
    switch ( card.card )
    {
case ace :
    widget->image( new
        widget->show();
        break;
case two :
    widget->image( new
        widget->show();
        break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
}
break;
Fl_PNG_Image( "../cards/AC.png" ) );
Fl_PNG_Image( "../cards/2C.png" ) );
Fl_PNG_Image( "../cards/3C.png" ) );
Fl_PNG_Image( "../cards/4C.png" ) );
Fl_PNG_Image( "../cards/5C.png" ) );

```

```

        widget->show();
        break;
    case six :
        widget->image( new
            Fl_PNG_Image( "../cards/6C.png" ) );
        widget->show();
        break;
    case seven :
        widget->image( new
            Fl_PNG_Image( "../cards/7C.png" ) );
        widget->show();
        break;
    case eight :
        widget->image( new
            Fl_PNG_Image( "../cards/8C.png" ) );
        widget->show();
        break;
    case nine :
        widget->image( new
            Fl_PNG_Image( "../cards/9C.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
            Fl_PNG_Image( "../cards/10C.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
            Fl_PNG_Image( "../cards/JC.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
            Fl_PNG_Image( "../cards/QC.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
            Fl_PNG_Image( "../cards/KC.png" ) );
        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
    widget->show();
    break;
```

```

        case jack :
            widget->image( new
                Fl_PNG_Image( "../cards/J.S.png" ) );
                widget->show();
                break;
        case queen :
            widget->image( new
                Fl_PNG_Image( "../cards/Q.S.png" ) );
                widget->show();
                break;
        case king :
            widget->image( new
                Fl_PNG_Image( "../cards/K.S.png" ) );
                widget->show();
                break;
        }
        break;
    }
    break;
}
case 1 : //card 2
    widget = P1C2;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        Fl_PNG_Image( "../cards/A.H.png" ) );
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        Fl_PNG_Image( "../cards/2.H.png" ) );
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        Fl_PNG_Image( "../cards/3.H.png" ) );
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        Fl_PNG_Image( "../cards/4.H.png" ) );
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        Fl_PNG_Image( "../cards/5.H.png" ) );

```

```

        widget->show();
        break;
    case six :
        widget->image( new
            Fl_PNG_Image( "../cards/6H.png" ) );
        widget->show();
        break;
    case seven :
        widget->image( new
            Fl_PNG_Image( "../cards/7H.png" ) );
        widget->show();
        break;
    case eight :
        widget->image( new
            Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
    case nine :
        widget->image( new
            Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
            Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
            Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
            Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
            Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                }
                break;

```

```
    widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
    widget->show();
    break;
```

```
case jack :  
    widget->image( new  
        widget->show();  
        break;  
case queen :  
    widget->image( new  
        widget->show();  
        break;  
case king :  
    widget->image( new  
        widget->show();  
        break;  
    }  
    break;  
case clubs :  
    switch ( card.card )  
    {  
        case ace :  
            widget->image( new  
                widget->show();  
                break;  
        case two :  
            widget->image( new  
                widget->show();  
                break;  
        case three :  
            widget->image( new  
                widget->show();  
                break;  
        case four :  
            widget->image( new  
                widget->show();  
                break;  
        case five :  
            widget->image( new  
                widget->show();  
                break;  
        case six :  
            widget->image( new  
                widget->show();  
                break;  
    }  
    Fl_PNG_Image( "../cards/JD.png" );  
    Fl_PNG_Image( "../cards/QD.png" );  
    Fl_PNG_Image( "../cards/KD.png" );  
    Fl_PNG_Image( "../cards/AC.png" );  
    Fl_PNG_Image( "../cards/2C.png" );  
    Fl_PNG_Image( "../cards/3C.png" );  
    Fl_PNG_Image( "../cards/4C.png" );  
    Fl_PNG_Image( "../cards/5C.png" );  
    Fl_PNG_Image( "../cards/6C.png" );
```

```

        break;
    case seven :
        widget->image( new
            widget->show();
            break;
    case eight :
        widget->image( new
            widget->show();
            break;
    case nine :
        widget->image( new
            widget->show();
            break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :
        widget->image( new
            widget->show();
            break;
    case king :
        widget->image( new
            widget->show();
            break;
    }
    break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
    Fl_PNG_Image( "../cards/AS.png" );
    Fl_PNG_Image( "../cards/2S.png" );

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/4S.png" );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );
Fl_PNG_Image( "../cards/J.S.png" );
Fl_PNG_Image( "../cards/JS.png" );
```

```

        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
break;
}
break;
case 2 : //card 3
    widget = P1C3;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                    widget->show();
                    break;
                case three :
                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                    widget->show();
                    break;
                case four :
                    widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                    widget->show();
                    break;
                case five :
                    widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                    widget->show();
                    break;
                case six :
                    widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                    widget->show();

```

```

        break;
    case seven :
        widget->image( new
            widget->show();
            break;
    case eight :
        widget->image( new
            widget->show();
            break;
    case nine :
        widget->image( new
            widget->show();
            break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :
        widget->image( new
            widget->show();
            break;
    case king :
        widget->image( new
            widget->show();
            break;
    }
    break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();
                    break;
            case eight :
                widget->image( new
                    widget->show();
                    break;
            case nine :
                widget->image( new
                    widget->show();
                    break;
            case ten :
                widget->image( new
                    widget->show();
                    break;
            case jack :
                widget->image( new
                    widget->show();
                    break;
            case queen :
                widget->image( new
                    widget->show();
                    break;
            case king :
                widget->image( new
                    widget->show();
                    break;
        }
    }
}

Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
Fl_PNG_Image( "../cards/AD.png" );
Fl_PNG_Image( "../cards/2D.png" );

```

```

        widget->show();
        break;
    case three :
        widget->image( new
            widget->show();
            break;
    case four :
        widget->image( new
            widget->show();
            break;
    case five :
        widget->image( new
            widget->show();
            break;
    case six :
        widget->image( new
            widget->show();
            break;
    case seven :
        widget->image( new
            widget->show();
            break;
    case eight :
        widget->image( new
            widget->show();
            break;
    case nine :
        widget->image( new
            widget->show();
            break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :

```

Fl_PNG_Image("../cards/3D.png"));

Fl_PNG_Image("../cards/4D.png"));

Fl_PNG_Image("../cards/5D.png"));

Fl_PNG_Image("../cards/6D.png"));

Fl_PNG_Image("../cards/7D.png"));

Fl_PNG_Image("../cards/8D.png"));

Fl_PNG_Image("../cards/9D.png"));

Fl_PNG_Image("../cards/10D.png"));

Fl_PNG_Image("../cards/JD.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
}
break;
case clubs :
switch ( card.card )
{
case ace :
        widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
        widget->show();
        break;
case two :
        widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
        widget->show();
        break;
case three :
        widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
        widget->show();
        break;
case four :
        widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
        widget->show();
        break;
case five :
        widget->image( new
Fl_PNG_Image( "../cards/5C.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6C.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );
        widget->show();
        break;

```

```

        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8C.png" ) );
                widget->show();
                break;
        case nine :
            widget->image( new
                Fl_PNG_Image( "../cards/9C.png" ) );
                widget->show();
                break;
        case ten :
            widget->image( new
                Fl_PNG_Image( "../cards/10C.png" ) );
                widget->show();
                break;
        case jack :
            widget->image( new
                Fl_PNG_Image( "../cards/JC.png" ) );
                widget->show();
                break;
        case queen :
            widget->image( new
                Fl_PNG_Image( "../cards/QC.png" ) );
                widget->show();
                break;
        case king :
            widget->image( new
                Fl_PNG_Image( "../cards/KC.png" ) );
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    Fl_PNG_Image( "../cards/AS.png" ) );
                    widget->show();
                    break;
            case two :
                widget->image( new
                    Fl_PNG_Image( "../cards/2S.png" ) );
                    widget->show();
                    break;
            case three :
                widget->image( new
                    Fl_PNG_Image( "../cards/3S.png" ) );
                    widget->show();

```

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4S.png" ) );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );
Fl_PNG_Image( "../cards/JS.png" );
Fl_PNG_Image( "../cards/QS.png" );
Fl_PNG_Image( "../cards/KS.png" );
```



```

        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
    }
}

```

```
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
case jack :  
    widget->image( new  
        widget->show();  
        break;  
case queen :  
    widget->image( new  
        widget->show();  
        break;  
case king :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/4D.png" );  
Fl_PNG_Image( "../cards/5D.png" );  
Fl_PNG_Image( "../cards/6D.png" );  
Fl_PNG_Image( "../cards/7D.png" );  
Fl_PNG_Image( "../cards/8D.png" );  
Fl_PNG_Image( "../cards/9D.png" );  
Fl_PNG_Image( "../cards/10D.png" );  
Fl_PNG_Image( "../cards/JD.png" );  
Fl_PNG_Image( "../cards/QD.png" );  
Fl_PNG_Image( "../cards/KD.png" );
```

```
break;
}
break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                widget->show();
                break;
        case two :
            widget->image( new
                widget->show();
                break;
        case three :
            widget->image( new
                widget->show();
                break;
        case four :
            widget->image( new
                widget->show();
                break;
        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
    }
}

Fl_PNG_Image( "../cards/AC.png" ) );
Fl_PNG_Image( "../cards/2C.png" ) ;
Fl_PNG_Image( "../cards/3C.png" ) ;
Fl_PNG_Image( "../cards/4C.png" ) ;
Fl_PNG_Image( "../cards/5C.png" ) ;
Fl_PNG_Image( "../cards/6C.png" ) ;
Fl_PNG_Image( "../cards/7C.png" ) ;
Fl_PNG_Image( "../cards/8C.png" ) ;
Fl_PNG_Image( "../cards/9C.png" ) ;
```

```

        widget->show();
        break;
    case ten :
        widget->image( new
        widget->show();
        break;
    case jack :
        widget->image( new
        widget->show();
        break;
    case queen :
        widget->image( new
        widget->show();
        break;
    case king :
        widget->image( new
        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
            widget->show();
            break;
        case two :
            widget->image( new
            widget->show();
            break;
        case three :
            widget->image( new
            widget->show();
            break;
        case four :
            widget->image( new
            widget->show();
            break;
        case five :

```

Fl_PNG_Image("../cards/10C.png"));

Fl_PNG_Image("../cards/JC.png"));

Fl_PNG_Image("../cards/QC.png"));

Fl_PNG_Image("../cards/KC.png"));

Fl_PNG_Image("../cards/AS.png"));

Fl_PNG_Image("../cards/2S.png"));

Fl_PNG_Image("../cards/3S.png"));

Fl_PNG_Image("../cards/4S.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/J.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
}
break;
}
break;
case 4 : //card 5

```

```

widget = P1C5;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                widget->show();
                break;
            case five :
                widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                widget->show();
                break;
            case six :
                widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                widget->show();
                break;
            case seven :
                widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
                widget->show();
                break;
            case eight :
                widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
                widget->show();
                break;
            case nine :
                widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );

```

```

        widget->show();
        break;
    case ten :
        widget->image( new
        widget->show();
        break;
    case jack :
        widget->image( new
        widget->show();
        break;
    case queen :
        widget->image( new
        widget->show();
        break;
    case king :
        widget->image( new
        widget->show();
        break;
    }
    break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                widget->show();
                break;
            case two :
                widget->image( new
                widget->show();
                break;
            case three :
                widget->image( new
                widget->show();
                break;
            case four :
                widget->image( new
                widget->show();
                break;
            case five :

```

Fl_PNG_Image("../cards/10H.png"));

Fl_PNG_Image("../cards/JH.png"));

Fl_PNG_Image("../cards/QH.png"));

Fl_PNG_Image("../cards/KH.png"));

Fl_PNG_Image("../cards/AD.png"));

Fl_PNG_Image("../cards/2D.png"));

Fl_PNG_Image("../cards/3D.png"));

Fl_PNG_Image("../cards/4D.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
}
break;
case clubs :
        switch ( card.card )
{

```

```
case ace :  
    widget->image( new  
        widget->show();  
        break;  
case two :  
    widget->image( new  
        widget->show();  
        break;  
case three :  
    widget->image( new  
        widget->show();  
        break;  
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/AC.png" );  
Fl_PNG_Image( "../cards/2C.png" );  
Fl_PNG_Image( "../cards/3C.png" );  
Fl_PNG_Image( "../cards/4C.png" );  
Fl_PNG_Image( "../cards/5C.png" );  
Fl_PNG_Image( "../cards/6C.png" );  
Fl_PNG_Image( "../cards/7C.png" );  
Fl_PNG_Image( "../cards/8C.png" );  
Fl_PNG_Image( "../cards/9C.png" );  
Fl_PNG_Image( "../cards/10C.png" );
```

```

                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/JC.png" ) );
Fl_PNG_Image( "../cards/QC.png" ) ;
Fl_PNG_Image( "../cards/KC.png" ) ;
Fl_PNG_Image( "../cards/AS.png" ) ;
Fl_PNG_Image( "../cards/2S.png" ) ;
Fl_PNG_Image( "../cards/3S.png" ) ;
Fl_PNG_Image( "../cards/4S.png" ) ;
Fl_PNG_Image( "../cards/5S.png" ) ;
Fl_PNG_Image( "../cards/6S.png" ) ;

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 5 : //card 6
    widget = P1C6;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
    widget->show();
    break;
```

```

        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
            }
            break;
        case diamonds :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        widget->show();
                        break;
                case six :
                    widget->image( new
                        widget->show();

```

```

                break;
        case seven :
                widget->image( new
                                widget->show();
                                break;
        case eight :
                widget->image( new
                                widget->show();
                                break;
        case nine :
                widget->image( new
                                widget->show();
                                break;
        case ten :
                widget->image( new
                                widget->show();
                                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
}
break;
case clubs :
switch ( card.card )
{
    case ace :
            widget->image( new
                            widget->show();
                            break;
    case two :
            widget->image( new
                            widget->show();
                            break;
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/KD.png" );
Fl_PNG_Image( "../cards/JD.png" );
Fl_PNG_Image( "../cards/10D.png" );
Fl_PNG_Image( "../cards/9D.png" );
Fl_PNG_Image( "../cards/8D.png" );
Fl_PNG_Image( "../cards/7D.png" );
}
break;

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3C.png" ) );
Fl_PNG_Image( "../cards/4C.png" ) ;
Fl_PNG_Image( "../cards/5C.png" ) ;
Fl_PNG_Image( "../cards/6C.png" ) ;
Fl_PNG_Image( "../cards/7C.png" ) ;
Fl_PNG_Image( "../cards/8C.png" ) ;
Fl_PNG_Image( "../cards/9C.png" ) ;
Fl_PNG_Image( "../cards/10C.png" ) ;
Fl_PNG_Image( "../cards/JC.png" ) ;
```

```

        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );
        widget->show();
        break;
}
break;
case spades :
switch ( card.card )
{
    case ace :
        widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );
        widget->show();
        break;
    case two :
        widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
        widget->show();
        break;
    case three :
        widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
        widget->show();
        break;
    case four :
        widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
        widget->show();
        break;
    case five :
        widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
        widget->show();
        break;
    case six :
        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
}

```

```

        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :
            widget->image( new
                Fl_PNG_Image( "../cards/9S.png" ) );
            widget->show();
            break;
        case ten :
            widget->image( new
                Fl_PNG_Image( "../cards/10S.png" ) );
            widget->show();
            break;
        case jack :
            widget->image( new
                Fl_PNG_Image( "../cards/JS.png" ) );
            widget->show();
            break;
        case queen :
            widget->image( new
                Fl_PNG_Image( "../cards/QS.png" ) );
            widget->show();
            break;
        case king :
            widget->image( new
                Fl_PNG_Image( "../cards/KS.png" ) );
            widget->show();
            break;
        }
        break;
    }
    break;
}
case 6 : //card 7
{
    widget = P1C7;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
                        Fl_PNG_Image( "../cards/2H.png" ) );
            }
        }
    }
}

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3H.png" ) );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
```

```
    widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
    widget->show();
    break;
case king :
    widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
    widget->show();
    break;
}
break;
case diamonds :
switch ( card.card )
{
case ace :
    widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
```

```

        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/8D.png");

Fl_PNG_Image("../cards/9D.png");

Fl_PNG_Image("../cards/10D.png");

Fl_PNG_Image("../cards/JD.png");

Fl_PNG_Image("../cards/QD.png");

Fl_PNG_Image("../cards/KD.png");

Fl_PNG_Image("../cards/AC.png");

Fl_PNG_Image("../cards/2C.png");

Fl_PNG_Image("../cards/3C.png");

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );
```

```

        widget->show();
        break;
    }
    break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AS.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2S.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3S.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4S.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5S.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6S.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7S.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
}

break;
case 1 : //Player 2
switch ( cardIndex )
{
    case 0 : //card 1
        widget = P2C1;
        switch ( card.suite )
        {
            case hearts :
                switch ( card.card )
                {
                    case ace :
                        widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                        widget->show();
                        break;
                    case two :
                        widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                }
            }
        }
    }
}

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3H.png" ) );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
```

```

        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
}
break;
case diamonds :
switch ( card.card )
{
case ace :
        widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
        widget->show();
        break;
case two :
        widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
        widget->show();
        break;
case three :
        widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
        widget->show();
        break;
case four :
        widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
        widget->show();
        break;
case five :
        widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
        widget->show();
        break;

```

```

        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/8D.png");

Fl_PNG_Image("../cards/9D.png");

Fl_PNG_Image("../cards/10D.png");

Fl_PNG_Image("../cards/JD.png");

Fl_PNG_Image("../cards/QD.png");

Fl_PNG_Image("../cards/KD.png");

Fl_PNG_Image("../cards/AC.png");

Fl_PNG_Image("../cards/2C.png");

Fl_PNG_Image("../cards/3C.png");

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );
```

```

        widget->show();
        break;
    }
    break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AS.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2S.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3S.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4S.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5S.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6S.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7S.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 1 : //card 2
    widget = P2C2;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                    widget->show();
                    break;
                case three :
                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                    widget->show();

```

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
```

```

        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4D.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5D.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6D.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7D.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8D.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
    }
}

```

```

        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        case spades :
            switch ( card.card )

```

```

{
    case ace :
        widget->image( new
                        Fl_PNG_Image( "../cards/AS.png" ) );
        widget->show();
        break;
    case two :
        widget->image( new
                        Fl_PNG_Image( "../cards/2S.png" ) );
        widget->show();
        break;
    case three :
        widget->image( new
                        Fl_PNG_Image( "../cards/3S.png" ) );
        widget->show();
        break;
    case four :
        widget->image( new
                        Fl_PNG_Image( "../cards/4S.png" ) );
        widget->show();
        break;
    case five :
        widget->image( new
                        Fl_PNG_Image( "../cards/5S.png" ) );
        widget->show();
        break;
    case six :
        widget->image( new
                        Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
    case seven :
        widget->image( new
                        Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
    case eight :
        widget->image( new
                        Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
    case nine :
        widget->image( new
                        Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
                        Fl_PNG_Image( "../cards/10S.png" ) );

```

```

Fl_PNG_Image( "./cards/J.S.png" ) );
widget->show();
break;
case jack :
widget->image( new
Fl_PNG_Image( "./cards/Q.S.png" ) );
widget->show();
break;
case queen :
widget->image( new
Fl_PNG_Image( "./cards/K.S.png" ) );
widget->show();
break;
case king :
widget->image( new
Fl_PNG_Image( "./cards/A.H.png" ) );
widget->show();
break;
}
break;
case 2 : //card 3
widget = P2C3;
switch ( card.suite )
{
case hearts :
switch ( card.card )
{
case ace :
widget->image( new
Fl_PNG_Image( "./cards/2.H.png" ) );
widget->show();
break;
case two :
widget->image( new
Fl_PNG_Image( "./cards/3.H.png" ) );
widget->show();
break;
case three :
widget->image( new
Fl_PNG_Image( "./cards/4.H.png" ) );
widget->show();
break;
case four :
widget->image( new
Fl_PNG_Image( "./cards/5.H.png" ) );
widget->show();
break;
case five :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
}
break;
case diamonds :
switch ( card.card )
{

```

```
case ace :
    widget->image( new
        widget->show();
        break;
case two :
    widget->image( new
        widget->show();
        break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();

Fl_PNG_Image( "../cards/AD.png" );
Fl_PNG_Image( "../cards/2D.png" );
Fl_PNG_Image( "../cards/3D.png" );
Fl_PNG_Image( "../cards/4D.png" );
Fl_PNG_Image( "../cards/5D.png" );
Fl_PNG_Image( "../cards/6D.png" );
Fl_PNG_Image( "../cards/7D.png" );
Fl_PNG_Image( "../cards/8D.png" );
Fl_PNG_Image( "../cards/9D.png" );
Fl_PNG_Image( "../cards/10D.png" );
```

```

                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
            case four :
                    widget->image( new
                                    widget->show();
                                    break;
            case five :
                    widget->image( new
                                    widget->show();
                                    break;
            case six :
                    widget->image( new
                                    widget->show();
                                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/JD.png" );
Fl_PNG_Image( "../cards/QD.png" );
Fl_PNG_Image( "../cards/KD.png" );
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/3C.png" );
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9C.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10C.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JC.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );

        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/J.png" ) );
    widget->show();
    break;
```

```

        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    }
    break;
case 3 : //card 4
    widget = P2C4;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        widget->show();
                        break;
                case six :
                    widget->image( new
                        widget->show();
                        break;
            }
            break;
        Fl_PNG_Image( "../cards/AH.png" );
    }
    break;
Fl_PNG_Image( "../cards/2H.png" );
Fl_PNG_Image( "../cards/3H.png" );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );

        widget->show();
        break;
    }
    break;
}
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
    widget->show();
    break;
```

```
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();
                    break;
        }
        break;
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();
                    break;
        }
        break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();
                    break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();
                    break;
        }
        break;
    }
}
```

```

        break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                            widget->show();
                            break;
        case two :
            widget->image( new
                            widget->show();
                            break;
        case three :
            widget->image( new
                            widget->show();
                            break;
Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );

```

```
    widget->show();
    break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->show();
```

Fl_PNG_Image("../cards/4S.png"));

Fl_PNG_Image("../cards/5S.png"));

Fl_PNG_Image("../cards/6S.png"));

Fl_PNG_Image("../cards/7S.png"));

Fl_PNG_Image("../cards/8S.png"));

Fl_PNG_Image("../cards/9S.png"));

Fl_PNG_Image("../cards/10S.png"));

Fl_PNG_Image("../cards/JS.png"));

Fl_PNG_Image("../cards/QS.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 4 : //card 5
    widget = P2C5;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                    widget->show();
                    break;
                case three :
                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                    widget->show();
                    break;
                case four :
                    widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                    widget->show();
                    break;
                case five :
                    widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                    widget->show();
                    break;
                case six :
                    widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                    widget->show();
                    break;
                case seven :
                    widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
                    widget->show();

```

```

                break;
        case eight :
                widget->image( new
                                widget->show();
                                break;
        case nine :
                widget->image( new
                                widget->show();
                                break;
        case ten :
                widget->image( new
                                widget->show();
                                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
Fl_PNG_Image( "../cards/AD.png" );
Fl_PNG_Image( "../cards/2D.png" );
Fl_PNG_Image( "../cards/3D.png" );

```

```
    widget->show();
    break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->show();
```

Fl_PNG_Image("../cards/4D.png"));

Fl_PNG_Image("../cards/5D.png"));

Fl_PNG_Image("../cards/6D.png"));

Fl_PNG_Image("../cards/7D.png"));

Fl_PNG_Image("../cards/8D.png"));

Fl_PNG_Image("../cards/9D.png"));

Fl_PNG_Image("../cards/10D.png"));

Fl_PNG_Image("../cards/JD.png"));

Fl_PNG_Image("../cards/QD.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
Fl_PNG_Image( "../cards/5C.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
Fl_PNG_Image( "../cards/6C.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );
            widget->show();
            break;
    }
}

```

```

        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/9C.png"));

Fl_PNG_Image("../cards/10C.png") ;

Fl_PNG_Image("../cards/JC.png") ;

Fl_PNG_Image("../cards/QC.png") ;

Fl_PNG_Image("../cards/KC.png") ;

Fl_PNG_Image("../cards/AS.png") ;

Fl_PNG_Image("../cards/2S.png") ;

Fl_PNG_Image("../cards/3S.png") ;

Fl_PNG_Image("../cards/4S.png") ;

```

        break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
break;
}

```

```

        break;
    case 5 : //card 6
        widget = P2C6;
        switch ( card.suite )
        {
            case hearts :
                switch ( card.card )
                {
                    case ace :
                        widget->image( new
                            Fl_PNG_Image( "../cards/AH.png" ) );
                        widget->show();
                        break;
                    case two :
                        widget->image( new
                            Fl_PNG_Image( "../cards/2H.png" ) );
                        widget->show();
                        break;
                    case three :
                        widget->image( new
                            Fl_PNG_Image( "../cards/3H.png" ) );
                        widget->show();
                        break;
                    case four :
                        widget->image( new
                            Fl_PNG_Image( "../cards/4H.png" ) );
                        widget->show();
                        break;
                    case five :
                        widget->image( new
                            Fl_PNG_Image( "../cards/5H.png" ) );
                        widget->show();
                        break;
                    case six :
                        widget->image( new
                            Fl_PNG_Image( "../cards/6H.png" ) );
                        widget->show();
                        break;
                    case seven :
                        widget->image( new
                            Fl_PNG_Image( "../cards/7H.png" ) );
                        widget->show();
                        break;
                    case eight :
                        widget->image( new
                            Fl_PNG_Image( "../cards/8H.png" ) );
                        widget->show();
                        break;
                    case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
            widget->show();
            break;
    }
}

```

```

        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        case clubs :
            switch ( card.card )

```

```

{
    case ace :
        widget->image( new
                        widget->show();
                        break;
    case two :
        widget->image( new
                        widget->show();
                        break;
    case three :
        widget->image( new
                        widget->show();
                        break;
    case four :
        widget->image( new
                        widget->show();
                        break;
    case five :
        widget->image( new
                        widget->show();
                        break;
    case six :
        widget->image( new
                        widget->show();
                        break;
    case seven :
        widget->image( new
                        widget->show();
                        break;
    case eight :
        widget->image( new
                        widget->show();
                        break;
    case nine :
        widget->image( new
                        widget->show();
                        break;
    case ten :
        widget->image( new
                        widget->show();
                        break;
}
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/3C.png" );
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );

```

```

        widget->show();
        break;
    case jack :
        widget->image( new
        widget->show();
        break;
    case queen :
        widget->image( new
        widget->show();
        break;
    case king :
        widget->image( new
        widget->show();
        break;
    }
    break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                widget->show();
                break;
            case two :
                widget->image( new
                widget->show();
                break;
            case three :
                widget->image( new
                widget->show();
                break;
            case four :
                widget->image( new
                widget->show();
                break;
            case five :
                widget->image( new
                widget->show();
                break;
            case six :

```

Fl_PNG_Image("../cards/JC.png"));

Fl_PNG_Image("../cards/QC.png"));

Fl_PNG_Image("../cards/KC.png"));

Fl_PNG_Image("../cards/AS.png"));

Fl_PNG_Image("../cards/2S.png"));

Fl_PNG_Image("../cards/3S.png"));

Fl_PNG_Image("../cards/4S.png"));

Fl_PNG_Image("../cards/5S.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 6 : //card 7
    widget = P2C7;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )

```

```

{
    case ace :
        widget->image( new
                        widget->show();
                        break;
    case two :
        widget->image( new
                        widget->show();
                        break;
    case three :
        widget->image( new
                        widget->show();
                        break;
    case four :
        widget->image( new
                        widget->show();
                        break;
    case five :
        widget->image( new
                        widget->show();
                        break;
    case six :
        widget->image( new
                        widget->show();
                        break;
    case seven :
        widget->image( new
                        widget->show();
                        break;
    case eight :
        widget->image( new
                        widget->show();
                        break;
    case nine :
        widget->image( new
                        widget->show();
                        break;
    case ten :
        widget->image( new
                        widget->show();
                        break;
}
Fl_PNG_Image( "../cards/AH.png" );
Fl_PNG_Image( "../cards/2H.png" );
Fl_PNG_Image( "../cards/3H.png" );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );

```

```

        widget->show();
        break;
    case jack :
        widget->image( new
        widget->show();
        break;
    case queen :
        widget->image( new
        widget->show();
        break;
    case king :
        widget->image( new
        widget->show();
        break;
    }
    break;
}
case diamonds :
switch ( card.card )
{
    case ace :
        widget->image( new
        widget->show();
        break;
    case two :
        widget->image( new
        widget->show();
        break;
    case three :
        widget->image( new
        widget->show();
        break;
    case four :
        widget->image( new
        widget->show();
        break;
    case five :
        widget->image( new
        widget->show();
        break;
    case six :

```

Fl_PNG_Image("../cards/JH.png"));

Fl_PNG_Image("../cards/QH.png"));

Fl_PNG_Image("../cards/KH.png"));

Fl_PNG_Image("../cards/AD.png"));

Fl_PNG_Image("../cards/2D.png"));

Fl_PNG_Image("../cards/3D.png"));

Fl_PNG_Image("../cards/4D.png"));

Fl_PNG_Image("../cards/5D.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
    }
}

```

```
case two :  
    widget->image( new  
        widget->show();  
        break;  
case three :  
    widget->image( new  
        widget->show();  
        break;  
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
case jack :  
    widget->image( new  
        widget->show();
```

```
Fl_PNG_Image( "./cards/QC.png" ) );
break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->image( new
        widget->show();
        break;
}
break;
case spades :
switch ( card.card )
{
    case ace :
        widget->image( new
            widget->show();
            break;
    case two :
        widget->image( new
            widget->show();
            break;
    case three :
        widget->image( new
            widget->show();
            break;
    case four :
        widget->image( new
            widget->show();
            break;
    case five :
        widget->image( new
            widget->show();
            break;
    case six :
        widget->image( new
            widget->show();
            break;
    case seven :
        widget->image( new
            widget->show();
            break;
}
break;
```

```

        widget->show();
        break;
    case eight :
        widget->image( new
        Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
    case nine :
        widget->image( new
        Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
        Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
        Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
        Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
        Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
}
break;
}
break;
case 2 : //Player 3
switch ( cardIndex )
{
    case 0 : //card 1
        widget = P3C1;
        switch ( card.suite )
        {
            case hearts :
                switch ( card.card )
                {
                    case ace :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
    widget->show();
    break;
```

```

        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
            }
            break;
        case diamonds :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        widget->show();
                        break;
                case six :
                    widget->image( new
                        widget->show();

```

```

        break;
    case seven :
        widget->image( new
            widget->show();
            break;
    case eight :
        widget->image( new
            widget->show();
            break;
    case nine :
        widget->image( new
            widget->show();
            break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :
        widget->image( new
            widget->show();
            break;
    case king :
        widget->image( new
            widget->show();
            break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                widget->show();
                break;
        case two :
            widget->image( new
                widget->show();
                break;
    }
}
break;
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3C.png" ) );
Fl_PNG_Image( "../cards/4C.png" ) ;
Fl_PNG_Image( "../cards/5C.png" ) ;
Fl_PNG_Image( "../cards/6C.png" ) ;
Fl_PNG_Image( "../cards/7C.png" ) ;
Fl_PNG_Image( "../cards/8C.png" ) ;
Fl_PNG_Image( "../cards/9C.png" ) ;
Fl_PNG_Image( "../cards/10C.png" ) ;
Fl_PNG_Image( "../cards/JC.png" ) ;
```

```

        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );
        widget->show();
        break;
}
break;
case spades :
switch ( card.card )
{
    case ace :
        widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );
        widget->show();
        break;
    case two :
        widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
        widget->show();
        break;
    case three :
        widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
        widget->show();
        break;
    case four :
        widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
        widget->show();
        break;
    case five :
        widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
        widget->show();
        break;
    case six :
        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
}

```

```

        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :
            widget->image( new
                Fl_PNG_Image( "../cards/9S.png" ) );
            widget->show();
            break;
        case ten :
            widget->image( new
                Fl_PNG_Image( "../cards/10S.png" ) );
            widget->show();
            break;
        case jack :
            widget->image( new
                Fl_PNG_Image( "../cards/JS.png" ) );
            widget->show();
            break;
        case queen :
            widget->image( new
                Fl_PNG_Image( "../cards/QS.png" ) );
            widget->show();
            break;
        case king :
            widget->image( new
                Fl_PNG_Image( "../cards/KS.png" ) );
            widget->show();
            break;
        }
        break;
    }
    break;
}
case 1 : //card 2
    widget = P3C2;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
                        Fl_PNG_Image( "../cards/2H.png" ) );
            }
        }
    }
}

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3H.png" ) );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
```

```
    widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
    widget->show();
    break;
case king :
    widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
    widget->show();
    break;
}
break;
case diamonds :
switch ( card.card )
{
case ace :
    widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
```

```

        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/8D.png");

Fl_PNG_Image("../cards/9D.png");

Fl_PNG_Image("../cards/10D.png");

Fl_PNG_Image("../cards/JD.png");

Fl_PNG_Image("../cards/QD.png");

Fl_PNG_Image("../cards/KD.png");

Fl_PNG_Image("../cards/AC.png");

Fl_PNG_Image("../cards/2C.png");

Fl_PNG_Image("../cards/3C.png");

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );
```

```

        widget->show();
        break;
    }
    break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AS.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2S.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3S.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4S.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5S.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6S.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7S.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 2 : //card 3
    widget = P3C3;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                    widget->show();
                    break;
                case three :
                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                    widget->show();

```

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
```

```

        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4D.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5D.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6D.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7D.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8D.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
    }
}

```

```

        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        case spades :
            switch ( card.card )

```

```

{
    case ace :
        widget->image( new
                        widget->show();
                        break;
    case two :
        widget->image( new
                        widget->show();
                        break;
    case three :
        widget->image( new
                        widget->show();
                        break;
    case four :
        widget->image( new
                        widget->show();
                        break;
    case five :
        widget->image( new
                        widget->show();
                        break;
    case six :
        widget->image( new
                        widget->show();
                        break;
    case seven :
        widget->image( new
                        widget->show();
                        break;
    case eight :
        widget->image( new
                        widget->show();
                        break;
    case nine :
        widget->image( new
                        widget->show();
                        break;
    case ten :
        widget->image( new
                        widget->show();
                        break;
}
Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/4S.png" );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );

```

```

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "./cards/J.S.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "./cards/Q.S.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "./cards/K.S.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 3 : //card 4
widget = P3C4;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "./cards/AH.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "./cards/2H.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "./cards/3H.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "./cards/4H.png" ) );
                widget->show();
                break;
            case five :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
}
break;
case diamonds :
switch ( card.card )
{

```

```
case ace :  
    widget->image( new  
        widget->show();  
        break;  
case two :  
    widget->image( new  
        widget->show();  
        break;  
case three :  
    widget->image( new  
        widget->show();  
        break;  
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/AD.png" );  
Fl_PNG_Image( "../cards/2D.png" );  
Fl_PNG_Image( "../cards/3D.png" );  
Fl_PNG_Image( "../cards/4D.png" );  
Fl_PNG_Image( "../cards/5D.png" );  
Fl_PNG_Image( "../cards/6D.png" );  
Fl_PNG_Image( "../cards/7D.png" );  
Fl_PNG_Image( "../cards/8D.png" );  
Fl_PNG_Image( "../cards/9D.png" );  
Fl_PNG_Image( "../cards/10D.png" );
```

```

                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
            case four :
                    widget->image( new
                                    widget->show();
                                    break;
            case five :
                    widget->image( new
                                    widget->show();
                                    break;
            case six :
                    widget->image( new
                                    widget->show();
                                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/JD.png" );
Fl_PNG_Image( "../cards/QD.png" );
Fl_PNG_Image( "../cards/KD.png" );
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/3C.png" );
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9C.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10C.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JC.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );

        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/J.png" ) );
    widget->show();
    break;
```

```

        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    }
    break;
case 4 : //card 5
    widget = P3C5;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        widget->show();
                        break;
                case six :
                    widget->image( new
                        widget->show();
                        break;
            }
            break;
        Fl_PNG_Image( "../cards/AH.png" );
    }
    break;
Fl_PNG_Image( "../cards/2H.png" );
Fl_PNG_Image( "../cards/3H.png" );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );

        widget->show();
        break;
    }
    break;
}
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
    widget->show();
    break;
```

```

        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();

```

```

        break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                            widget->show();
                            break;
        case two :
            widget->image( new
                            widget->show();
                            break;
        case three :
            widget->image( new
                            widget->show();
                            break;
Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );

```

```
    widget->show();
    break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->show();
```

Fl_PNG_Image("../cards/4S.png"));

Fl_PNG_Image("../cards/5S.png"));

Fl_PNG_Image("../cards/6S.png"));

Fl_PNG_Image("../cards/7S.png"));

Fl_PNG_Image("../cards/8S.png"));

Fl_PNG_Image("../cards/9S.png"));

Fl_PNG_Image("../cards/10S.png"));

Fl_PNG_Image("../cards/JS.png"));

Fl_PNG_Image("../cards/QS.png"));


```

                break;
        case eight :
                widget->image( new
                                widget->show();
                                break;
        case nine :
                widget->image( new
                                widget->show();
                                break;
        case ten :
                widget->image( new
                                widget->show();
                                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
Fl_PNG_Image( "../cards/AD.png" );
Fl_PNG_Image( "../cards/2D.png" );
Fl_PNG_Image( "../cards/3D.png" );

```

```
    widget->show();
    break;
case four :
    widget->image( new
    widget->show();
    break;
case five :
    widget->image( new
    widget->show();
    break;
case six :
    widget->image( new
    widget->show();
    break;
case seven :
    widget->image( new
    widget->show();
    break;
case eight :
    widget->image( new
    widget->show();
    break;
case nine :
    widget->image( new
    widget->show();
    break;
case ten :
    widget->image( new
    widget->show();
    break;
case jack :
    widget->image( new
    widget->show();
    break;
case queen :
    widget->image( new
    widget->show();
    break;
case king :
    widget->show();
```

Fl_PNG_Image("../cards/4D.png"));
Fl_PNG_Image("../cards/5D.png") ;
Fl_PNG_Image("../cards/6D.png") ;
Fl_PNG_Image("../cards/7D.png") ;
Fl_PNG_Image("../cards/8D.png") ;
Fl_PNG_Image("../cards/9D.png") ;
Fl_PNG_Image("../cards/10D.png") ;
Fl_PNG_Image("../cards/JD.png") ;
Fl_PNG_Image("../cards/QD.png") ;

```

        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
Fl_PNG_Image( "../cards/5C.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
Fl_PNG_Image( "../cards/6C.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );
            widget->show();
            break;
    }
}

```

```

        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/9C.png"));

Fl_PNG_Image("../cards/10C.png") ;

Fl_PNG_Image("../cards/JC.png") ;

Fl_PNG_Image("../cards/QC.png") ;

Fl_PNG_Image("../cards/KC.png") ;

Fl_PNG_Image("../cards/AS.png") ;

Fl_PNG_Image("../cards/2S.png") ;

Fl_PNG_Image("../cards/3S.png") ;

Fl_PNG_Image("../cards/4S.png") ;

```

        break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
break;
}

```

```

        break;
    case 6 : //card 7
        widget = P3C7;
        switch ( card.suite )
        {
            case hearts :
                switch ( card.card )
                {
                    case ace :
                        widget->image( new
                            Fl_PNG_Image( "../cards/AH.png" ) );
                        widget->show();
                        break;
                    case two :
                        widget->image( new
                            Fl_PNG_Image( "../cards/2H.png" ) );
                        widget->show();
                        break;
                    case three :
                        widget->image( new
                            Fl_PNG_Image( "../cards/3H.png" ) );
                        widget->show();
                        break;
                    case four :
                        widget->image( new
                            Fl_PNG_Image( "../cards/4H.png" ) );
                        widget->show();
                        break;
                    case five :
                        widget->image( new
                            Fl_PNG_Image( "../cards/5H.png" ) );
                        widget->show();
                        break;
                    case six :
                        widget->image( new
                            Fl_PNG_Image( "../cards/6H.png" ) );
                        widget->show();
                        break;
                    case seven :
                        widget->image( new
                            Fl_PNG_Image( "../cards/7H.png" ) );
                        widget->show();
                        break;
                    case eight :
                        widget->image( new
                            Fl_PNG_Image( "../cards/8H.png" ) );
                        widget->show();
                        break;
                    case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
            widget->show();
            break;
    }
}

```

```

        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        Fl_PNG_Image( "../cards/KD.png" ) );
            widget->show();
            break;
    case clubs :
        switch ( card.card )

```

```

{
    case ace :
        widget->image( new
                        widget->show();
                        break;
    case two :
        widget->image( new
                        widget->show();
                        break;
    case three :
        widget->image( new
                        widget->show();
                        break;
    case four :
        widget->image( new
                        widget->show();
                        break;
    case five :
        widget->image( new
                        widget->show();
                        break;
    case six :
        widget->image( new
                        widget->show();
                        break;
    case seven :
        widget->image( new
                        widget->show();
                        break;
    case eight :
        widget->image( new
                        widget->show();
                        break;
    case nine :
        widget->image( new
                        widget->show();
                        break;
    case ten :
        widget->image( new
                        widget->show();
                        break;
}
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/3C.png" );
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );

```

```

        widget->show();
        break;
    case jack :
        widget->image( new
        widget->show();
        break;
    case queen :
        widget->image( new
        widget->show();
        break;
    case king :
        widget->image( new
        widget->show();
        break;
    }
    break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                widget->show();
                break;
            case two :
                widget->image( new
                widget->show();
                break;
            case three :
                widget->image( new
                widget->show();
                break;
            case four :
                widget->image( new
                widget->show();
                break;
            case five :
                widget->image( new
                widget->show();
                break;
            case six :

```

Fl_PNG_Image("../cards/JC.png"));

Fl_PNG_Image("../cards/QC.png"));

Fl_PNG_Image("../cards/KC.png"));

Fl_PNG_Image("../cards/AS.png"));

Fl_PNG_Image("../cards/2S.png"));

Fl_PNG_Image("../cards/3S.png"));

Fl_PNG_Image("../cards/4S.png"));

Fl_PNG_Image("../cards/5S.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
break;
}
break;
}
break;
case 3 : //Player 4
switch ( cardIndex )
{
    case 0 : //card 1

```

```

widget = P4C1;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                widget->show();
                break;
            case five :
                widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                widget->show();
                break;
            case six :
                widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                widget->show();
                break;
            case seven :
                widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
                widget->show();
                break;
            case eight :
                widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
                widget->show();
                break;
            case nine :
                widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );

```

```

        widget->show();
        break;
    case ten :
        widget->image( new
        widget->show();
        break;
    case jack :
        widget->image( new
        widget->show();
        break;
    case queen :
        widget->image( new
        widget->show();
        break;
    case king :
        widget->image( new
        widget->show();
        break;
    }
    break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                widget->show();
                break;
            case two :
                widget->image( new
                widget->show();
                break;
            case three :
                widget->image( new
                widget->show();
                break;
            case four :
                widget->image( new
                widget->show();
                break;
            case five :

```

Fl_PNG_Image("../cards/10H.png"));

Fl_PNG_Image("../cards/JH.png"));

Fl_PNG_Image("../cards/QH.png"));

Fl_PNG_Image("../cards/KH.png"));

Fl_PNG_Image("../cards/AD.png"));

Fl_PNG_Image("../cards/2D.png"));

Fl_PNG_Image("../cards/3D.png"));

Fl_PNG_Image("../cards/4D.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {

```

```
case ace :  
    widget->image( new  
        widget->show();  
        break;  
case two :  
    widget->image( new  
        widget->show();  
        break;  
case three :  
    widget->image( new  
        widget->show();  
        break;  
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/AC.png" );  
Fl_PNG_Image( "../cards/2C.png" );  
Fl_PNG_Image( "../cards/3C.png" );  
Fl_PNG_Image( "../cards/4C.png" );  
Fl_PNG_Image( "../cards/5C.png" );  
Fl_PNG_Image( "../cards/6C.png" );  
Fl_PNG_Image( "../cards/7C.png" );  
Fl_PNG_Image( "../cards/8C.png" );  
Fl_PNG_Image( "../cards/9C.png" );  
Fl_PNG_Image( "../cards/10C.png" );
```

```

                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/JC.png" ) );
Fl_PNG_Image( "../cards/QC.png" ) ;
Fl_PNG_Image( "../cards/KC.png" ) ;
Fl_PNG_Image( "../cards/AS.png" ) ;
Fl_PNG_Image( "../cards/2S.png" ) ;
Fl_PNG_Image( "../cards/3S.png" ) ;
Fl_PNG_Image( "../cards/4S.png" ) ;
Fl_PNG_Image( "../cards/5S.png" ) ;
Fl_PNG_Image( "../cards/6S.png" ) ;

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 1 : //card 2
    widget = P4C2;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
    widget->show();
    break;
```

```

        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
            }
            break;
        case diamonds :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        widget->show();
                        break;
                case six :
                    widget->image( new
                        widget->show();

```

```

                break;
        case seven :
                widget->image( new
                                widget->show();
                                break;
        case eight :
                widget->image( new
                                widget->show();
                                break;
        case nine :
                widget->image( new
                                widget->show();
                                break;
        case ten :
                widget->image( new
                                widget->show();
                                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
}
break;
case clubs :
switch ( card.card )
{
    case ace :
            widget->image( new
                            widget->show();
                            break;
    case two :
            widget->image( new
                            widget->show();
                            break;
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/KD.png" );
Fl_PNG_Image( "../cards/JD.png" );
Fl_PNG_Image( "../cards/10D.png" );
Fl_PNG_Image( "../cards/9D.png" );
Fl_PNG_Image( "../cards/8D.png" );
Fl_PNG_Image( "../cards/7D.png" );
}
break;

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3C.png" ) );
Fl_PNG_Image( "../cards/4C.png" ) ;
Fl_PNG_Image( "../cards/5C.png" ) ;
Fl_PNG_Image( "../cards/6C.png" ) ;
Fl_PNG_Image( "../cards/7C.png" ) ;
Fl_PNG_Image( "../cards/8C.png" ) ;
Fl_PNG_Image( "../cards/9C.png" ) ;
Fl_PNG_Image( "../cards/10C.png" ) ;
Fl_PNG_Image( "../cards/JC.png" ) ;
```

```
        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );
        widget->show();
        break;
    }
    break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
                widget->show();
                break;
            case five :
                widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
                widget->show();
                break;
            case six :
                widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
                widget->show();
                break;
            case seven :
                widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
                widget->show();
                break;
```

```

        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :
            widget->image( new
                Fl_PNG_Image( "../cards/9S.png" ) );
            widget->show();
            break;
        case ten :
            widget->image( new
                Fl_PNG_Image( "../cards/10S.png" ) );
            widget->show();
            break;
        case jack :
            widget->image( new
                Fl_PNG_Image( "../cards/JS.png" ) );
            widget->show();
            break;
        case queen :
            widget->image( new
                Fl_PNG_Image( "../cards/QS.png" ) );
            widget->show();
            break;
        case king :
            widget->image( new
                Fl_PNG_Image( "../cards/KS.png" ) );
            widget->show();
            break;
        }
        break;
    }
    break;
}
case 2 : //card 3
{
    widget = P4C3;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
                        Fl_PNG_Image( "../cards/2H.png" ) );
            }
        }
    }
}

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3H.png" ) );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
```

```
    widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
    widget->show();
    break;
case king :
    widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
    widget->show();
    break;
}
break;
case diamonds :
switch ( card.card )
{
case ace :
    widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
```

```

        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/8D.png");

Fl_PNG_Image("../cards/9D.png");

Fl_PNG_Image("../cards/10D.png");

Fl_PNG_Image("../cards/JD.png");

Fl_PNG_Image("../cards/QD.png");

Fl_PNG_Image("../cards/KD.png");

Fl_PNG_Image("../cards/AC.png");

Fl_PNG_Image("../cards/2C.png");

Fl_PNG_Image("../cards/3C.png");

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );
```

```

        widget->show();
        break;
    }
    break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AS.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2S.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3S.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4S.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5S.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6S.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7S.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 3 : //card 4
    widget = P4C4;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                    widget->show();
                    break;
                case three :
                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                    widget->show();

```

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
```

```

        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4D.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5D.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6D.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7D.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8D.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
    }
}

```

```

        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        case spades :
            switch ( card.card )

```

```

{
    case ace :
        widget->image( new
                        widget->show();
                        break;
    case two :
        widget->image( new
                        widget->show();
                        break;
    case three :
        widget->image( new
                        widget->show();
                        break;
    case four :
        widget->image( new
                        widget->show();
                        break;
    case five :
        widget->image( new
                        widget->show();
                        break;
    case six :
        widget->image( new
                        widget->show();
                        break;
    case seven :
        widget->image( new
                        widget->show();
                        break;
    case eight :
        widget->image( new
                        widget->show();
                        break;
    case nine :
        widget->image( new
                        widget->show();
                        break;
    case ten :
        widget->image( new
                        widget->show();
                        break;
}
Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/4S.png" );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );

```

```

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "./cards/J.S.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "./cards/Q.S.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "./cards/K.S.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 4 : //card 5
widget = P4C5;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "./cards/AH.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "./cards/2H.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "./cards/3H.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "./cards/4H.png" ) );
                widget->show();
                break;
            case five :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
}
break;
case diamonds :
switch ( card.card )
{

```

```
case ace :  
    widget->image( new  
        widget->show();  
        break;  
case two :  
    widget->image( new  
        widget->show();  
        break;  
case three :  
    widget->image( new  
        widget->show();  
        break;  
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/AD.png" );  
Fl_PNG_Image( "../cards/2D.png" );  
Fl_PNG_Image( "../cards/3D.png" );  
Fl_PNG_Image( "../cards/4D.png" );  
Fl_PNG_Image( "../cards/5D.png" );  
Fl_PNG_Image( "../cards/6D.png" );  
Fl_PNG_Image( "../cards/7D.png" );  
Fl_PNG_Image( "../cards/8D.png" );  
Fl_PNG_Image( "../cards/9D.png" );  
Fl_PNG_Image( "../cards/10D.png" );
```

```

                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
            case four :
                    widget->image( new
                                    widget->show();
                                    break;
            case five :
                    widget->image( new
                                    widget->show();
                                    break;
            case six :
                    widget->image( new
                                    widget->show();
                                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/JD.png" );
Fl_PNG_Image( "../cards/QD.png" );
Fl_PNG_Image( "../cards/KD.png" );
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/3C.png" );
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9C.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10C.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JC.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );

        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/J.png" ) );
    widget->show();
    break;
```

```

        case queen :
            widget->image( new
                Fl_PNG_Image( "./cards/QS.png" ) );
                widget->show();
                break;
        case king :
            widget->image( new
                Fl_PNG_Image( "./cards/KS.png" ) );
                widget->show();
                break;
            }
            break;
        }
        break;
    case 5 : //card 6
        widget = P4C6;
        switch ( card.suite )
        {
            case hearts :
                switch ( card.card )
                {
                    case ace :
                        widget->image( new
                            Fl_PNG_Image( "./cards/AH.png" ) );
                            widget->show();
                            break;
                    case two :
                        widget->image( new
                            Fl_PNG_Image( "./cards/2H.png" ) );
                            widget->show();
                            break;
                    case three :
                        widget->image( new
                            Fl_PNG_Image( "./cards/3H.png" ) );
                            widget->show();
                            break;
                    case four :
                        widget->image( new
                            Fl_PNG_Image( "./cards/4H.png" ) );
                            widget->show();
                            break;
                    case five :
                        widget->image( new
                            Fl_PNG_Image( "./cards/5H.png" ) );
                            widget->show();
                            break;
                    case six :
                        widget->image( new
                            Fl_PNG_Image( "./cards/6H.png" ) );
                            widget->show();
                            break;
                }
            }
        }
    }
}

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );

        widget->show();
        break;
    }
    break;
}
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
    widget->show();
    break;
```

```
        case queen :  
            widget->image( new  
                Fl_PNG_Image( "../cards/QD.png" ) );  
  
            widget->show();  
            break;  
        case king :  
            widget->image( new  
                Fl_PNG_Image( "../cards/KD.png" ) );  
  
            widget->show();  
            break;  
        }  
        break;  
    case clubs :  
        switch ( card.card )  
        {  
            case ace :  
                widget->image( new  
                    Fl_PNG_Image( "../cards/AC.png" ) );  
  
                widget->show();  
                break;  
            case two :  
                widget->image( new  
                    Fl_PNG_Image( "../cards/2C.png" ) );  
  
                widget->show();  
                break;  
            case three :  
                widget->image( new  
                    Fl_PNG_Image( "../cards/3C.png" ) );  
  
                widget->show();  
                break;  
            case four :  
                widget->image( new  
                    Fl_PNG_Image( "../cards/4C.png" ) );  
  
                widget->show();  
                break;  
            case five :  
                widget->image( new  
                    Fl_PNG_Image( "../cards/5C.png" ) );  
  
                widget->show();  
                break;  
            case six :  
                widget->image( new  
                    Fl_PNG_Image( "../cards/6C.png" ) );  
  
                widget->show();  
                break;  
            case seven :  
                widget->image( new  
                    Fl_PNG_Image( "../cards/7C.png" ) );  
  
                widget->show();
```

```

        break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                            widget->show();
                            break;
        case two :
            widget->image( new
                            widget->show();
                            break;
        case three :
            widget->image( new
                            widget->show();
                            break;
Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );

```

```
    widget->show();
    break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->show();
```

Fl_PNG_Image("../cards/4S.png"));

Fl_PNG_Image("../cards/5S.png"));

Fl_PNG_Image("../cards/6S.png"));

Fl_PNG_Image("../cards/7S.png"));

Fl_PNG_Image("../cards/8S.png"));

Fl_PNG_Image("../cards/9S.png"));

Fl_PNG_Image("../cards/10S.png"));

Fl_PNG_Image("../cards/JS.png"));

Fl_PNG_Image("../cards/QS.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 6 : //card 7
    widget = P4C7;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                    widget->show();
                    break;
                case three :
                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                    widget->show();
                    break;
                case four :
                    widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                    widget->show();
                    break;
                case five :
                    widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                    widget->show();
                    break;
                case six :
                    widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                    widget->show();
                    break;
                case seven :
                    widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
                    widget->show();

```

```

                break;
        case eight :
                widget->image( new
                                widget->show();
                                break;
        case nine :
                widget->image( new
                                widget->show();
                                break;
        case ten :
                widget->image( new
                                widget->show();
                                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
Fl_PNG_Image( "../cards/AD.png" );
Fl_PNG_Image( "../cards/2D.png" );
Fl_PNG_Image( "../cards/3D.png" );

```

```
    widget->show();
    break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->show();
```

Fl_PNG_Image("../cards/4D.png"));

Fl_PNG_Image("../cards/5D.png"));

Fl_PNG_Image("../cards/6D.png"));

Fl_PNG_Image("../cards/7D.png"));

Fl_PNG_Image("../cards/8D.png"));

Fl_PNG_Image("../cards/9D.png"));

Fl_PNG_Image("../cards/10D.png"));

Fl_PNG_Image("../cards/JD.png"));

Fl_PNG_Image("../cards/QD.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
Fl_PNG_Image( "../cards/5C.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
Fl_PNG_Image( "../cards/6C.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );
            widget->show();
            break;
    }
}

```

```

        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/9C.png"));

Fl_PNG_Image("../cards/10C.png") ;

Fl_PNG_Image("../cards/JC.png") ;

Fl_PNG_Image("../cards/QC.png") ;

Fl_PNG_Image("../cards/KC.png") ;

Fl_PNG_Image("../cards/AS.png") ;

Fl_PNG_Image("../cards/2S.png") ;

Fl_PNG_Image("../cards/3S.png") ;

Fl_PNG_Image("../cards/4S.png") ;

```

        break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
break;
}

```

```

        break;
    }
    break;
case 4 : //Player 5
    switch ( cardIndex )
    {
        case 0 : //card 1
            widget = P5C1;
            switch ( card.suite )
            {
                case hearts :
                    switch ( card.card )
                    {
                        case ace :
                            widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                            widget->show();
                            break;
                        case two :
                            widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                            widget->show();
                            break;
                        case three :
                            widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                            widget->show();
                            break;
                        case four :
                            widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                            widget->show();
                            break;
                        case five :
                            widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                            widget->show();
                            break;
                        case six :
                            widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                            widget->show();
                            break;
                        case seven :
                            widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
                            widget->show();
                            break;
                        case eight :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
    }
}

```

```
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
case jack :  
    widget->image( new  
        widget->show();  
        break;  
case queen :  
    widget->image( new  
        widget->show();  
        break;  
case king :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/4D.png" );  
Fl_PNG_Image( "../cards/5D.png" );  
Fl_PNG_Image( "../cards/6D.png" );  
Fl_PNG_Image( "../cards/7D.png" );  
Fl_PNG_Image( "../cards/8D.png" );  
Fl_PNG_Image( "../cards/9D.png" );  
Fl_PNG_Image( "../cards/10D.png" );  
Fl_PNG_Image( "../cards/JD.png" );  
Fl_PNG_Image( "../cards/QD.png" );  
Fl_PNG_Image( "../cards/KD.png" );
```

```
break;
}
break;
case clubs :
switch ( card.card )
{
case ace :
widget->image( new
widget->show();
break;
case two :
widget->image( new
widget->show();
break;
case three :
widget->image( new
widget->show();
break;
case four :
widget->image( new
widget->show();
break;
case five :
widget->image( new
widget->show();
break;
case six :
widget->image( new
widget->show();
break;
case seven :
widget->image( new
widget->show();
break;
case eight :
widget->image( new
widget->show();
break;
case nine :
widget->image( new
widget->show();
break;
Fl_PNG_Image( "../cards/AC.png" ) );
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/3C.png" );
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
```

```

        widget->show();
        break;
    case ten :
        widget->image( new
            Fl_PNG_Image( "../cards/10C.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
            Fl_PNG_Image( "../cards/JC.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
            Fl_PNG_Image( "../cards/QC.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
            Fl_PNG_Image( "../cards/KC.png" ) );
        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AS.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2S.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3S.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4S.png" ) );
            widget->show();
            break;
        case five :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/J.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
}
break;
}
break;
case 1 : //card 2

```

```

widget = P5C2;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                widget->show();
                break;
            case five :
                widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                widget->show();
                break;
            case six :
                widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                widget->show();
                break;
            case seven :
                widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
                widget->show();
                break;
            case eight :
                widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
                widget->show();
                break;
            case nine :
                widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );

```

```

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    }
    break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
                widget->show();
                break;
            case five :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
}
break;
case clubs :
        switch ( card.card )
{

```

```
case ace :  
    widget->image( new  
        widget->show();  
        break;  
case two :  
    widget->image( new  
        widget->show();  
        break;  
case three :  
    widget->image( new  
        widget->show();  
        break;  
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/AC.png" );  
Fl_PNG_Image( "../cards/2C.png" );  
Fl_PNG_Image( "../cards/3C.png" );  
Fl_PNG_Image( "../cards/4C.png" );  
Fl_PNG_Image( "../cards/5C.png" );  
Fl_PNG_Image( "../cards/6C.png" );  
Fl_PNG_Image( "../cards/7C.png" );  
Fl_PNG_Image( "../cards/8C.png" );  
Fl_PNG_Image( "../cards/9C.png" );  
Fl_PNG_Image( "../cards/10C.png" );
```

```

                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
            case four :
                    widget->image( new
                                    widget->show();
                                    break;
            case five :
                    widget->image( new
                                    widget->show();
                                    break;
            case six :
                    widget->image( new
                                    widget->show();
                                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/JC.png" ) );
Fl_PNG_Image( "../cards/QC.png" ) ;
Fl_PNG_Image( "../cards/KC.png" ) ;
Fl_PNG_Image( "../cards/AS.png" ) ;
Fl_PNG_Image( "../cards/2S.png" ) ;
Fl_PNG_Image( "../cards/3S.png" ) ;
Fl_PNG_Image( "../cards/4S.png" ) ;
Fl_PNG_Image( "../cards/5S.png" ) ;
Fl_PNG_Image( "../cards/6S.png" ) ;

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 2 : //card 3
    widget = P5C3;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
    widget->show();
    break;
```

```

        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();

```

```

        break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
break;
case clubs :
switch ( card.card )
{
case ace :
    widget->image( new
                    widget->show();
                    break;
case two :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/KD.png" );
Fl_PNG_Image( "../cards/JD.png" );
Fl_PNG_Image( "../cards/10D.png" );
Fl_PNG_Image( "../cards/9D.png" );
Fl_PNG_Image( "../cards/8D.png" );
Fl_PNG_Image( "../cards/7D.png" );
}

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3C.png" ) );
Fl_PNG_Image( "../cards/4C.png" ) ;
Fl_PNG_Image( "../cards/5C.png" ) ;
Fl_PNG_Image( "../cards/6C.png" ) ;
Fl_PNG_Image( "../cards/7C.png" ) ;
Fl_PNG_Image( "../cards/8C.png" ) ;
Fl_PNG_Image( "../cards/9C.png" ) ;
Fl_PNG_Image( "../cards/10C.png" ) ;
Fl_PNG_Image( "../cards/JC.png" ) ;
```

```

        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );
        widget->show();
        break;
}
break;
case spades :
switch ( card.card )
{
    case ace :
        widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );
        widget->show();
        break;
    case two :
        widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
        widget->show();
        break;
    case three :
        widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
        widget->show();
        break;
    case four :
        widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
        widget->show();
        break;
    case five :
        widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
        widget->show();
        break;
    case six :
        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
}

```

```

        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :
            widget->image( new
                Fl_PNG_Image( "../cards/9S.png" ) );
            widget->show();
            break;
        case ten :
            widget->image( new
                Fl_PNG_Image( "../cards/10S.png" ) );
            widget->show();
            break;
        case jack :
            widget->image( new
                Fl_PNG_Image( "../cards/JS.png" ) );
            widget->show();
            break;
        case queen :
            widget->image( new
                Fl_PNG_Image( "../cards/QS.png" ) );
            widget->show();
            break;
        case king :
            widget->image( new
                Fl_PNG_Image( "../cards/KS.png" ) );
            widget->show();
            break;
        }
        break;
    }
    break;
}
case 3 : //card 4
{
    widget = P5C4;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
                        Fl_PNG_Image( "../cards/2H.png" ) );
            }
        }
    }
}

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3H.png" ) );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
```

```
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
            widget->show();
            break;
```

```

        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/8D.png");

Fl_PNG_Image("../cards/9D.png");

Fl_PNG_Image("../cards/10D.png");

Fl_PNG_Image("../cards/JD.png");

Fl_PNG_Image("../cards/QD.png");

Fl_PNG_Image("../cards/KD.png");

Fl_PNG_Image("../cards/AC.png");

Fl_PNG_Image("../cards/2C.png");

Fl_PNG_Image("../cards/3C.png");

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );
```

```

        widget->show();
        break;
    }
    break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AS.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2S.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3S.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4S.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5S.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6S.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7S.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 4 : //card 5
    widget = P5C5;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                    widget->show();
                    break;
                case three :
                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                    widget->show();

```

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
```

```

        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4D.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5D.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6D.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7D.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8D.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
    }
}

```

```

        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        case spades :
            switch ( card.card )

```

```

{
    case ace :
        widget->image( new
                        widget->show();
                        break;
    case two :
        widget->image( new
                        widget->show();
                        break;
    case three :
        widget->image( new
                        widget->show();
                        break;
    case four :
        widget->image( new
                        widget->show();
                        break;
    case five :
        widget->image( new
                        widget->show();
                        break;
    case six :
        widget->image( new
                        widget->show();
                        break;
    case seven :
        widget->image( new
                        widget->show();
                        break;
    case eight :
        widget->image( new
                        widget->show();
                        break;
    case nine :
        widget->image( new
                        widget->show();
                        break;
    case ten :
        widget->image( new
                        widget->show();
                        break;
}
Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/4S.png" );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );

```

```

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "./cards/J.S.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "./cards/Q.S.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "./cards/K.S.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 5 : //card 6
widget = P5C6;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "./cards/AH.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "./cards/2H.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "./cards/3H.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "./cards/4H.png" ) );
                widget->show();
                break;
            case five :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
}
break;
case diamonds :
switch ( card.card )
{

```

```
case ace :  
    widget->image( new  
        widget->show();  
        break;  
case two :  
    widget->image( new  
        widget->show();  
        break;  
case three :  
    widget->image( new  
        widget->show();  
        break;  
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/AD.png" );  
Fl_PNG_Image( "../cards/2D.png" );  
Fl_PNG_Image( "../cards/3D.png" );  
Fl_PNG_Image( "../cards/4D.png" );  
Fl_PNG_Image( "../cards/5D.png" );  
Fl_PNG_Image( "../cards/6D.png" );  
Fl_PNG_Image( "../cards/7D.png" );  
Fl_PNG_Image( "../cards/8D.png" );  
Fl_PNG_Image( "../cards/9D.png" );  
Fl_PNG_Image( "../cards/10D.png" );
```

```

                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
            case four :
                    widget->image( new
                                    widget->show();
                                    break;
            case five :
                    widget->image( new
                                    widget->show();
                                    break;
            case six :
                    widget->image( new
                                    widget->show();
                                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/JD.png" );
Fl_PNG_Image( "../cards/QD.png" );
Fl_PNG_Image( "../cards/KD.png" );
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/3C.png" );
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9C.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10C.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JC.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );

        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/J.png" ) );
    widget->show();
    break;
```

```

        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    }
    break;
case 6 : //card 7
    widget = P5C7;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        widget->show();
                        break;
                case six :
                    widget->image( new
                        widget->show();
                        break;
            }
            break;
        Fl_PNG_Image( "../cards/AH.png" );
    }
    break;
Fl_PNG_Image( "../cards/2H.png" );
Fl_PNG_Image( "../cards/3H.png" );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );

        widget->show();
        break;
    }
    break;
}
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
    widget->show();
    break;
```

```

        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();

```

```

        break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                            widget->show();
                            break;
        case two :
            widget->image( new
                            widget->show();
                            break;
        case three :
            widget->image( new
                            widget->show();
                            break;
Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );

```

```
    widget->show();
    break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->show();
```

Fl_PNG_Image("../cards/4S.png"));

Fl_PNG_Image("../cards/5S.png"));

Fl_PNG_Image("../cards/6S.png"));

Fl_PNG_Image("../cards/7S.png"));

Fl_PNG_Image("../cards/8S.png"));

Fl_PNG_Image("../cards/9S.png"));

Fl_PNG_Image("../cards/10S.png"));

Fl_PNG_Image("../cards/JS.png"));

Fl_PNG_Image("../cards/QS.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
}

case 5 : //Player 6
switch ( cardIndex )
{
    case 0 : //card 1
        widget = P6C1;
        switch ( card.suite )
        {
            case hearts :
                switch ( card.card )
                {
                    case ace :
                        widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                        widget->show();
                        break;
                    case two :
                        widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                        widget->show();
                        break;
                    case three :
                        widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                        widget->show();
                        break;
                    case four :
                        widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                        widget->show();
                        break;
                    case five :
                        widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                        widget->show();
                        break;
                    case six :
                        widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                        widget->show();
                }
            }
        }
    }
}
```

```

Fl_PNG_Image( "./cards/7H.png" ) );
break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->image( new
        widget->show();
        break;
}
break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                widget->show();
                break;
        case two :
            widget->image( new
                widget->show();
                break;
        case three :
            widget->image( new
                widget->show();
                break;
        case four :
            widget->image( new
                widget->show();
                break;
        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
    }
}
break;

```

```

        widget->show();
        break;
    case three :
        widget->image( new
            widget->show();
            break;
    case four :
        widget->image( new
            widget->show();
            break;
    case five :
        widget->image( new
            widget->show();
            break;
    case six :
        widget->image( new
            widget->show();
            break;
    case seven :
        widget->image( new
            widget->show();
            break;
    case eight :
        widget->image( new
            widget->show();
            break;
    case nine :
        widget->image( new
            widget->show();
            break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :

```

Fl_PNG_Image("../cards/3D.png"));

Fl_PNG_Image("../cards/4D.png"));

Fl_PNG_Image("../cards/5D.png"));

Fl_PNG_Image("../cards/6D.png"));

Fl_PNG_Image("../cards/7D.png"));

Fl_PNG_Image("../cards/8D.png"));

Fl_PNG_Image("../cards/9D.png"));

Fl_PNG_Image("../cards/10D.png"));

Fl_PNG_Image("../cards/JD.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
}
break;
case clubs :
switch ( card.card )
{
case ace :
        widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
        widget->show();
        break;
case two :
        widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
        widget->show();
        break;
case three :
        widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
        widget->show();
        break;
case four :
        widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
        widget->show();
        break;
case five :
        widget->image( new
Fl_PNG_Image( "../cards/5C.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6C.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );
        widget->show();
        break;

```

```

        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8C.png" ) );
                widget->show();
                break;
        case nine :
            widget->image( new
                Fl_PNG_Image( "../cards/9C.png" ) );
                widget->show();
                break;
        case ten :
            widget->image( new
                Fl_PNG_Image( "../cards/10C.png" ) );
                widget->show();
                break;
        case jack :
            widget->image( new
                Fl_PNG_Image( "../cards/JC.png" ) );
                widget->show();
                break;
        case queen :
            widget->image( new
                Fl_PNG_Image( "../cards/QC.png" ) );
                widget->show();
                break;
        case king :
            widget->image( new
                Fl_PNG_Image( "../cards/KC.png" ) );
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    Fl_PNG_Image( "../cards/AS.png" ) );
                    widget->show();
                    break;
            case two :
                widget->image( new
                    Fl_PNG_Image( "../cards/2S.png" ) );
                    widget->show();
                    break;
            case three :
                widget->image( new
                    Fl_PNG_Image( "../cards/3S.png" ) );
                    widget->show();

```

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4S.png" ) );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );
Fl_PNG_Image( "../cards/JS.png" );
Fl_PNG_Image( "../cards/QS.png" );
Fl_PNG_Image( "../cards/KS.png" );
```



```

        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
    }
}

```

```
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
case jack :  
    widget->image( new  
        widget->show();  
        break;  
case queen :  
    widget->image( new  
        widget->show();  
        break;  
case king :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/4D.png" );  
Fl_PNG_Image( "../cards/5D.png" );  
Fl_PNG_Image( "../cards/6D.png" );  
Fl_PNG_Image( "../cards/7D.png" );  
Fl_PNG_Image( "../cards/8D.png" );  
Fl_PNG_Image( "../cards/9D.png" );  
Fl_PNG_Image( "../cards/10D.png" );  
Fl_PNG_Image( "../cards/JD.png" );  
Fl_PNG_Image( "../cards/QD.png" );  
Fl_PNG_Image( "../cards/KD.png" );
```

```
break;
}
break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5C.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6C.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7C.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8C.png" ) );
            widget->show();
            break;
        case nine :
            widget->image( new
                Fl_PNG_Image( "../cards/9C.png" ) );
            widget->show();
            break;
    }
}
```

```

        widget->show();
        break;
    case ten :
        widget->image( new
        widget->show();
        break;
    case jack :
        widget->image( new
        widget->show();
        break;
    case queen :
        widget->image( new
        widget->show();
        break;
    case king :
        widget->image( new
        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
            widget->show();
            break;
        case two :
            widget->image( new
            widget->show();
            break;
        case three :
            widget->image( new
            widget->show();
            break;
        case four :
            widget->image( new
            widget->show();
            break;
        case five :

```

Fl_PNG_Image("../cards/10C.png"));

Fl_PNG_Image("../cards/JC.png"));

Fl_PNG_Image("../cards/QC.png"));

Fl_PNG_Image("../cards/KC.png"));

Fl_PNG_Image("../cards/AS.png"));

Fl_PNG_Image("../cards/2S.png"));

Fl_PNG_Image("../cards/3S.png"));

Fl_PNG_Image("../cards/4S.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/J.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
}
break;
}
break;
case 2 : //card 3

```

```

widget = P6C3;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                widget->show();
                break;
            case five :
                widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                widget->show();
                break;
            case six :
                widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                widget->show();
                break;
            case seven :
                widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
                widget->show();
                break;
            case eight :
                widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
                widget->show();
                break;
            case nine :
                widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );

```

```

        widget->show();
        break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :
        widget->image( new
            widget->show();
            break;
    case king :
        widget->image( new
            widget->show();
            break;
    }
    break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :

```

Fl_PNG_Image("../cards/10H.png"));

Fl_PNG_Image("../cards/JH.png"));

Fl_PNG_Image("../cards/QH.png"));

Fl_PNG_Image("../cards/KH.png"));

Fl_PNG_Image("../cards/AD.png"));

Fl_PNG_Image("../cards/2D.png"));

Fl_PNG_Image("../cards/3D.png"));

Fl_PNG_Image("../cards/4D.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
}
break;
case clubs :
        switch ( card.card )
{

```

```
case ace :
    widget->image( new
        widget->show();
        break;
case two :
    widget->image( new
        widget->show();
        break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();

Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/3C.png" );
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
```

```

                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/JC.png" ) );
Fl_PNG_Image( "../cards/QC.png" ) ;
Fl_PNG_Image( "../cards/KC.png" ) ;
Fl_PNG_Image( "../cards/AS.png" ) ;
Fl_PNG_Image( "../cards/2S.png" ) ;
Fl_PNG_Image( "../cards/3S.png" ) ;
Fl_PNG_Image( "../cards/4S.png" ) ;
Fl_PNG_Image( "../cards/5S.png" ) ;
Fl_PNG_Image( "../cards/6S.png" ) ;

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 3 : //card 4
    widget = P6C4;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
    widget->show();
    break;
```

```

        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
            }
            break;
        case diamonds :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        widget->show();
                        break;
                case six :
                    widget->image( new
                        widget->show();

```

```

        break;
    case seven :
        widget->image( new
            widget->show();
            break;
    case eight :
        widget->image( new
            widget->show();
            break;
    case nine :
        widget->image( new
            widget->show();
            break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :
        widget->image( new
            widget->show();
            break;
    case king :
        widget->image( new
            widget->show();
            break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                widget->show();
                break;
        case two :
            widget->image( new
                widget->show();
                break;
    }
}
break;
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );

```

```

        widget->show();
        break;
    case three :
        widget->image( new
            widget->show();
            break;
    case four :
        widget->image( new
            widget->show();
            break;
    case five :
        widget->image( new
            widget->show();
            break;
    case six :
        widget->image( new
            widget->show();
            break;
    case seven :
        widget->image( new
            widget->show();
            break;
    case eight :
        widget->image( new
            widget->show();
            break;
    case nine :
        widget->image( new
            widget->show();
            break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :

```

Fl_PNG_Image("../cards/3C.png"));

Fl_PNG_Image("../cards/4C.png"));

Fl_PNG_Image("../cards/5C.png"));

Fl_PNG_Image("../cards/6C.png"));

Fl_PNG_Image("../cards/7C.png"));

Fl_PNG_Image("../cards/8C.png"));

Fl_PNG_Image("../cards/9C.png"));

Fl_PNG_Image("../cards/10C.png"));

Fl_PNG_Image("../cards/JC.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );
        widget->show();
        break;
}
break;
case spades :
switch ( card.card )
{
    case ace :
        widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );
        widget->show();
        break;
    case two :
        widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
        widget->show();
        break;
    case three :
        widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
        widget->show();
        break;
    case four :
        widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
        widget->show();
        break;
    case five :
        widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
        widget->show();
        break;
    case six :
        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
}

```

```

        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :
            widget->image( new
                Fl_PNG_Image( "../cards/9S.png" ) );
            widget->show();
            break;
        case ten :
            widget->image( new
                Fl_PNG_Image( "../cards/10S.png" ) );
            widget->show();
            break;
        case jack :
            widget->image( new
                Fl_PNG_Image( "../cards/JS.png" ) );
            widget->show();
            break;
        case queen :
            widget->image( new
                Fl_PNG_Image( "../cards/QS.png" ) );
            widget->show();
            break;
        case king :
            widget->image( new
                Fl_PNG_Image( "../cards/KS.png" ) );
            widget->show();
            break;
        }
        break;
    }
    break;
}
case 4 : //card 5
{
    widget = P6C5;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
                        Fl_PNG_Image( "../cards/2H.png" ) );
            }
        }
    }
}

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3H.png" ) );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
```

```

        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
}
break;
case diamonds :
switch ( card.card )
{
case ace :
        widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
        widget->show();
        break;
case two :
        widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
        widget->show();
        break;
case three :
        widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
        widget->show();
        break;
case four :
        widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
        widget->show();
        break;
case five :
        widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
        widget->show();
        break;
}

```

```

        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/8D.png");

Fl_PNG_Image("../cards/9D.png");

Fl_PNG_Image("../cards/10D.png");

Fl_PNG_Image("../cards/JD.png");

Fl_PNG_Image("../cards/QD.png");

Fl_PNG_Image("../cards/KD.png");

Fl_PNG_Image("../cards/AC.png");

Fl_PNG_Image("../cards/2C.png");

Fl_PNG_Image("../cards/3C.png");

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );
```

```

        widget->show();
        break;
    }
    break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AS.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2S.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3S.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4S.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5S.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6S.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7S.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 5 : //card 6
    widget = P6C6;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                    widget->show();
                    break;
                case three :
                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                    widget->show();

```

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
```

```

        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4D.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5D.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6D.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7D.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8D.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
    }
}

```

```

        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        case spades :
            switch ( card.card )

```

```

{
    case ace :
        widget->image( new
                        widget->show();
                        break;
    case two :
        widget->image( new
                        widget->show();
                        break;
    case three :
        widget->image( new
                        widget->show();
                        break;
    case four :
        widget->image( new
                        widget->show();
                        break;
    case five :
        widget->image( new
                        widget->show();
                        break;
    case six :
        widget->image( new
                        widget->show();
                        break;
    case seven :
        widget->image( new
                        widget->show();
                        break;
    case eight :
        widget->image( new
                        widget->show();
                        break;
    case nine :
        widget->image( new
                        widget->show();
                        break;
    case ten :
        widget->image( new
                        widget->show();
                        break;
}
Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/4S.png" );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );

```

```

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "./cards/J.S.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "./cards/Q.S.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "./cards/K.S.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 6 : //card 7
widget = P6C7;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "./cards/AH.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "./cards/2H.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "./cards/3H.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "./cards/4H.png" ) );
                widget->show();
                break;
            case five :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
}
break;
case diamonds :
switch ( card.card )
{

```

```
case ace :  
    widget->image( new  
        widget->show();  
        break;  
case two :  
    widget->image( new  
        widget->show();  
        break;  
case three :  
    widget->image( new  
        widget->show();  
        break;  
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/AD.png" );  
Fl_PNG_Image( "../cards/2D.png" );  
Fl_PNG_Image( "../cards/3D.png" );  
Fl_PNG_Image( "../cards/4D.png" );  
Fl_PNG_Image( "../cards/5D.png" );  
Fl_PNG_Image( "../cards/6D.png" );  
Fl_PNG_Image( "../cards/7D.png" );  
Fl_PNG_Image( "../cards/8D.png" );  
Fl_PNG_Image( "../cards/9D.png" );  
Fl_PNG_Image( "../cards/10D.png" );
```

```

                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
            case four :
                    widget->image( new
                                    widget->show();
                                    break;
            case five :
                    widget->image( new
                                    widget->show();
                                    break;
            case six :
                    widget->image( new
                                    widget->show();
                                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/JD.png" );
Fl_PNG_Image( "../cards/QD.png" );
Fl_PNG_Image( "../cards/KD.png" );
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/3C.png" );
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9C.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10C.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JC.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );

        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/J.png" ) );
    widget->show();
    break;
```

```

        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    }
    break;
}
break;
case 6 : //Player 7
switch ( cardIndex )
{
    case 0 : //card 1
        widget = P7C1;
        switch ( card.suite )
        {
            case hearts :
                switch ( card.card )
                {
                    case ace :
                        widget->image( new
                            widget->show();
                            break;
                    case two :
                        widget->image( new
                            widget->show();
                            break;
                    case three :
                        widget->image( new
                            widget->show();
                            break;
                    case four :
                        widget->image( new
                            widget->show();
                            break;
                    case five :
                        widget->image( new
                            widget->show();
                            break;
                }
                Fl_PNG_Image( "../cards/AH.png" );
            }
        }
    }
    break;
Fl_PNG_Image( "../cards/2H.png" );
Fl_PNG_Image( "../cards/3H.png" );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );

```

```

        widget->show();
        break;
    case six :
        widget->image( new
            Fl_PNG_Image( "../cards/6H.png" ) );
        widget->show();
        break;
    case seven :
        widget->image( new
            Fl_PNG_Image( "../cards/7H.png" ) );
        widget->show();
        break;
    case eight :
        widget->image( new
            Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
    case nine :
        widget->image( new
            Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
            Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
            Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
            Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
            Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                }
                break;

```

```
    widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
    widget->show();
    break;
```

```
        case jack :
            widget->image( new
                Fl_PNG_Image( "../cards/JD.png" ) );
            widget->show();
            break;
        case queen :
            widget->image( new
                Fl_PNG_Image( "../cards/QD.png" ) );
            widget->show();
            break;
        case king :
            widget->image( new
                Fl_PNG_Image( "../cards/KD.png" ) );
            widget->show();
            break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    Fl_PNG_Image( "../cards/AC.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
                    Fl_PNG_Image( "../cards/2C.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
                    Fl_PNG_Image( "../cards/3C.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
                    Fl_PNG_Image( "../cards/4C.png" ) );
                widget->show();
                break;
            case five :
                widget->image( new
                    Fl_PNG_Image( "../cards/5C.png" ) );
                widget->show();
                break;
            case six :
                widget->image( new
                    Fl_PNG_Image( "../cards/6C.png" ) );
                widget->show();
```

```

        break;
    case seven :
        widget->image( new
            widget->show();
            break;
    case eight :
        widget->image( new
            widget->show();
            break;
    case nine :
        widget->image( new
            widget->show();
            break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :
        widget->image( new
            widget->show();
            break;
    case king :
        widget->image( new
            widget->show();
            break;
    }
    break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
    Fl_PNG_Image( "../cards/AS.png" );
    Fl_PNG_Image( "../cards/2S.png" );

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/4S.png" );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );
Fl_PNG_Image( "../cards/J.S.png" );
Fl_PNG_Image( "../cards/JS.png" );
```

```

        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
break;
}
break;
case 1 : //card 2
    widget = P7C2;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                    widget->show();
                    break;
                case three :
                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                    widget->show();
                    break;
                case four :
                    widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                    widget->show();
                    break;
                case five :
                    widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                    widget->show();
                    break;
                case six :
                    widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                    widget->show();

```

```

        break;
    case seven :
        widget->image( new
            widget->show();
            break;
    case eight :
        widget->image( new
            widget->show();
            break;
    case nine :
        widget->image( new
            widget->show();
            break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :
        widget->image( new
            widget->show();
            break;
    case king :
        widget->image( new
            widget->show();
            break;
    }
    break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();
                    break;
            case eight :
                widget->image( new
                    widget->show();
                    break;
            case nine :
                widget->image( new
                    widget->show();
                    break;
            case ten :
                widget->image( new
                    widget->show();
                    break;
            case jack :
                widget->image( new
                    widget->show();
                    break;
            case queen :
                widget->image( new
                    widget->show();
                    break;
            case king :
                widget->image( new
                    widget->show();
                    break;
        }
    }
}

Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
Fl_PNG_Image( "../cards/AD.png" );
Fl_PNG_Image( "../cards/2D.png" );

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3D.png" );
Fl_PNG_Image( "../cards/4D.png" );
Fl_PNG_Image( "../cards/5D.png" );
Fl_PNG_Image( "../cards/6D.png" );
Fl_PNG_Image( "../cards/7D.png" );
Fl_PNG_Image( "../cards/8D.png" );
Fl_PNG_Image( "../cards/9D.png" );
Fl_PNG_Image( "../cards/10D.png" );
Fl_PNG_Image( "../cards/JD.png" );
```

```
    widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
    widget->show();
    break;
case king :
    widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
    widget->show();
    break;
}
break;
case clubs :
switch ( card.card )
{
case ace :
    widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5C.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6C.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );
    widget->show();
    break;
```

```

        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/8C.png"));

Fl_PNG_Image("../cards/9C.png"));

Fl_PNG_Image("../cards/10C.png"));

Fl_PNG_Image("../cards/JC.png"));

Fl_PNG_Image("../cards/QC.png"));

Fl_PNG_Image("../cards/KC.png"));

Fl_PNG_Image("../cards/AS.png"));

Fl_PNG_Image("../cards/2S.png"));

Fl_PNG_Image("../cards/3S.png"));

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4S.png" ) );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );
Fl_PNG_Image( "../cards/JS.png" );
Fl_PNG_Image( "../cards/QS.png" );
Fl_PNG_Image( "../cards/KS.png" );
```



```

        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
    }
}

```

```
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
case jack :  
    widget->image( new  
        widget->show();  
        break;  
case queen :  
    widget->image( new  
        widget->show();  
        break;  
case king :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/4D.png" );  
Fl_PNG_Image( "../cards/5D.png" );  
Fl_PNG_Image( "../cards/6D.png" );  
Fl_PNG_Image( "../cards/7D.png" );  
Fl_PNG_Image( "../cards/8D.png" );  
Fl_PNG_Image( "../cards/9D.png" );  
Fl_PNG_Image( "../cards/10D.png" );  
Fl_PNG_Image( "../cards/JD.png" );  
Fl_PNG_Image( "../cards/QD.png" );  
Fl_PNG_Image( "../cards/KD.png" );
```

```
break;
}
break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5C.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6C.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7C.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8C.png" ) );
            widget->show();
            break;
        case nine :
            widget->image( new
                Fl_PNG_Image( "../cards/9C.png" ) );
            widget->show();
            break;
    }
}
```

```

        widget->show();
        break;
    case ten :
        widget->image( new
            Fl_PNG_Image( "../cards/10C.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
            Fl_PNG_Image( "../cards/JC.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
            Fl_PNG_Image( "../cards/QC.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
            Fl_PNG_Image( "../cards/KC.png" ) );
        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AS.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2S.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3S.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4S.png" ) );
            widget->show();
            break;
        case five :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/J.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
}
break;
}
break;
case 3 : //card 4

```

```

widget = P7C4;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
                widget->show();
                break;
            case five :
                widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
                widget->show();
                break;
            case six :
                widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
                widget->show();
                break;
            case seven :
                widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
                widget->show();
                break;
            case eight :
                widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
                widget->show();
                break;
            case nine :
                widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );

```

```

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    }
    break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
                widget->show();
                break;
            case two :
                widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
                widget->show();
                break;
            case three :
                widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
                widget->show();
                break;
            case four :
                widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
                widget->show();
                break;
            case five :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {

```

```
case ace :  
    widget->image( new  
        widget->show();  
        break;  
case two :  
    widget->image( new  
        widget->show();  
        break;  
case three :  
    widget->image( new  
        widget->show();  
        break;  
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/AC.png" );  
Fl_PNG_Image( "../cards/2C.png" );  
Fl_PNG_Image( "../cards/3C.png" );  
Fl_PNG_Image( "../cards/4C.png" );  
Fl_PNG_Image( "../cards/5C.png" );  
Fl_PNG_Image( "../cards/6C.png" );  
Fl_PNG_Image( "../cards/7C.png" );  
Fl_PNG_Image( "../cards/8C.png" );  
Fl_PNG_Image( "../cards/9C.png" );  
Fl_PNG_Image( "../cards/10C.png" );
```

```

                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/JC.png" ) );
Fl_PNG_Image( "../cards/QC.png" ) ;
Fl_PNG_Image( "../cards/KC.png" ) ;
Fl_PNG_Image( "../cards/AS.png" ) ;
Fl_PNG_Image( "../cards/2S.png" ) ;
Fl_PNG_Image( "../cards/3S.png" ) ;
Fl_PNG_Image( "../cards/4S.png" ) ;
Fl_PNG_Image( "../cards/5S.png" ) ;
Fl_PNG_Image( "../cards/6S.png" ) ;

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 4 : //card 5
    widget = P7C5;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4H.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
    widget->show();
    break;
```

```

        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
            }
            break;
        case diamonds :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        widget->show();
                        break;
                case six :
                    widget->image( new
                        widget->show();

```

```

        break;
    case seven :
        widget->image( new
            widget->show();
            break;
    case eight :
        widget->image( new
            widget->show();
            break;
    case nine :
        widget->image( new
            widget->show();
            break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :
        widget->image( new
            widget->show();
            break;
    case king :
        widget->image( new
            widget->show();
            break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                widget->show();
                break;
        case two :
            widget->image( new
                widget->show();
                break;
    }
}
break;
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3C.png" ) );
Fl_PNG_Image( "../cards/4C.png" ) ;
Fl_PNG_Image( "../cards/5C.png" ) ;
Fl_PNG_Image( "../cards/6C.png" ) ;
Fl_PNG_Image( "../cards/7C.png" ) ;
Fl_PNG_Image( "../cards/8C.png" ) ;
Fl_PNG_Image( "../cards/9C.png" ) ;
Fl_PNG_Image( "../cards/10C.png" ) ;
Fl_PNG_Image( "../cards/JC.png" ) ;
```

```

        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );
        widget->show();
        break;
}
break;
case spades :
switch ( card.card )
{
    case ace :
        widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );
        widget->show();
        break;
    case two :
        widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
        widget->show();
        break;
    case three :
        widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
        widget->show();
        break;
    case four :
        widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
        widget->show();
        break;
    case five :
        widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
        widget->show();
        break;
    case six :
        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
}

```

```

        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :
            widget->image( new
                Fl_PNG_Image( "../cards/9S.png" ) );
            widget->show();
            break;
        case ten :
            widget->image( new
                Fl_PNG_Image( "../cards/10S.png" ) );
            widget->show();
            break;
        case jack :
            widget->image( new
                Fl_PNG_Image( "../cards/JS.png" ) );
            widget->show();
            break;
        case queen :
            widget->image( new
                Fl_PNG_Image( "../cards/QS.png" ) );
            widget->show();
            break;
        case king :
            widget->image( new
                Fl_PNG_Image( "../cards/KS.png" ) );
            widget->show();
            break;
        }
        break;
    }
    break;
}
case 5 : //card 6
{
    widget = P7C6;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
                        Fl_PNG_Image( "../cards/2H.png" ) );
            }
        }
    }
}

```

```
    widget->show();
    break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->show();
    break;
Fl_PNG_Image( "../cards/3H.png" );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
```

```
    widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
    widget->show();
    break;
case king :
    widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
    widget->show();
    break;
}
break;
case diamonds :
switch ( card.card )
{
case ace :
    widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
    widget->show();
    break;
case two :
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
```

```

        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/8D.png");

Fl_PNG_Image("../cards/9D.png");

Fl_PNG_Image("../cards/10D.png");

Fl_PNG_Image("../cards/JD.png");

Fl_PNG_Image("../cards/QD.png");

Fl_PNG_Image("../cards/KD.png");

Fl_PNG_Image("../cards/AC.png");

Fl_PNG_Image("../cards/2C.png");

Fl_PNG_Image("../cards/3C.png");

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );
```

```

        widget->show();
        break;
    }
    break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AS.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2S.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3S.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4S.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5S.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6S.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7S.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8S.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 6 : //card 7
    widget = P7C7;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                    widget->show();
                    break;
                case two :
                    widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                    widget->show();
                    break;
                case three :
                    widget->image( new
Fl_PNG_Image( "../cards/3H.png" ) );
                    widget->show();

```

```
        break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
```

```

        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
                Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
                Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
                Fl_PNG_Image( "../cards/4D.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
                Fl_PNG_Image( "../cards/5D.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
                Fl_PNG_Image( "../cards/6D.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
                Fl_PNG_Image( "../cards/7D.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
                Fl_PNG_Image( "../cards/8D.png" ) );
            widget->show();
            break;
        case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
    }
}

```

```

        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        case spades :
            switch ( card.card )

```

```

{
    case ace :
        widget->image( new
                        widget->show();
                        break;
    case two :
        widget->image( new
                        widget->show();
                        break;
    case three :
        widget->image( new
                        widget->show();
                        break;
    case four :
        widget->image( new
                        widget->show();
                        break;
    case five :
        widget->image( new
                        widget->show();
                        break;
    case six :
        widget->image( new
                        widget->show();
                        break;
    case seven :
        widget->image( new
                        widget->show();
                        break;
    case eight :
        widget->image( new
                        widget->show();
                        break;
    case nine :
        widget->image( new
                        widget->show();
                        break;
    case ten :
        widget->image( new
                        widget->show();
                        break;
}
Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/4S.png" );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );

```

```

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
}
break;
case 7 ://Dealer
switch ( cardIndex )
{
    case 0 : //card 1
        widget = DC1;
        if(card.valid == false)
        {
            widget->image( new
Fl_PNG_Image( "../cards/gray_back.png" ) );
            widget->show();
        }else
        {
            switch ( card.suite )
            {
                case hearts :
                    switch ( card.card )
                    {
                        case ace :
                            widget->image( new
Fl_PNG_Image( "../cards/AH.png" ) );
                            widget->show();
                            break;
                        case two :
                            widget->image( new
Fl_PNG_Image( "../cards/2H.png" ) );
                            widget->show();
                    }
                }
            }
        }
    }
}

```

```
        break;
case three :
    widget->image( new
                    widget->show();
                    break;
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/3H.png" );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
```

```
    widget->show();
    break;
case king :
    widget->image( new
    widget->show();
    break;
}
break;
case diamonds :
switch ( card.card )
{
case ace :
    widget->image( new
    widget->show();
    break;
case two :
    widget->image( new
    widget->show();
    break;
case three :
    widget->image( new
    widget->show();
    break;
case four :
    widget->image( new
    widget->show();
    break;
case five :
    widget->image( new
    widget->show();
    break;
case six :
    widget->image( new
    widget->show();
    break;
case seven :
    widget->image( new
    widget->show();
    break;
case eight :
    widget->show();
    break;
}

Fl_PNG_Image( "../cards/KH.png" ) );
Fl_PNG_Image( "../cards/AD.png" );
Fl_PNG_Image( "../cards/2D.png" );
Fl_PNG_Image( "../cards/3D.png" );
Fl_PNG_Image( "../cards/4D.png" );
Fl_PNG_Image( "../cards/5D.png" );
Fl_PNG_Image( "../cards/6D.png" );
Fl_PNG_Image( "../cards/7D.png" );
```

```

        widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
    }
}

```

```
case four :
    widget->image( new
                    widget->show();
                    break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );
Fl_PNG_Image( "../cards/7C.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );
```

```

                break;
            }
            break;
        case spades :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        widget->show();
                        break;
                case six :
                    widget->image( new
                        widget->show();
                        break;
                case seven :
                    widget->image( new
                        widget->show();
                        break;
                case eight :
                    widget->image( new
                        widget->show();
                        break;
                case nine :
                    widget->image( new
                        widget->show();
                        break;
            }
        Fl_PNG_Image( "../cards/AS.png" );
    }
}

```

```

        widget->show();
        break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :
        widget->image( new
            widget->show();
            break;
    case king :
        widget->image( new
            widget->show();
            break;
    }
    break;
}
break;
case 1 : //card 2
widget = DC2;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
Fl_PNG_Image( "../cards/AH.png" ) );
Fl_PNG_Image( "../cards/2H.png" ) ;
Fl_PNG_Image( "../cards/3H.png" ) );
}
}
break;
}

```

```
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
case jack :  
    widget->image( new  
        widget->show();  
        break;  
case queen :  
    widget->image( new  
        widget->show();  
        break;  
case king :  
    widget->image( new  
        widget->show();  
        break;  
Fl_PNG_Image( "../cards/4H.png" );  
Fl_PNG_Image( "../cards/5H.png" );  
Fl_PNG_Image( "../cards/6H.png" );  
Fl_PNG_Image( "../cards/7H.png" );  
Fl_PNG_Image( "../cards/8H.png" );  
Fl_PNG_Image( "../cards/9H.png" );  
Fl_PNG_Image( "../cards/10H.png" );  
Fl_PNG_Image( "../cards/JH.png" );  
Fl_PNG_Image( "../cards/QH.png" );  
Fl_PNG_Image( "../cards/KH.png" );
```

```
break;
}
break;
case diamonds :
switch ( card.card )
{
case ace :
widget->image( new
widget->show();
break;
case two :
widget->image( new
widget->show();
break;
case three :
widget->image( new
widget->show();
break;
case four :
widget->image( new
widget->show();
break;
case five :
widget->image( new
widget->show();
break;
case six :
widget->image( new
widget->show();
break;
case seven :
widget->image( new
widget->show();
break;
case eight :
widget->image( new
widget->show();
break;
case nine :
widget->image( new
widget->show();
break;
Fl_PNG_Image( "../cards/AD.png" ) );
Fl_PNG_Image( "../cards/2D.png" ) ;
Fl_PNG_Image( "../cards/3D.png" ) ;
Fl_PNG_Image( "../cards/4D.png" ) ;
Fl_PNG_Image( "../cards/5D.png" ) ;
Fl_PNG_Image( "../cards/6D.png" ) ;
Fl_PNG_Image( "../cards/7D.png" ) ;
Fl_PNG_Image( "../cards/8D.png" ) ;
Fl_PNG_Image( "../cards/9D.png" ) );
```

```

        widget->show();
        break;
    case ten :
        widget->image( new
            widget->show();
            break;
    case jack :
        widget->image( new
            widget->show();
            break;
    case queen :
        widget->image( new
            widget->show();
            break;
    case king :
        widget->image( new
            widget->show();
            break;
    }
    break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :

```

Fl_PNG_Image("../cards/10D.png"));

Fl_PNG_Image("../cards/JD.png"));

Fl_PNG_Image("../cards/QD.png"));

Fl_PNG_Image("../cards/KD.png"));

Fl_PNG_Image("../cards/AC.png"));

Fl_PNG_Image("../cards/2C.png"));

Fl_PNG_Image("../cards/3C.png"));

Fl_PNG_Image("../cards/4C.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/5C.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6C.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9C.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10C.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JC.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );
        widget->show();
        break;
}
break;
case spades :
switch ( card.card )
{

```

```
case ace :
    widget->image( new
        widget->show();
        break;
case two :
    widget->image( new
        widget->show();
        break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();

Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/4S.png" );
Fl_PNG_Image( "../cards/5S.png" );
Fl_PNG_Image( "../cards/6S.png" );
Fl_PNG_Image( "../cards/7S.png" );
Fl_PNG_Image( "../cards/8S.png" );
Fl_PNG_Image( "../cards/9S.png" );
Fl_PNG_Image( "../cards/10S.png" );
```



```

        widget->image( new
Fl_PNG_Image( "../cards/5H.png" ) );
        widget->show();
        break;
case six :
        widget->image( new
Fl_PNG_Image( "../cards/6H.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
}
break;
case diamonds :
switch ( card.card )
{

```

```
case ace :
    widget->image( new
        widget->show();
        break;
case two :
    widget->image( new
        widget->show();
        break;
case three :
    widget->image( new
        widget->show();
        break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();

Fl_PNG_Image( "../cards/AD.png" );
Fl_PNG_Image( "../cards/2D.png" );
Fl_PNG_Image( "../cards/3D.png" );
Fl_PNG_Image( "../cards/4D.png" );
Fl_PNG_Image( "../cards/5D.png" );
Fl_PNG_Image( "../cards/6D.png" );
Fl_PNG_Image( "../cards/7D.png" );
Fl_PNG_Image( "../cards/8D.png" );
Fl_PNG_Image( "../cards/9D.png" );
Fl_PNG_Image( "../cards/10D.png" );
```

```

                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
            case four :
                    widget->image( new
                                    widget->show();
                                    break;
            case five :
                    widget->image( new
                                    widget->show();
                                    break;
            case six :
                    widget->image( new
                                    widget->show();
                                    break;
        }
    }
}

Fl_PNG_Image( "../cards/JD.png" );
Fl_PNG_Image( "../cards/QD.png" );
Fl_PNG_Image( "../cards/KD.png" );
Fl_PNG_Image( "../cards/AC.png" );
Fl_PNG_Image( "../cards/2C.png" );
Fl_PNG_Image( "../cards/3C.png" );
Fl_PNG_Image( "../cards/4C.png" );
Fl_PNG_Image( "../cards/5C.png" );
Fl_PNG_Image( "../cards/6C.png" );

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9C.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10C.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JC.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QC.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KC.png" ) );

        widget->show();
        break;
    }
    break;
}
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AS.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2S.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3S.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4S.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5S.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/J.png" ) );
    widget->show();
    break;
```

```

        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    }
    break;
case 3 : //card 4
    widget = DC4;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )
            {
                case ace :
                    widget->image( new
                        widget->show();
                        break;
                case two :
                    widget->image( new
                        widget->show();
                        break;
                case three :
                    widget->image( new
                        widget->show();
                        break;
                case four :
                    widget->image( new
                        widget->show();
                        break;
                case five :
                    widget->image( new
                        widget->show();
                        break;
                case six :
                    widget->image( new
                        widget->show();
                        break;
            }
            break;
        Fl_PNG_Image( "../cards/AH.png" );
    }
    break;
Fl_PNG_Image( "../cards/2H.png" );
Fl_PNG_Image( "../cards/3H.png" );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );

```

```

        widget->show();
        break;
    case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7H.png" ) );

        widget->show();
        break;
    case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8H.png" ) );

        widget->show();
        break;
    case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );

        widget->show();
        break;
    case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );

        widget->show();
        break;
    case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );

        widget->show();
        break;
    case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );

        widget->show();
        break;
    case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );

        widget->show();
        break;
    }
    break;
}
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );

            widget->show();
            break;
        case two :

```

```
    widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
    widget->show();
    break;
case three :
    widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
    widget->show();
    break;
case four :
    widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
    widget->show();
    break;
case five :
    widget->image( new
Fl_PNG_Image( "../cards/5D.png" ) );
    widget->show();
    break;
case six :
    widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
    widget->show();
    break;
case seven :
    widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
    widget->show();
    break;
case eight :
    widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
    widget->show();
    break;
case nine :
    widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
    widget->show();
    break;
case ten :
    widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
    widget->show();
    break;
case jack :
    widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
    widget->show();
    break;
```

```

        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case clubs :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();

```

```

        break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
break;
case spades :
    switch ( card.card )
    {
        case ace :
            widget->image( new
                            widget->show();
                            break;
        case two :
            widget->image( new
                            widget->show();
                            break;
        case three :
            widget->image( new
                            widget->show();
                            break;
Fl_PNG_Image( "../cards/AS.png" );
Fl_PNG_Image( "../cards/2S.png" );
Fl_PNG_Image( "../cards/3S.png" );
Fl_PNG_Image( "../cards/8C.png" );
Fl_PNG_Image( "../cards/9C.png" );
Fl_PNG_Image( "../cards/10C.png" );
Fl_PNG_Image( "../cards/JC.png" );
Fl_PNG_Image( "../cards/QC.png" );
Fl_PNG_Image( "../cards/KC.png" );

```

```
    widget->show();
    break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->show();
```

Fl_PNG_Image("../cards/4S.png"));

Fl_PNG_Image("../cards/5S.png"));

Fl_PNG_Image("../cards/6S.png"));

Fl_PNG_Image("../cards/7S.png"));

Fl_PNG_Image("../cards/8S.png"));

Fl_PNG_Image("../cards/9S.png"));

Fl_PNG_Image("../cards/10S.png"));

Fl_PNG_Image("../cards/JS.png"));

Fl_PNG_Image("../cards/QS.png"));

```

Fl_PNG_Image( "./cards/KS.png" ) );
    widget->image( new
    widget->show();
    break;
}
break;
}

case 4 : //card 5
widget = DC5;
switch ( card.suite )
{
    case hearts :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();
                    break;
            case five :
                widget->image( new
                    widget->show();
                    break;
            case six :
                widget->image( new
                    widget->show();
                    break;
            case seven :
                widget->image( new
                    widget->show();
                    break;
        }
    }
}

```

```

                break;
        case eight :
                widget->image( new
                                widget->show();
                                break;
        case nine :
                widget->image( new
                                widget->show();
                                break;
        case ten :
                widget->image( new
                                widget->show();
                                break;
        case jack :
                widget->image( new
                                widget->show();
                                break;
        case queen :
                widget->image( new
                                widget->show();
                                break;
        case king :
                widget->image( new
                                widget->show();
                                break;
        }
        break;
    case diamonds :
        switch ( card.card )
        {
            case ace :
                    widget->image( new
                                    widget->show();
                                    break;
            case two :
                    widget->image( new
                                    widget->show();
                                    break;
            case three :
                    widget->image( new
                                    widget->show();
                                    break;
        }
        break;
    }
}

Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );
Fl_PNG_Image( "../cards/JH.png" );
Fl_PNG_Image( "../cards/QH.png" );
Fl_PNG_Image( "../cards/KH.png" );
Fl_PNG_Image( "../cards/AD.png" );
Fl_PNG_Image( "../cards/2D.png" );
Fl_PNG_Image( "../cards/3D.png" );

```

```
    widget->show();
    break;
case four :
    widget->image( new
        widget->show();
        break;
case five :
    widget->image( new
        widget->show();
        break;
case six :
    widget->image( new
        widget->show();
        break;
case seven :
    widget->image( new
        widget->show();
        break;
case eight :
    widget->image( new
        widget->show();
        break;
case nine :
    widget->image( new
        widget->show();
        break;
case ten :
    widget->image( new
        widget->show();
        break;
case jack :
    widget->image( new
        widget->show();
        break;
case queen :
    widget->image( new
        widget->show();
        break;
case king :
    widget->show();
```

Fl_PNG_Image("../cards/4D.png"));

Fl_PNG_Image("../cards/5D.png"));

Fl_PNG_Image("../cards/6D.png"));

Fl_PNG_Image("../cards/7D.png"));

Fl_PNG_Image("../cards/8D.png"));

Fl_PNG_Image("../cards/9D.png"));

Fl_PNG_Image("../cards/10D.png"));

Fl_PNG_Image("../cards/JD.png"));

Fl_PNG_Image("../cards/QD.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2C.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3C.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4C.png" ) );
            widget->show();
            break;
        case five :
            widget->image( new
Fl_PNG_Image( "../cards/5C.png" ) );
            widget->show();
            break;
        case six :
            widget->image( new
Fl_PNG_Image( "../cards/6C.png" ) );
            widget->show();
            break;
        case seven :
            widget->image( new
Fl_PNG_Image( "../cards/7C.png" ) );
            widget->show();
            break;
        case eight :
            widget->image( new
Fl_PNG_Image( "../cards/8C.png" ) );
            widget->show();
            break;
    }
}

```

```

        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        }
        break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                    widget->show();
                    break;
            case two :
                widget->image( new
                    widget->show();
                    break;
            case three :
                widget->image( new
                    widget->show();
                    break;
            case four :
                widget->image( new
                    widget->show();

```

Fl_PNG_Image("../cards/9C.png"));

Fl_PNG_Image("../cards/10C.png") ;

Fl_PNG_Image("../cards/JC.png") ;

Fl_PNG_Image("../cards/QC.png") ;

Fl_PNG_Image("../cards/KC.png") ;

Fl_PNG_Image("../cards/AS.png") ;

Fl_PNG_Image("../cards/2S.png") ;

Fl_PNG_Image("../cards/3S.png") ;

Fl_PNG_Image("../cards/4S.png") ;

```

        break;
case five :
    widget->image( new
                    widget->show();
                    break;
case six :
    widget->image( new
                    widget->show();
                    break;
case seven :
    widget->image( new
                    widget->show();
                    break;
case eight :
    widget->image( new
                    widget->show();
                    break;
case nine :
    widget->image( new
                    widget->show();
                    break;
case ten :
    widget->image( new
                    widget->show();
                    break;
case jack :
    widget->image( new
                    widget->show();
                    break;
case queen :
    widget->image( new
                    widget->show();
                    break;
case king :
    widget->image( new
                    widget->show();
                    break;
}
break;
}

```

```

        break;
    case 5 : //card 6
        widget = DC6;
        switch ( card.suite )
        {
            case hearts :
                switch ( card.card )
                {
                    case ace :
                        widget->image( new
                            Fl_PNG_Image( "../cards/AH.png" ) );
                        widget->show();
                        break;
                    case two :
                        widget->image( new
                            Fl_PNG_Image( "../cards/2H.png" ) );
                        widget->show();
                        break;
                    case three :
                        widget->image( new
                            Fl_PNG_Image( "../cards/3H.png" ) );
                        widget->show();
                        break;
                    case four :
                        widget->image( new
                            Fl_PNG_Image( "../cards/4H.png" ) );
                        widget->show();
                        break;
                    case five :
                        widget->image( new
                            Fl_PNG_Image( "../cards/5H.png" ) );
                        widget->show();
                        break;
                    case six :
                        widget->image( new
                            Fl_PNG_Image( "../cards/6H.png" ) );
                        widget->show();
                        break;
                    case seven :
                        widget->image( new
                            Fl_PNG_Image( "../cards/7H.png" ) );
                        widget->show();
                        break;
                    case eight :
                        widget->image( new
                            Fl_PNG_Image( "../cards/8H.png" ) );
                        widget->show();
                        break;
                    case nine :

```

```

        widget->image( new
Fl_PNG_Image( "../cards/9H.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10H.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JH.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QH.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KH.png" ) );
        widget->show();
        break;
    }
    break;
case diamonds :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AD.png" ) );
            widget->show();
            break;
        case two :
            widget->image( new
Fl_PNG_Image( "../cards/2D.png" ) );
            widget->show();
            break;
        case three :
            widget->image( new
Fl_PNG_Image( "../cards/3D.png" ) );
            widget->show();
            break;
        case four :
            widget->image( new
Fl_PNG_Image( "../cards/4D.png" ) );
            widget->show();
            break;
    }
}

```

```

        case five :
            widget->image( new
                widget->show();
                break;
        case six :
            widget->image( new
                widget->show();
                break;
        case seven :
            widget->image( new
                widget->show();
                break;
        case eight :
            widget->image( new
                widget->show();
                break;
        case nine :
            widget->image( new
                widget->show();
                break;
        case ten :
            widget->image( new
                widget->show();
                break;
        case jack :
            widget->image( new
                widget->show();
                break;
        case queen :
            widget->image( new
                widget->show();
                break;
        case king :
            widget->image( new
                widget->show();
                break;
        case clubs :
            switch ( card.card )

```

Fl_PNG_Image("../cards/5D.png");

Fl_PNG_Image("../cards/6D.png");

Fl_PNG_Image("../cards/7D.png");

Fl_PNG_Image("../cards/8D.png");

Fl_PNG_Image("../cards/9D.png");

Fl_PNG_Image("../cards/10D.png");

Fl_PNG_Image("../cards/JD.png");

Fl_PNG_Image("../cards/QD.png");

Fl_PNG_Image("../cards/KD.png");

```
{  
    case ace :  
        widget->image( new  
            widget->show();  
            break;  
    case two :  
        widget->image( new  
            widget->show();  
            break;  
    case three :  
        widget->image( new  
            widget->show();  
            break;  
    case four :  
        widget->image( new  
            widget->show();  
            break;  
    case five :  
        widget->image( new  
            widget->show();  
            break;  
    case six :  
        widget->image( new  
            widget->show();  
            break;  
    case seven :  
        widget->image( new  
            widget->show();  
            break;  
    case eight :  
        widget->image( new  
            widget->show();  
            break;  
    case nine :  
        widget->image( new  
            widget->show();  
            break;  
    case ten :  
        widget->image( new  
            widget->show();  
            break;  
Fl_PNG_Image( "../cards/AC.png" );  
Fl_PNG_Image( "../cards/2C.png" );  
Fl_PNG_Image( "../cards/3C.png" );  
Fl_PNG_Image( "../cards/4C.png" );  
Fl_PNG_Image( "../cards/5C.png" );  
Fl_PNG_Image( "../cards/6C.png" );  
Fl_PNG_Image( "../cards/7C.png" );  
Fl_PNG_Image( "../cards/8C.png" );  
Fl_PNG_Image( "../cards/9C.png" );  
Fl_PNG_Image( "../cards/10C.png" );
```

```

        widget->show();
        break;
    case jack :
        widget->image( new
        widget->show();
        break;
    case queen :
        widget->image( new
        widget->show();
        break;
    case king :
        widget->image( new
        widget->show();
        break;
    }
    break;
    case spades :
        switch ( card.card )
        {
            case ace :
                widget->image( new
                widget->show();
                break;
            case two :
                widget->image( new
                widget->show();
                break;
            case three :
                widget->image( new
                widget->show();
                break;
            case four :
                widget->image( new
                widget->show();
                break;
            case five :
                widget->image( new
                widget->show();
                break;
            case six :

```

Fl_PNG_Image("../cards/JC.png"));

Fl_PNG_Image("../cards/QC.png"));

Fl_PNG_Image("../cards/KC.png"));

Fl_PNG_Image("../cards/AS.png"));

Fl_PNG_Image("../cards/2S.png"));

Fl_PNG_Image("../cards/3S.png"));

Fl_PNG_Image("../cards/4S.png"));

Fl_PNG_Image("../cards/5S.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/6S.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7S.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8S.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9S.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10S.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JS.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QS.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KS.png" ) );
        widget->show();
        break;
    }
    break;
}
break;
case 6 : //card 7
    widget = DC7;
    switch ( card.suite )
    {
        case hearts :
            switch ( card.card )

```

```

{
    case ace :
        widget->image( new
                        widget->show();
                        break;
    case two :
        widget->image( new
                        widget->show();
                        break;
    case three :
        widget->image( new
                        widget->show();
                        break;
    case four :
        widget->image( new
                        widget->show();
                        break;
    case five :
        widget->image( new
                        widget->show();
                        break;
    case six :
        widget->image( new
                        widget->show();
                        break;
    case seven :
        widget->image( new
                        widget->show();
                        break;
    case eight :
        widget->image( new
                        widget->show();
                        break;
    case nine :
        widget->image( new
                        widget->show();
                        break;
    case ten :
        widget->image( new
                        widget->show();
                        break;
}
Fl_PNG_Image( "../cards/AH.png" );
Fl_PNG_Image( "../cards/2H.png" );
Fl_PNG_Image( "../cards/3H.png" );
Fl_PNG_Image( "../cards/4H.png" );
Fl_PNG_Image( "../cards/5H.png" );
Fl_PNG_Image( "../cards/6H.png" );
Fl_PNG_Image( "../cards/7H.png" );
Fl_PNG_Image( "../cards/8H.png" );
Fl_PNG_Image( "../cards/9H.png" );
Fl_PNG_Image( "../cards/10H.png" );

```

```

        widget->show();
        break;
    case jack :
        widget->image( new
        widget->show();
        break;
    case queen :
        widget->image( new
        widget->show();
        break;
    case king :
        widget->image( new
        widget->show();
        break;
    }
    break;
}
case diamonds :
switch ( card.card )
{
    case ace :
        widget->image( new
        widget->show();
        break;
    case two :
        widget->image( new
        widget->show();
        break;
    case three :
        widget->image( new
        widget->show();
        break;
    case four :
        widget->image( new
        widget->show();
        break;
    case five :
        widget->image( new
        widget->show();
        break;
    case six :

```

Fl_PNG_Image("../cards/JH.png"));

Fl_PNG_Image("../cards/QH.png"));

Fl_PNG_Image("../cards/KH.png"));

Fl_PNG_Image("../cards/AD.png"));

Fl_PNG_Image("../cards/2D.png"));

Fl_PNG_Image("../cards/3D.png"));

Fl_PNG_Image("../cards/4D.png"));

Fl_PNG_Image("../cards/5D.png"));

```

        widget->image( new
Fl_PNG_Image( "../cards/6D.png" ) );
        widget->show();
        break;
case seven :
        widget->image( new
Fl_PNG_Image( "../cards/7D.png" ) );
        widget->show();
        break;
case eight :
        widget->image( new
Fl_PNG_Image( "../cards/8D.png" ) );
        widget->show();
        break;
case nine :
        widget->image( new
Fl_PNG_Image( "../cards/9D.png" ) );
        widget->show();
        break;
case ten :
        widget->image( new
Fl_PNG_Image( "../cards/10D.png" ) );
        widget->show();
        break;
case jack :
        widget->image( new
Fl_PNG_Image( "../cards/JD.png" ) );
        widget->show();
        break;
case queen :
        widget->image( new
Fl_PNG_Image( "../cards/QD.png" ) );
        widget->show();
        break;
case king :
        widget->image( new
Fl_PNG_Image( "../cards/KD.png" ) );
        widget->show();
        break;
    }
    break;
case clubs :
    switch ( card.card )
    {
        case ace :
            widget->image( new
Fl_PNG_Image( "../cards/AC.png" ) );
            widget->show();
            break;
    }
}

```

```
case two :  
    widget->image( new  
        widget->show();  
        break;  
case three :  
    widget->image( new  
        widget->show();  
        break;  
case four :  
    widget->image( new  
        widget->show();  
        break;  
case five :  
    widget->image( new  
        widget->show();  
        break;  
case six :  
    widget->image( new  
        widget->show();  
        break;  
case seven :  
    widget->image( new  
        widget->show();  
        break;  
case eight :  
    widget->image( new  
        widget->show();  
        break;  
case nine :  
    widget->image( new  
        widget->show();  
        break;  
case ten :  
    widget->image( new  
        widget->show();  
        break;  
case jack :  
    widget->image( new  
        widget->show();
```

```
Fl_PNG_Image( "./cards/QC.png" ) );
break;
case queen :
    widget->image( new
    widget->show();
    break;
case king :
    widget->image( new
    widget->show();
    break;
}
break;
case spades :
switch ( card.card )
{
    case ace :
        widget->image( new
        widget->show();
        break;
    case two :
        widget->image( new
        widget->show();
        break;
    case three :
        widget->image( new
        widget->show();
        break;
    case four :
        widget->image( new
        widget->show();
        break;
    case five :
        widget->image( new
        widget->show();
        break;
    case six :
        widget->image( new
        widget->show();
        break;
    case seven :
        widget->image( new
        widget->show();
        break;
}
break;
Fl_PNG_Image( "./cards/AS.png" ) ;
Fl_PNG_Image( "./cards/2S.png" ) ;
Fl_PNG_Image( "./cards/3S.png" ) ;
Fl_PNG_Image( "./cards/4S.png" ) ;
Fl_PNG_Image( "./cards/5S.png" ) ;
Fl_PNG_Image( "./cards/6S.png" ) ;
Fl_PNG_Image( "./cards/7S.png" ) ;
```

Dealer.cpp

```
#include <boost/uuid/uuid.hpp>           // uuid class
#include <boost/uuid/uuid_generators.hpp> // generators
#include <boost/uuid/uuid_io.hpp>         // streaming operators etc.
#include <iostream>
#include <stdio.h>
#include <iomanip>
```

```

#include <locale>
#include <sstream>
#include <string>
#include <vector>
#include "gui.h"

typedef boost::uuids::uuid UID;
UID new_uuid()
{
    boost::uuids::uuid uuid = boost::uuids::random_generator()();
    return uuid;
}

Fl_Double_Window* game_screen;
Fl_Double_Window* open_screen;
Fl_PNG_Image *background_image;
Fl_Button *NextHand;
Fl_Button *DealAuto;
Fl_Button *StartButton;
Fl_Button *EndGame;
game_instance *game = new game_instance();

using namespace std;

std::string to_string ( UberCasino::game_state t );

int main( int argc, char *argv[] )
{
    /////////////////////////////////
    //////
    //// Begin Main Execution
    //////
    ///////////////////////////////
    playing_f = false;
    action_f = false;
    waiting_f = false;
    srand(time(0));
    //XInitThreads();

    // dealer unique ID
    UID uid = new_uuid();
    memcpy ( game->D_pub.uid, &uid, sizeof ( char ) * SIZE_OF_UUID );
    memcpy ( game->G_pub.dealer_uid, &uid, sizeof ( char ) * SIZE_OF_UUID );
    strncpy ( game->D_pub.name,"Teixeira",sizeof ( game->D_pub.name ) );

    // game unique ID
    UID game_uuid = new_uuid();
    memcpy ( game->G_pub.game_uid, &game_uuid, SIZE_OF_UUID );
    memcpy ( game->D_pub.game_uid, &game_uuid, sizeof ( char ) * SIZE_OF_UUID );

```

```

//GENERATE WINDOW

background_image = new Fl_PNG_Image("background_950x550.png");
{
    Fl_Double_Window* o = new Fl_Double_Window(995, 605);
    open_screen = o;
    o->box(FL_DOWN_BOX);
    {
        Fl_Return_Button* o = new Fl_Return_Button(350, 415, 290, 105, "8-Deck Shoe");
        o->box(FL_SHADOW_BOX);
        o->color((Fl_Color)61);
        o->labelfont(14);
        o->labelsize(25);
        o->labelcolor(FL_BACKGROUND2_COLOR);
        o->callback( (Fl_Callback *)eight_shoe );
    } // Fl_Return_Button* o
    {
        Fl_Box* o = new Fl_Box(75, 30, 820, 240, "UberCasino");
        o->labelfont(7);
        o->labelsize(150);
        o->labelcolor((Fl_Color)178);
    } // Fl_Box* o
    {
        Fl_Box* o = new Fl_Box(440, 245, 100, 25, "Dealer Version");
        o->labelsize(51);
        o->labelcolor((Fl_Color)178);
    } // Fl_Box* o
    {
        Fl_Button* o = new Fl_Button(645, 415, 290, 105, "Infinite Shoe");
        o->box(FL_SHADOW_BOX);
        o->color((Fl_Color)69);
        o->labelfont(14);
        o->labelsize(25);
        o->labelcolor((Fl_Color)89);
        o->callback( (Fl_Callback *)infinite_shoe );
    } // Fl_Button* o
    {
        Fl_Button* o = new Fl_Button(55, 415, 290, 105, "Test Mode");
        o->box(FL_SHADOW_BOX);
        o->color((Fl_Color)38);
        o->labelfont(14);
        o->labelsize(25);
        o->callback( (Fl_Callback *)test_suite );
    } // Fl_Button* o
    {
        Fl_Box* o = new Fl_Box(330, 350, 325, 45, "Host a Table");
        o->labeltype(FL_ENGRAVED_LABEL);
        o->labelsize(35);
    } // Fl_Box* o
}

```

```

    o->end();
} // Fl_Double_Window* o

{
    Fl_Double_Window* o = new Fl_Double_Window(1000, 600);
    game_screen = o;
    {
        background = new Fl_Box(25, 25, 950, 550);
        background->box(FL_DOWN_BOX);
        background->color((Fl_Color)59);
        background->image(background_image);
        background->labeltype(FL_NO_LABEL);
        background->align(Fl_Align(512));
    } // Fl_Box* background
    {
        Title = new Fl_Button(450, 0, 125, 26, "Uber Casino");
        Title->box(FL_BORDER_BOX);
        Title->color(FL_YELLOW);
    } // Fl_Button* Title
    {
        Players = new Fl_Group(25, 70, 965, 500);
        {
            Player_1 = new Fl_Group(30, 105, 145, 340);
            {
                P1_Status = new Fl_Output(75, 295, 100, 100);
                P1_Status->box(FL_OVAL_BOX);
                P1_Status->labeltype(FL_NO_LABEL);
                P1_Status->value(" inactive");
            } // Fl_Output* P1_Status
            {
                P1_Name = new Fl_Text_Display(90, 405, 80, 20, "Player Name:");
                P1_Name->labeltype(FL_SHADOW_LABEL);
                P1_Name->labelsize(8);
                P1_Name->labelcolor((Fl_Color)3);
                P1_Name->textsize(8);
                P1_Name->textcolor((Fl_Color)140);
                P1_Name->align(Fl_Align(FL_ALIGN_LEFT));
                P1NameBuff = new Fl_Text_Buffer();
                P1_Name->buffer(P1NameBuff);
            } // Fl_Text_Display* P1_Name
            {
                P1_clock = new Fl_Text_Display(115, 271, 20, 20, "Time Left:");
                P1_clock->labeltype(FL_SHADOW_LABEL);
                P1_clock->labelsize(8);
                P1_clock->labelcolor((Fl_Color)3);
                P1_clock->textsize(8);
                P1_clock->textcolor((Fl_Color)88);
                P1_clock->align(Fl_Align(FL_ALIGN_LEFT));
                P1ClockBuff = new Fl_Text_Buffer();
            }
        }
    }
}

```

```

    P1_clock->buffer(P1ClockBuff);
} // Fl_Text_Display* P1_clock
{
    P1C1 = new Fl_Box(30, 195, 50, 75);
    P1C1->box(FL_UP_BOX);
    P1C1->color(FL_BACKGROUND2_COLOR);
    P1C1->hide();
} // Fl_Box* P1C1
{
    P1C2 = new Fl_Box(45, 185, 50, 75);
    P1C2->box(FL_UP_BOX);
    P1C2->color(FL_BACKGROUND2_COLOR);
    P1C2->hide();
} // Fl_Box* P1C2
{
    P1C3 = new Fl_Box(60, 175, 50, 75);
    P1C3->box(FL_UP_BOX);
    P1C3->color(FL_BACKGROUND2_COLOR);
    P1C3->hide();
} // Fl_Box* P1C3
{
    P1C4 = new Fl_Box(75, 165, 50, 75);
    P1C4->box(FL_UP_BOX);
    P1C4->color(FL_BACKGROUND2_COLOR);
    P1C4->hide();
} // Fl_Box* P1C4
{
    P1C5 = new Fl_Box(90, 155, 50, 75);
    P1C5->box(FL_UP_BOX);
    P1C5->color(FL_BACKGROUND2_COLOR);
    P1C5->hide();
} // Fl_Box* P1C5
{
    P1C6 = new Fl_Box(105, 145, 50, 75);
    P1C6->box(FL_UP_BOX);
    P1C6->color(FL_BACKGROUND2_COLOR);
    P1C6->hide();
} // Fl_Box* P1C6
{
    P1C7 = new Fl_Box(120, 135, 50, 75);
    P1C7->box(FL_UP_BOX);
    P1C7->color(FL_BACKGROUND2_COLOR);
    P1C7->hide();
} // Fl_Box* P1C7
{
    P1_hand_value = new Fl_Text_Display(75, 120, 25, 25, "Hand:");
    P1_hand_value->labeltype(FL_SHADOW_LABEL);
    P1_hand_value->labelsize(12);
    P1_hand_value->labelcolor(Fl_Color)3);
}

```

```

P1_hand_value->textsize(10);
P1_hand_value->textcolor((Fl_Color)216);
P1_hand_value->align(Fl_Align(FL_ALIGN_LEFT));
P1HandBuff = new Fl_Text_Buffer();
P1_hand_value->buffer(P1HandBuff);
} // Fl_Text_Display* P1_hand_value
Player_1->end();
} // Fl_Group* Player_1
{
Player_2 = new Fl_Group(165, 155, 140, 335);
{
P2_Status = new Fl_Output(190, 340, 100, 100);
P2_Status->box(FL_OVAL_BOX);
P2_Status->labeltype(FL_NO_LABEL);
P2_Status->value("    inactive");
} // Fl_Output* P2_Status
{
P2_Name = new Fl_Text_Display(205, 450, 80, 20, "Player Name:");
P2_Name->labeltype(FL_SHADOW_LABEL);
P2_Name->labelsize(8);
P2_Name->labelcolor((Fl_Color)3);
P2_Name->textsize(8);
P2_Name->textcolor((Fl_Color)140);
P2_Name->align(Fl_Align(FL_ALIGN_LEFT));
P2NameBuff = new Fl_Text_Buffer();
P2_Name->buffer(P2NameBuff);
} // Fl_Text_Display* P2_Name
{
P2_clock = new Fl_Text_Display(230, 315, 20, 20, "Time Left:");
P2_clock->labeltype(FL_SHADOW_LABEL);
P2_clock->labelsize(8);
P2_clock->labelcolor((Fl_Color)3);
P2_clock->textsize(8);
P2_clock->textcolor((Fl_Color)88);
P2_clock->align(Fl_Align(FL_ALIGN_LEFT));
P2ClockBuff = new Fl_Text_Buffer();
P2_clock->buffer(P2ClockBuff);
} // Fl_Text_Display* P2_clock
{
P2C1 = new Fl_Box(165, 235, 50, 75);
P2C1->box(FL_UP_BOX);
P2C1->color(FL_BACKGROUND2_COLOR);
P2C1->hide();
} // Fl_Box* P2C1
{
P2C2 = new Fl_Box(180, 225, 50, 75);
P2C2->box(FL_UP_BOX);
P2C2->color(FL_BACKGROUND2_COLOR);
P2C2->hide();
}

```

```

} // Fl_Box* P2C2
{
    P2C3 = new Fl_Box(195, 215, 50, 75);
    P2C3->box(FL_UP_BOX);
    P2C3->color(FL_BACKGROUND2_COLOR);
    P2C3->hide();
} // Fl_Box* P2C3
{
    P2C4 = new Fl_Box(210, 205, 50, 75);
    P2C4->box(FL_UP_BOX);
    P2C4->color(FL_BACKGROUND2_COLOR);
    P2C4->hide();
} // Fl_Box* P2C4
{
    P2C5 = new Fl_Box(225, 195, 50, 75);
    P2C5->box(FL_UP_BOX);
    P2C5->color(FL_BACKGROUND2_COLOR);
    P2C5->hide();
} // Fl_Box* P2C5
{
    P2C6 = new Fl_Box(240, 185, 50, 75);
    P2C6->box(FL_UP_BOX);
    P2C6->color(FL_BACKGROUND2_COLOR);
    P2C6->hide();
} // Fl_Box* P2C6
{
    P2C7 = new Fl_Box(255, 175, 50, 75);
    P2C7->box(FL_UP_BOX);
    P2C7->color(FL_BACKGROUND2_COLOR);
    P2C7->hide();
} // Fl_Box* P2C7
{ P2_hand_value = new Fl_Text_Display(225, 155, 25, 25, "Hand:");
    P2_hand_value->labeltype(FL_SHADOW_LABEL);
    P2_hand_value->labelsize(10);
    P2_hand_value->labelcolor((Fl_Color)3);
    P2_hand_value->textsize(10);
    P2_hand_value->textcolor((Fl_Color)216);
    P2_hand_value->align(Fl_Align(FL_ALIGN_LEFT));
    P2HandBuff = new Fl_Text_Buffer();
    P2_hand_value->buffer(P2HandBuff);
} // Fl_Text_Display* P2_hand_value
Player_2->end();
} // Fl_Group* Player_2
{
    Player_3 = new Fl_Group(275, 185, 140, 380);
    {
        P3_Status = new Fl_Output(310, 390, 100, 100);
        P3_Status->box(FL_OVAL_BOX);
        P3_Status->labeltype(FL_NO_LABEL);

```

```

    P3_Status->value("    inactive");
} // Fl_Output* P3_Status
{
    P3_Name = new Fl_Text_Display(320, 500, 80, 20, "Player Name:");
    P3_Name->labeltype(Fl_SHADOW_LABEL);
    P3_Name->labelsize(8);
    P3_Name->labelcolor((Fl_Color)3);
    P3_Name->textsize(8);
    P3_Name->textcolor((Fl_Color)140);
    P3_Name->align(Fl_Align(Fl_ALIGN_LEFT));
    P3NameBuff = new Fl_Text_Buffer();
    P3_Name->buffer(P3NameBuff);
} // Fl_Text_Display* P3_Name
{
    P3_clock = new Fl_Text_Display(350, 365, 20, 20, "Time Left:");
    P3_clock->labeltype(Fl_SHADOW_LABEL);
    P3_clock->labelsize(8);
    P3_clock->labelcolor((Fl_Color)3);
    P3_clock->textsize(8);
    P3_clock->textcolor((Fl_Color)88);
    P3_clock->align(Fl_Align(Fl_ALIGN_LEFT));
    P3ClockBuff = new Fl_Text_Buffer();
    P3_clock->buffer(P3ClockBuff);
} // Fl_Text_Display* P3_clock
{
    P3C1 = new Fl_Box(275, 275, 50, 75);
    P3C1->box(Fl_UP_BOX);
    P3C1->color(Fl_BACKGROUND2_COLOR);
    P3C1->hide();
} // Fl_Box* P3C1
{
    P3C2 = new Fl_Box(290, 265, 50, 75);
    P3C2->box(Fl_UP_BOX);
    P3C2->color(Fl_BACKGROUND2_COLOR);
    P3C2->hide();
} // Fl_Box* P3C2
{
    P3C3 = new Fl_Box(305, 255, 50, 75);
    P3C3->box(Fl_UP_BOX);
    P3C3->color(Fl_BACKGROUND2_COLOR);
    P3C3->hide();
} // Fl_Box* P3C3
{
    P3C4 = new Fl_Box(320, 245, 50, 75);
    P3C4->box(Fl_UP_BOX);
    P3C4->color(Fl_BACKGROUND2_COLOR);
    P3C4->hide();
} // Fl_Box* P3C4
{

```

```

P3C5 = new Fl_Box(335, 235, 50, 75);
P3C5->box(FL_UP_BOX);
P3C5->color(FL_BACKGROUND2_COLOR);
P3C5->hide();
} // Fl_Box* P3C5
{
    P3C6 = new Fl_Box(350, 225, 50, 75);
    P3C6->box(FL_UP_BOX);
    P3C6->color(FL_BACKGROUND2_COLOR);
    P3C6->hide();
} // Fl_Box* P3C6
{
    P3C7 = new Fl_Box(365, 215, 50, 75);
    P3C7->box(FL_UP_BOX);
    P3C7->color(FL_BACKGROUND2_COLOR);
    P3C7->hide();
} // Fl_Box* P3C7
{
    P3_hand_value = new Fl_Text_Display(345, 185, 25, 25, "Hand:");
    P3_hand_value->labeltype(FL_SHADOW_LABEL);
    P3_hand_value->labelsize(10);
    P3_hand_value->labelcolor((Fl_Color)3);
    P3_hand_value->textsize(10);
    P3_hand_value->textcolor((Fl_Color)216);
    P3_hand_value->align(Fl_Align(FL_ALIGN_LEFT));
    P3HandBuff = new Fl_Text_Buffer();
    P3_hand_value->buffer(P3HandBuff);
} // Fl_Text_Display* P3_hand_value
Player_3->end();
} // Fl_Group* Player_3
{
    Player_4 = new Fl_Group(400, 205, 150, 360);
    {
        P4_Status = new Fl_Output(450, 415, 100, 100);
        P4_Status->box(FL_OVAL_BOX);
        P4_Status->labeltype(FL_NO_LABEL);
        P4_Status->value(" inactive");
    } // Fl_Output* P4_Status
    {
        P4_Name = new Fl_Text_Display(465, 525, 80, 20, "Player Name:");
        P4_Name->labeltype(FL_SHADOW_LABEL);
        P4_Name->labelsize(8);
        P4_Name->labelcolor((Fl_Color)3);
        P4_Name->textsize(8);
        P4_Name->textcolor((Fl_Color)140);
        P4_Name->align(Fl_Align(FL_ALIGN_LEFT));
        P4NameBuff = new Fl_Text_Buffer();
        P4_Name->buffer(P4NameBuff);
    } // Fl_Text_Display* P4_Name
}

```

```

{
    P4_clock = new Fl_Text_Display(490, 390, 20, 20, "Time Left:");
    P4_clock->labeltype(FL_SHADOW_LABEL);
    P4_clock->labelsize(8);
    P4_clock->labelcolor((Fl_Color)3);
    P4_clock->textsize(8);
    P4_clock->textcolor((Fl_Color)88);
    P4_clock->align(Fl_Align(FL_ALIGN_LEFT));
    P4ClockBuff = new Fl_Text_Buffer();
    P4_clock->buffer(P4ClockBuff);
} // Fl_Text_Display* P4_clock
{
    P4C1 = new Fl_Box(400, 310, 50, 75);
    P4C1->box(FL_UP_BOX);
    P4C1->color(FL_BACKGROUND2_COLOR);
    P4C1->hide();
} // Fl_Box* P4C1
{
    P4C2 = new Fl_Box(415, 300, 50, 75);
    P4C2->box(FL_UP_BOX);
    P4C2->color(FL_BACKGROUND2_COLOR);
    P4C2->hide();
} // Fl_Box* P4C2
{
    P4C3 = new Fl_Box(430, 290, 50, 75);
    P4C3->box(FL_UP_BOX);
    P4C3->color(FL_BACKGROUND2_COLOR);
    P4C3->hide();
} // Fl_Box* P4C3
{
    P4C4 = new Fl_Box(445, 280, 50, 75);
    P4C4->box(FL_UP_BOX);
    P4C4->color(FL_BACKGROUND2_COLOR);
    P4C4->hide();
} // Fl_Box* P4C4
{
    P4C5 = new Fl_Box(460, 270, 50, 75);
    P4C5->box(FL_UP_BOX);
    P4C5->color(FL_BACKGROUND2_COLOR);
    P4C5->hide();
} // Fl_Box* P4C5
{
    P4C6 = new Fl_Box(475, 260, 50, 75);
    P4C6->box(FL_UP_BOX);
    P4C6->color(FL_BACKGROUND2_COLOR);
    P4C6->hide();
} // Fl_Box* P4C6
{
    P4C7 = new Fl_Box(490, 250, 50, 75);
}

```

```

P4C7->box(FL_UP_BOX);
P4C7->color(FL_BACKGROUND2_COLOR);
P4C7->hide();
} // Fl_Box* P4C7
{
P4_hand_value = new Fl_Text_Display(485, 205, 25, 25, "Hand:");
P4_hand_value->labeltype(FL_SHADOW_LABEL);
P4_hand_value->labelsize(10);
P4_hand_value->labelcolor((Fl_Color)3);
P4_hand_value->textsize(10);
P4_hand_value->textcolor((Fl_Color)216);
P4_hand_value->align(Fl_Align(FL_ALIGN_LEFT));
P4HandBuff = new Fl_Text_Buffer();
P4_hand_value->buffer(P4HandBuff);
} // Fl_Text_Display* P4_hand_value
Player_4->end();
} // Fl_Group* Player_4
{
Player_5 = new Fl_Group(545, 195, 145, 345);
{
P5_Status = new Fl_Output(590, 390, 100, 100);
P5_Status->box(FL_OVAL_BOX);
P5_Status->labeltype(FL_NO_LABEL);
P5_Status->value(" inactive");
} // Fl_Output* P5_Status
{
P5_Name = new Fl_Text_Display(605, 500, 80, 20, "Player Name:");
P5_Name->labeltype(FL_SHADOW_LABEL);
P5_Name->labelsize(8);
P5_Name->labelcolor((Fl_Color)3);
P5_Name->textsize(8);
P5_Name->textcolor((Fl_Color)140);
P5_Name->align(Fl_Align(FL_ALIGN_LEFT));
P5NameBuff = new Fl_Text_Buffer();
P5_Name->buffer(P5NameBuff);
} // Fl_Text_Display* P5_Name
{
P5_clock = new Fl_Text_Display(630, 365, 20, 20, "Time Left:");
P5_clock->labeltype(FL_SHADOW_LABEL);
P5_clock->labelsize(8);
P5_clock->labelcolor((Fl_Color)3);
P5_clock->textsize(8);
P5_clock->textcolor((Fl_Color)88);
P5_clock->align(Fl_Align(FL_ALIGN_LEFT));
P5ClockBuff = new Fl_Text_Buffer();
P5_clock->buffer(P5ClockBuff);
} // Fl_Text_Display* P5_clock
{
P5C1 = new Fl_Box(545, 285, 50, 75);

```

```

P5C1->box(FL_UP_BOX);
P5C1->color(FL_BACKGROUND2_COLOR);
P5C1->hide();
} // Fl_Box* P5C1
{
P5C2 = new Fl_Box(560, 275, 50, 75);
P5C2->box(FL_UP_BOX);
P5C2->color(FL_BACKGROUND2_COLOR);
P5C2->hide();
} // Fl_Box* P5C2
{
P5C3 = new Fl_Box(575, 265, 50, 75);
P5C3->box(FL_UP_BOX);
P5C3->color(FL_BACKGROUND2_COLOR);
P5C3->hide();
} // Fl_Box* P5C3
{
P5C4 = new Fl_Box(590, 255, 50, 75);
P5C4->box(FL_UP_BOX);
P5C4->color(FL_BACKGROUND2_COLOR);
P5C4->hide();
} // Fl_Box* P5C4
{
P5C5 = new Fl_Box(605, 245, 50, 75);
P5C5->box(FL_UP_BOX);
P5C5->color(FL_BACKGROUND2_COLOR);
P5C5->hide();
} // Fl_Box* P5C5
{
P5C6 = new Fl_Box(620, 235, 50, 75);
P5C6->box(FL_UP_BOX);
P5C6->color(FL_BACKGROUND2_COLOR);
P5C6->hide();
} // Fl_Box* P5C6
{
P5C7 = new Fl_Box(635, 225, 50, 75);
P5C7->box(FL_UP_BOX);
P5C7->color(FL_BACKGROUND2_COLOR);
P5C7->hide();
} // Fl_Box* P5C7
{
P5_hand_value = new Fl_Text_Display(625, 195, 25, 25, "Hand:");
P5_hand_value->labeltype(FL_SHADOW_LABEL);
P5_hand_value->labelsize(10);
P5_hand_value->labelcolor((Fl_Color)3);
P5_hand_value->textsize(10);
P5_hand_value->textcolor((Fl_Color)216);
P5_hand_value->align(Fl_Align(FL_ALIGN_LEFT));
P5HandBuff = new Fl_Text_Buffer();

```

```

    P5_hand_value->buffer(P5HandBuff);
} // Fl_Text_Display* P5_hand_value
Player_5->end();
} // Fl_Group* Player_5
{
    Player_6 = new Fl_Group(685, 150, 150, 340);
    { P6_Status = new Fl_Output(735, 340, 100, 100);
        P6_Status->box(FL_OVAL_BOX);
        P6_Status->labeltype(FL_NO_LABEL);
        P6_Status->value(" inactive");
    } // Fl_Output* P6_Status
    {
        P6_Name = new Fl_Text_Display(750, 450, 80, 20, "Player Name:");
        P6_Name->labeltype(FL_SHADOW_LABEL);
        P6_Name->labelsize(8);
        P6_Name->labelcolor((Fl_Color)3);
        P6_Name->textsize(8);
        P6_Name->textcolor((Fl_Color)140);
        P6_Name->align(Fl_Align(FL_ALIGN_LEFT));
        P6NameBuff = new Fl_Text_Buffer();
        P6_Name->buffer(P6NameBuff);
    } // Fl_Text_Display* P6_Name
    {
        P6_clock = new Fl_Text_Display(773, 315, 20, 20, "Time Left:");
        P6_clock->labeltype(FL_SHADOW_LABEL);
        P6_clock->labelsize(8);
        P6_clock->labelcolor((Fl_Color)3);
        P6_clock->textsize(8);
        P6_clock->textcolor((Fl_Color)88);
        P6_clock->align(Fl_Align(FL_ALIGN_LEFT));
        P6ClockBuff = new Fl_Text_Buffer();
        P6_clock->buffer(P6ClockBuff);
    } // Fl_Text_Display* P6_clock
    {
        P6C1 = new Fl_Box(687, 240, 50, 75);
        P6C1->box(FL_UP_BOX);
        P6C1->color(FL_BACKGROUND2_COLOR);
        P6C1->hide();
    } // Fl_Box* P6C1
    {
        P6C2 = new Fl_Box(702, 230, 50, 75);
        P6C2->box(FL_UP_BOX);
        P6C2->color(FL_BACKGROUND2_COLOR);
        P6C2->hide();
    } // Fl_Box* P6C2
    {
        P6C3 = new Fl_Box(717, 220, 50, 75);
        P6C3->box(FL_UP_BOX);
        P6C3->color(FL_BACKGROUND2_COLOR);
    }
}

```

```

    P6C3->hide();
} // Fl_Box* P6C3
{
    P6C4 = new Fl_Box(732, 210, 50, 75);
    P6C4->box(FL_UP_BOX);
    P6C4->color(FL_BACKGROUND2_COLOR);
    P6C4->hide();
} // Fl_Box* P6C4
{
    P6C5 = new Fl_Box(747, 200, 50, 75);
    P6C5->box(FL_UP_BOX);
    P6C5->color(FL_BACKGROUND2_COLOR);
    P6C5->hide();
} // Fl_Box* P6C5
{
    P6C6 = new Fl_Box(762, 190, 50, 75);
    P6C6->box(FL_UP_BOX);
    P6C6->color(FL_BACKGROUND2_COLOR);
    P6C6->hide();
} // Fl_Box* P6C6
{
    P6C7 = new Fl_Box(777, 180, 50, 75);
    P6C7->box(FL_UP_BOX);
    P6C7->color(FL_BACKGROUND2_COLOR);
    P6C7->hide();
} // Fl_Box* P6C7
{
    P6_hand_value = new Fl_Text_Display(765, 150, 25, 25, "Hand:");
    P6_hand_value->labeltype(FL_SHADOW_LABEL);
    P6_hand_value->labelsize(10);
    P6_hand_value->labelcolor((Fl_Color)3);
    P6_hand_value->textsize(10);
    P6_hand_value->textcolor((Fl_Color)216);
    P6_hand_value->align(Fl_Align(FL_ALIGN_LEFT));
    P6HandBuff = new Fl_Text_Buffer();
    P6_hand_value->buffer(P6HandBuff);
} // Fl_Text_Display* P6_hand_value
Player_6->end();
} // Fl_Group* Player_6
{
    Player_7 = new Fl_Group(830, 105, 140, 340);
    {
        P7_Status = new Fl_Output(867, 295, 100, 100);
        P7_Status->box(FL_OVAL_BOX);
        P7_Status->labeltype(FL_NO_LABEL);
        P7_Status->value(" inactive");
    } // Fl_Output* P7_Status
    {
        P7_Name = new Fl_Text_Display(895, 405, 80, 20, "Player Name:");

```

```

P7_Name->labeltype(FL_SHADOW_LABEL);
P7_Name->labelsize(8);
P7_Name->labelcolor((Fl_Color)3);
P7_Name->textsize(8);
P7_Name->textcolor((Fl_Color)140);
P7_Name->align(Fl_Align(FL_ALIGN_LEFT));
P7NameBuff = new Fl_Text_Buffer();
P7_Name->buffer(P7NameBuff);
} // Fl_Text_Display* P7_Name
{
P7_clock = new Fl_Text_Display(905, 270, 20, 20, "Time Left:");
P7_clock->labeltype(FL_SHADOW_LABEL);
P7_clock->labelsize(8);
P7_clock->labelcolor((Fl_Color)3);
P7_clock->textsize(8);
P7_clock->textcolor((Fl_Color)88);
P7_clock->align(Fl_Align(FL_ALIGN_LEFT));
P7ClockBuff = new Fl_Text_Buffer();
P7_clock->buffer(P7ClockBuff);
} // Fl_Text_Display* P7_clock
{
P7C1 = new Fl_Box(830, 195, 50, 75);
P7C1->box(FL_UP_BOX);
P7C1->color(FL_BACKGROUND2_COLOR);
P7C1->hide();
} // Fl_Box* P7C1
{
P7C2 = new Fl_Box(845, 185, 50, 75);
P7C2->box(FL_UP_BOX);
P7C2->color(FL_BACKGROUND2_COLOR);
P7C2->hide();
} // Fl_Box* P7C2
{
P7C3 = new Fl_Box(860, 175, 50, 75);
P7C3->box(FL_UP_BOX);
P7C3->color(FL_BACKGROUND2_COLOR);
P7C3->hide();
} // Fl_Box* P7C3
{
P7C4 = new Fl_Box(875, 165, 50, 75);
P7C4->box(FL_UP_BOX);
P7C4->color(FL_BACKGROUND2_COLOR);
P7C4->hide();
} // Fl_Box* P7C4
{
P7C5 = new Fl_Box(890, 155, 50, 75);
P7C5->box(FL_UP_BOX);
P7C5->color(FL_BACKGROUND2_COLOR);
P7C5->hide();

```

```

} // Fl_Box* P7C5
{
    P7C6 = new Fl_Box(905, 145, 50, 75);
    P7C6->box(FL_UP_BOX);
    P7C6->color(FL_BACKGROUND2_COLOR);
    P7C6->hide();
} // Fl_Box* P7C6
{
    P7C7 = new Fl_Box(920, 135, 50, 75);
    P7C7->box(FL_UP_BOX);
    P7C7->color(FL_BACKGROUND2_COLOR);
    P7C7->hide();
} // Fl_Box* P7C7
{
    P7_hand_value = new Fl_Text_Display(910, 105, 25, 25, "Hand:");
    P7_hand_value->labeltype(FL_SHADOW_LABEL);
    P7_hand_value->labelsize(10);
    P7_hand_value->labelcolor((Fl_Color)3);
    P7_hand_value->textsize(10);
    P7_hand_value->textcolor((Fl_Color)216);
    P7_hand_value->align(Fl_Align(FL_ALIGN_LEFT));
    P7HandBuff = new Fl_Text_Buffer();
    P7_hand_value->buffer(P7HandBuff);
} // Fl_Text_Display* P7_hand_value
Player_7->end();
} // Fl_Group* Player_7
Players->end();
} // Fl_Group* Players
{
    Fl_Button* o = new Fl_Button(40, 540, 100, 25, "End Game");
    o->color((Fl_Color)1);
    o->callback( (Fl_Callback *)end_game );
    o->hide();
    EndGame = o;
} // Fl_Button* o
{
    Fl_Button* o = new Fl_Button(40, 540, 100, 25, "Start Game");
    o->color(FL_GREEN);
    o->selection_color(FL_BLACK);
    o->callback( (Fl_Callback *)start_game );
    o->hide();
    StartButton = o;
} // Fl_Button* o
{
    Fl_Button* o = new Fl_Button(725, 540, 125, 25, "Deal Next Hand");
    o->color(FL_CYAN);
    o->selection_color(FL_BLACK);
    o->callback( (Fl_Callback *)next_hand );
    o->hide();
}

```

```

    NextHand = o;
} // Fl_Button* o
{
    Fl_Button* o = new Fl_Button(860, 540, 100, 25, "Deal Auto");
    o->color(Fl_MAGENTA);
    o->selection_color(Fl_BLACK);
    o->callback( (Fl_Callback *)deal_auto );
    DealAuto = o;
} // Fl_Button* o
{
    Fl_Text_Display* o = new Fl_Text_Display(80, 28, 50, 20, "Game ID:");
    o->labeltype(Fl_SHADOW_LABEL);
    o->labelsize(10);
    o->labelcolor(Fl_BACKGROUND2_COLOR);
    o->textsize(10);
    o->textcolor(Fl_BACKGROUND2_COLOR);
    o->align(Fl_Align(Fl_ALIGN_LEFT));
    o->hide();
} // Fl_Text_Display* o
{
    statusDisplay = new Fl_Text_Display(80, 50, 100, 20, "Status:");
    statusDisplay->labeltype(Fl_SHADOW_LABEL);
    statusDisplay->labelsize(10);
    statusDisplay->labelcolor(Fl_BACKGROUND2_COLOR);
    statusDisplay->textsize(10);
    statusDisplay->align(Fl_Align(Fl_ALIGN_LEFT));
    statusBuff = new Fl_Text_Buffer();
    statusDisplay->buffer(statusBuff);
    statusBuff->text( to_string( game->G_pub.gstate ).c_str() );
} // Fl_Text_Display* o
{
    playersDisplay = new Fl_Text_Display(80, 70, 25, 20, "Players:");
    playersDisplay->labeltype(Fl_SHADOW_LABEL);
    playersDisplay->labelsize(10);
    playersDisplay->labelcolor(Fl_BACKGROUND2_COLOR);
    playersDisplay->textsize(10);
    playersDisplay->align(Fl_Align(Fl_ALIGN_LEFT));
    playersBuff = new Fl_Text_Buffer();
    playersDisplay->buffer(playersBuff);
    playersBuff->text("0");
} // Fl_Text_Display* o
{
    shoeTypeDisplay = new Fl_Text_Display(920, 30, 50, 20, "Shoe Type:");
    shoeTypeDisplay->labeltype(Fl_SHADOW_LABEL);
    shoeTypeDisplay->labelsize(10);
    shoeTypeDisplay->labelcolor(Fl_BACKGROUND2_COLOR);
    shoeTypeDisplay->textsize(10);
    shoeTypeDisplay->align(Fl_Align(Fl_ALIGN_LEFT));
    shoeTypeBuff = new Fl_Text_Buffer();
}

```

```

shoeTypeDisplay->buffer(shoeTypeBuff);
} // Fl_Text_Display* o
{
    countDisplay = new Fl_Text_Display(920, 50, 50, 20, "Table Count:");
    countDisplay->labeltype(Fl_SHADOW_LABEL);
    countDisplay->labelsize(10);
    countDisplay->labelcolor(Fl_BACKGROUND2_COLOR);
    countDisplay->textsize(10);
    countDisplay->align(Fl_Align(Fl_ALIGN_LEFT));
    countBuff = new Fl_Text_Buffer();
    countDisplay->buffer(countBuff);
    countBuff->text("0");
} // Fl_Text_Display* o
{
    Fl_Text_Display* o = new Fl_Text_Display(920, 70, 50, 20, "Table Min:");
    o->labeltype(Fl_SHADOW_LABEL);
    o->labelsize(10);
    o->labelcolor(Fl_BACKGROUND2_COLOR);
    o->textsize(10);
    o->align(Fl_Align(Fl_ALIGN_LEFT));
    Fl_Text_Buffer* b = new Fl_Text_Buffer();
    o->buffer(b);
    b->text("$5.00");
} // Fl_Text_Display* o
{
    GUI_Dealer = new Fl_Group(385, 27, 315, 108);
    {
        duid = new Fl_Text_Display(525, 27, 75, 25, "Dealer Name:");
        duid->labelcolor((Fl_Color)3);
        duid->align(Fl_Align(Fl_ALIGN_LEFT));
        duidBuffer = new Fl_Text_Buffer();
        duid->buffer(duidBuffer);
        duidBuffer->text( ( (string)game->D_pub.name ).c_str() );
    } // Fl_Text_Display* o
    {
        DC1 = new Fl_Box(460, 60, 50, 75);
        DC1->box(Fl_UP_BOX);
        DC1->color(Fl_BACKGROUND2_COLOR);
        DC1->hide();
    } // Fl_Box* DC1
    {
        DC2 = new Fl_Box(515, 60, 50, 75);
        DC2->box(Fl_UP_BOX);
        DC2->color(Fl_BACKGROUND2_COLOR);
        DC2->hide();
    } // Fl_Box* DC2
    {
        DC3 = new Fl_Box(570, 60, 50, 75);
        DC3->box(Fl_UP_BOX);

```

```

DC3->color(FL_BACKGROUND2_COLOR);
DC3->hide();
} // Fl_Box* DC3
{
    DC4 = new Fl_Box(590, 60, 50, 75);
    DC4->box(FL_UP_BOX);
    DC4->color(FL_BACKGROUND2_COLOR);
    DC4->hide();
} // Fl_Box* DC4
{
    DC5 = new Fl_Box(610, 60, 50, 75);
    DC5->box(FL_UP_BOX);
    DC5->color(FL_BACKGROUND2_COLOR);
    DC5->hide();
} // Fl_Box* DC5
{
    DC6 = new Fl_Box(630, 60, 50, 75);
    DC6->box(FL_UP_BOX);
    DC6->color(FL_BACKGROUND2_COLOR);
    DC6->hide();
} // Fl_Box* DC6
{
    DC7 = new Fl_Box(650, 60, 50, 75);
    DC7->box(FL_UP_BOX);
    DC7->color(FL_BACKGROUND2_COLOR);
    DC7->hide();
} // Fl_Box* DC7
{
    DHandDisplay = new Fl_Text_Display(410, 105, 25, 25, "Hand:");
    DHandDisplay->labeltype(FL_SHADOW_LABEL);
    DHandDisplay->labelsize(10);
    DHandDisplay->labelcolor((Fl_Color)3);
    DHandDisplay->textsize(10);
    DHandDisplay->textcolor((Fl_Color)216);
    DHandDisplay->align(Fl_Align(FL_ALIGN_LEFT));
    DHandBuff = new Fl_Text_Buffer();
    DHandDisplay->buffer(DHandBuff);
} // Fl_Text_Display* o
GUI_Dealer->end();
} // Fl_Group* Dealer
{
    Suggestion_box = new Fl_Text_Display(425, 145, 200, 30);
    suggestionBuff = new Fl_Text_Buffer();
    Suggestion_box->buffer(suggestionBuff);
} // Fl_Text_Display* Suggestion_box
{
    shoe_bar = new Fl_Progress(615, 33, 220, 20, "Cards Remaining");
    shoe_bar->selection_color(FL_GREEN);
    shoe_bar->maximum(416.00);
}

```

```
shoe_bar->minimum(0.00);
shoe_bar->value(416.00);
shoe_bar->hide();
} // Fl_Progress* shoe_bar
o->end();
o->resizable(o);
} // Fl_Double_Window* o

open_screen->show();

return Fl::run();
}
```