

Title **Crazy Eights – Text-Based**

Learning objectives Reproduce games for a variety of platforms using diverse game engine tools.

Instructions Create a fully functioning Crazy Eights game in three separate phases. A text based version with no graphics, a text based object oriented version and lastly an object oriented 2D graphical version. Wins are kept track of throughout the game by placing a number next to the player name.

Everything shown to the user will be in plain text. No graphics are needed in this submission. The player will be given options for what can be done during their turn. I.e., Card 1 (1), Card 2 (2), Draw Card (D), Suit Selection ('H', 'S', 'D', 'C'), etc...

- Deck Mechanics
 - Deck Building
 - Shuffle
- Game Mechanics
 1. Deal Cards
 2. Turn Progression
 3. Game Over (Finished Cards)
 4. Stats Tracking (Win/Loss)
- Player Mechanics
 1. Drop Card with Suit and Rank Check
 2. Draw Card
 3. Drop Pair of Cards
 4. Dropping Crazy Eights regardless of suit
 5. Changing Suits
 6. Skip Turn
 7. Card Penalties (Draw Two)

Game must have the following Crazy Eights rules implemented:

- Purpose of the game is to get rid of all cards in your hand
- Game starts with one card placed on the table and eight cards dealt to players that are in the game
- Player can play a card(s) with the same suit at the top of discard pile
- Player can play a card(s) with the same rank (number) at the top of discard pile
- Player can play one or more cards of the same rank (number), but the first card must match suit or rank at top of discard pile
- Player can draw a single card from the deck if they have no playable card in hand
- Turn advances to next player after picking up a single card
- Playing an Eight allows the suit to be changed to the current player's choice

ASSIGNMENT #1

DUE DATE: FRIDAY OF WEEK 7

Instructions

- Player penalties
 - Dropping a two forces other player to pick up two cards
 - Only a single two can be played at once
 - Queen of Spades does nothing in this version of the game
- Dropping a Jack skips other players turn
- Dropping a card(s) progresses turn to next player
 - Wins and losses are kept track for Two Players

The 2D graphics portion of the assignment will implement a title screen when the game starts and ends on a loss, win or if a Player decides to quit. All versions of the assignment must contain instructions on how to play before the game begins. This is a one player game versus the dealer.

Crazy Eights Rules: <http://www.pagat.com/eights/crazy8s.html>

Crazy Eights Example: <http://www.crazyeights-cardgame.com/>

Deliverables

- Submit your project solution files
- Naming Convention: VGP122_A1_Lastname_Firstname.zip

Percentage of final grade 15%

Grading rubric

	0 POINTS	1 POINT	2 POINTS	3 POINTS
PROGRAM EXECUTION	Did not complete	Program executes with a minor, easily fixed error	Program executes with no syntax or runtime errors	
DESIGN OF LOGIC	Did not complete	Program has significant logic errors	Program has slight logic errors that don't significantly affect results	Program is logically well designed
STANDARDS	Did not complete	Several inappropriate design choices (i.e. poor variable names, improper indentation)	Few inappropriate design choices (i.e. poor variable names, improper indentation)	Program is stylistically well designed
GAME INSTRUCTIONS	Did not complete	Instructions shown to player at start of game		
GAME FLOW: PLAYER SWITCH	Did not complete	Implemented but not functional	Player can switch to next player after turn complete	Player can switch to next player after turn complete
GAME FLOW: WIN/LOSE	Did not complete	Implemented but not functional	Game can end based on end scenarios	Game can be restarted
GAME: SHUFFLE	Did not complete	Implemented but not functional	Cards can be shuffled in random order	
GAME: DECK	Did not complete	Implemented but not functional	Cards are stored in one variable	Card can be displayed to Console (text)
GAME: DEALING	Did not complete	Implemented but not functional	Cards are dealt based on game rules	
PLAYER: MECHANICS	Did not complete	None to two player mechanic implemented	Three to five player mechanics implemented	Six or more mechanics implemented
PLAYER: STATS TRACKING	Did not complete	Implemented but not functional	Displays and updates player stats during game play	