CSC 667 Milestone 3 Documentation

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1) Github Repository:

https://github.com/sfsu-csc-667-fall-2018/fall-2019-term-project-brian-teo-adam

2) Heroku Link:

https://uno667.herokuapp.com/

3) Team Name:

Brian-Teo-Adam (Group F)

4) Entities:

Admin():
Description: has open access to user(), game() and gameDeck()
Purpose: To validate, create, and update relevant and sensitive user, game and game deck data. This can include login credential updating and validation, setting up new administrators, and correctly monitoring distinct processes on the network.

User():
Description: user contains userID, Password, WinsOrLosses and can play Game()
Purpose: The user represents the players of the game. Users keep track of their wins, losses, and current games they are involved in. Each user can access the individual games they are involved in, start new games to play, quit current games, or stay in the game lobby.

Game():
Description: game contains numOfUsers, gameID, and winnerOrLoser and can access gameDeck() and hand()
Purpose: The game represents each individual game session occurring on the network. Each game has a number of associated users playing the game, the hand of cards associated with each user in the game, and the central game deck that users draw from to add cards to their hands. All games track which userId is the winner or loser of the individual game.

gameDeck():
Description: gameDeck contains numOfCards, cardValue, and cardColor

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Purpose: The game deck represents the current collection of cards in circulation for a particular game session. Each gameDeck starts with the maximum total number of cards available to a deck at the start of a game, and each gameDeck keeps track of the number of cards left in the deck as users draw from the deck to complete their hands. Cards are represented by a value and a color.

hand():
Description: hand contains the users current hand i.e the cards they were dealt
Purpose: The hand represents the collection of playable cards possessed by each user in an individual game. As cards are drawn by the user from the gameDeck, the users hand is updated to reflect the accurate collection of cards now possessed by the player.

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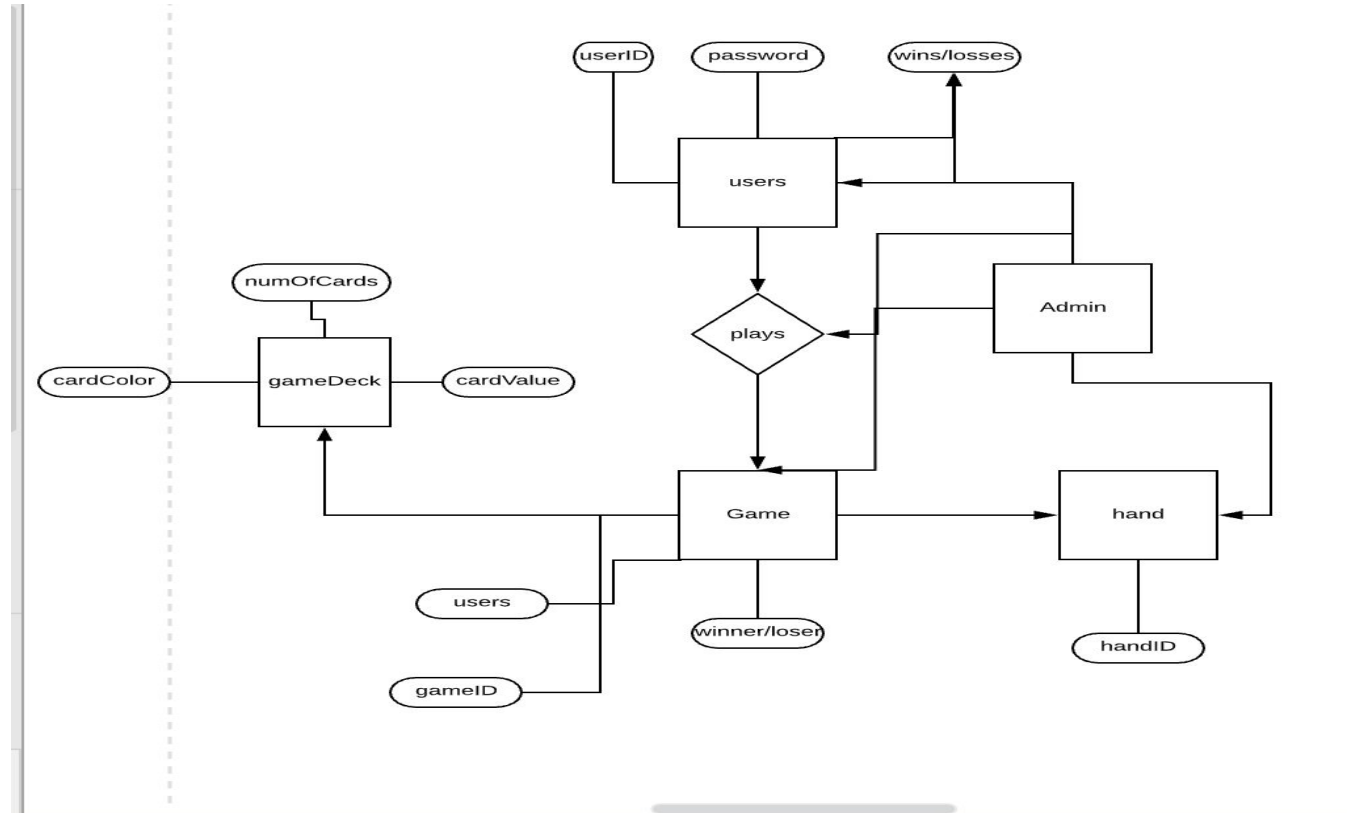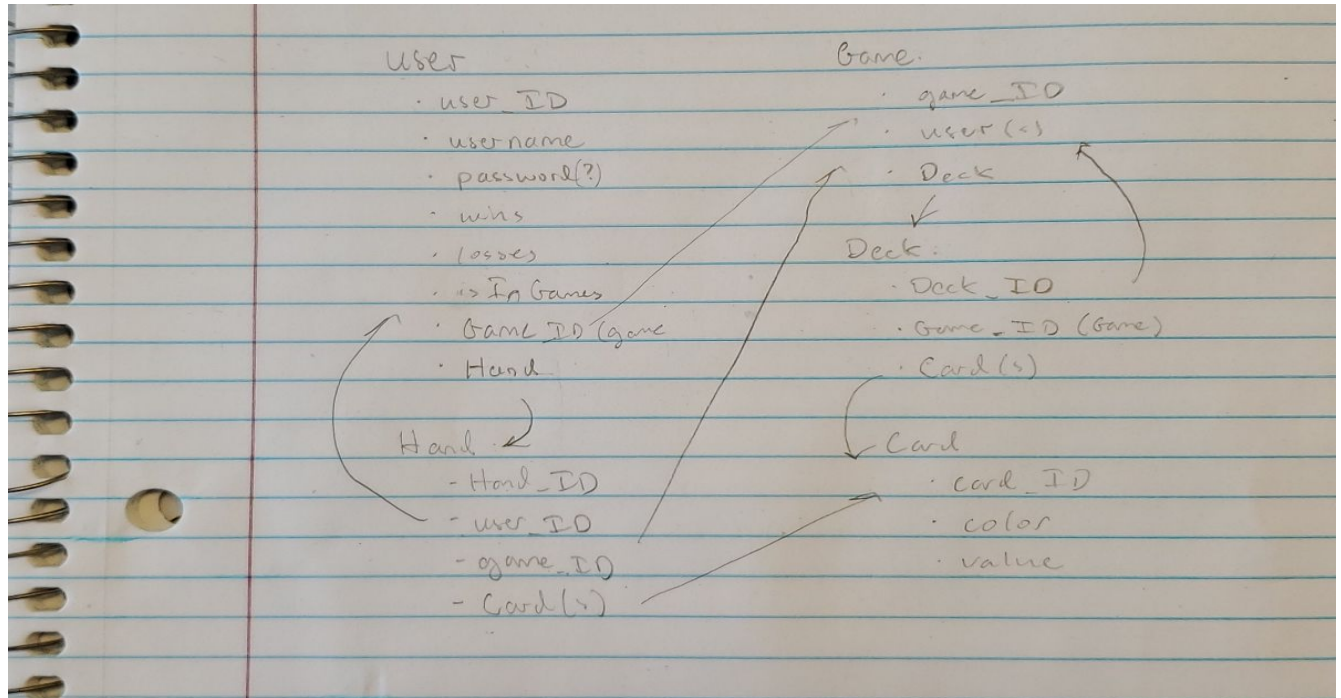Saleh Zahran, (917473965)

5) Diagrams:

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Sample Example Tables

1v1 Game of Uno with 2 card hands, 2 card Deck (just to show basics)

User:

UserID	GameID	Hand
1	1	1
2	1	2

User table contains list of users with respective game and hand, 1 row per game.

Game:

Game_ID	USER	Deck
1	1	1
1	2	1

Game table contains list of games and associated users and decks, one row per user.

Deck:

Deck ID	Game_ID	Card
1	1	5
1	1	6

Deck table contains list of decks with respective cards, one row per card.

Hand:

HandID	UserID	GameID	Card
1	1	1	1
1	1	1	2
2	2	1	3
2	2	1	4

Hand table contains list of hands with respective user, games, and cards. One row per card in hand.

Card

CardID	Color	Value
1	R	1
2	G	1
3	B	1
4	Y	1
5	R	2

Card table is a state table of all existing uno cards, will never be changed or adjusted.

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