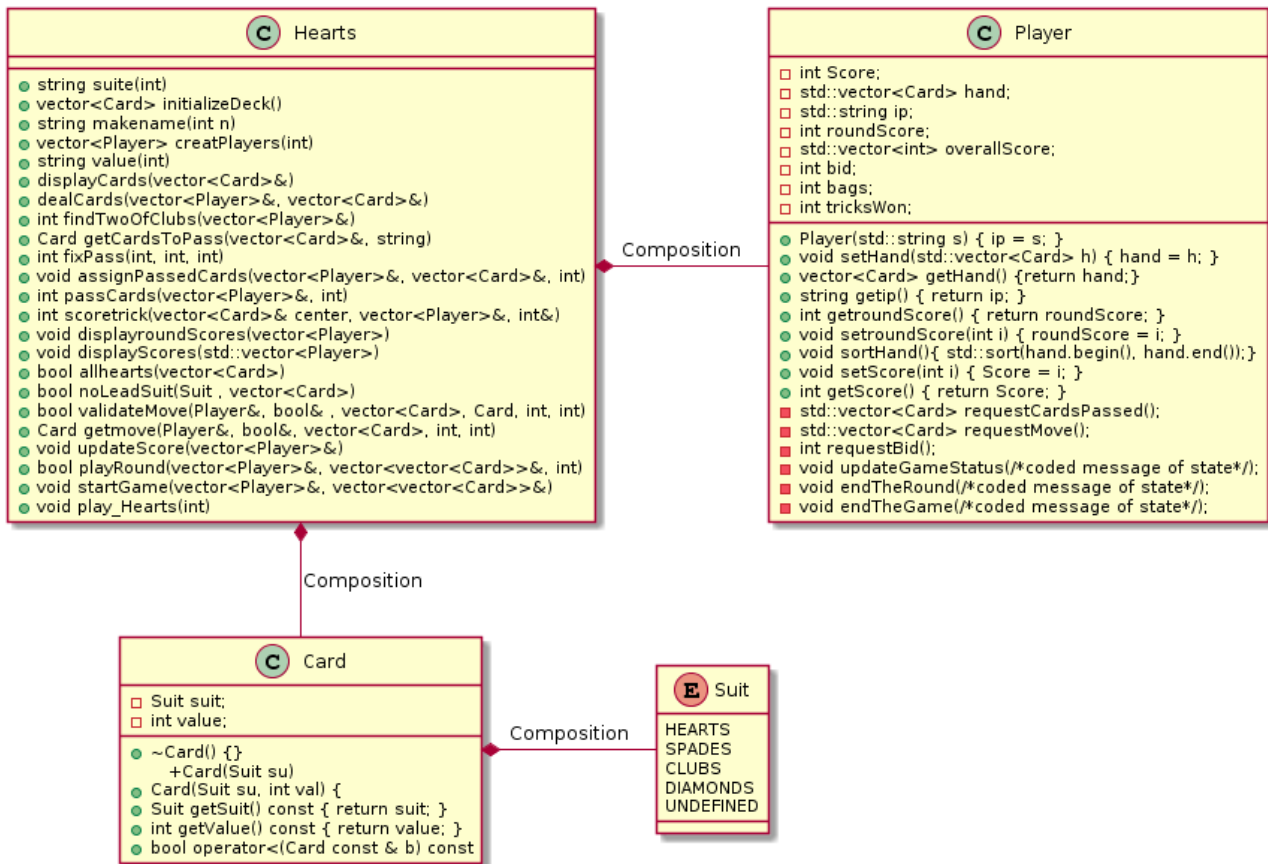


SDD -Hearts Low Level Design

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Hearts - Class Diagram



1 Hearts Class

- string suite(int i)
 - Converts enum of ints to string of card suit.
- vector<Card> initializeDeck()
 - Creates deck of cards taken from card class.
- string makename(int n)
 - Creates a player name.
- vector<Player> creatPlayers(int p)
 - Creates a vector of Players to play the game.
- void displayCards(vector<Card> & hand)
 - Displays the deck for screen purposes.
- void dealCards(vector<Player> & players, vector<Card> & Deck)
 - Deals cards to players.
- int findTwoOfClubs(vector<Player> & p)
 - Looks through each hand to find the 2 of clubs to find starting player and hand.
- Card getCardsToPass(vector<Card> & h, string p)
 - Gets and stores cards for passing at the beginning of each round.
- int fixPass(int r, int p, int c)

- Ensures that cards are passed to the right players depending on the round.
- void assignPassedCards(vector<Player> & p, vector<Card> & h, int r)
 - Takes the passed cards and redistributes based on round.
- int passCards(vector<Player> & p, int round)
 - Function for passing cards at beginning of round.
- int scoretrick(vector<Card> & center, vector<Player> & players, int& turn)
 - Holds the score for the current trick.
- void displayroundScores(vector<Player> p)
 - Displays scores for the round.
- void displayScores(vector<Player> p)
 - Display scores each turn.
- bool allhearts(vector<Card> h)
 - Checks to see if a players hand is all hearts.
- string value(int i)
- bool noLeadSuit(Suit s, vector<Card> h)
 - Compares hand against the lead suit
- bool validateMove(Player& p, bool& broken, vector<Card> Center, Card move, int t, int i)
- Card getmove(Player& p, bool& b, vector<Card> c, int t, int i)
- void updateScore(vector<Player> & p)
 - Adds round score to Score.
- bool playRound(vector<Player> & players, vector<vector<Card> >& history, int round)
- void startGame(vector<Player> & players, vector<vector<Card> >& history)
 - Uses players and calls round until game is over
- void play_Hearts(int num)