Patrick Seminatore

Drew Bies

April 3, 2019

CPSC224 - Guizani

Project Proposal

1. Names: Patrick Seminatore and Drew Bies

2. **Project Name:** Blackjack

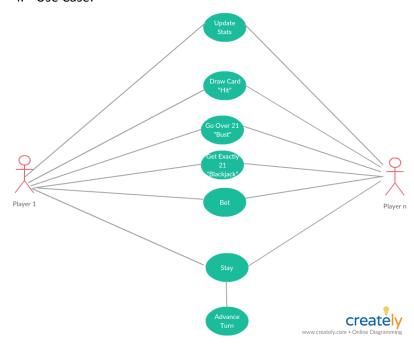
3. Project Description:

- a. **Motivation:** Both of us have been huge fans of card games for a long time. We also both enjoy making games as an application of computer science. Blackjack is a perfect way to blend these two things together!
- b. **Stakeholders:** The major stakeholders in the development of his application are mostly just us, as we are the only ones being evaluated on its implementation. However, we hope that in the future there is a possibility that our application could be published, in which case any future users would be stakeholders as well.
- c. **Sources of Data/Content:** We won't really be using any outside sources for this, as we are both fairly comfortable with the rules of Blackjack. However, it is possible that we will consult documentation for graphics functions.
- d. **Impact:** We hope that our application will change the way Blackjack is played forever! In the off chance that this isn't the case, we hope that our application will be a great example of utilizing the power of Java classes to implement a fully functional game. We hope that people will be able to enjoy our game for years to come!

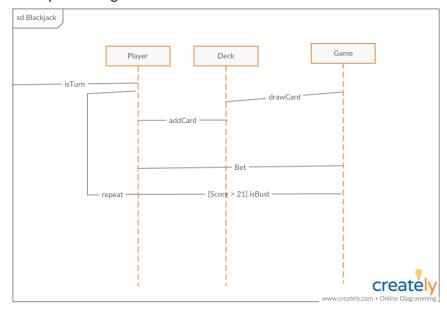
4. Implementation:

a. UML:

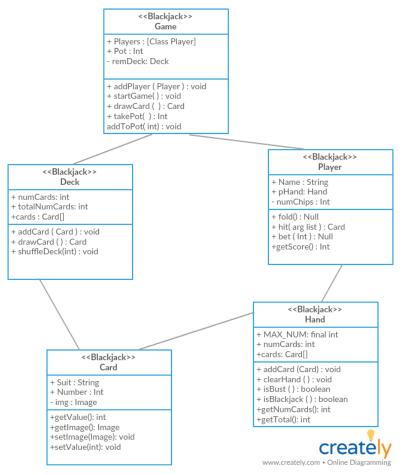
i. Use Case:



ii. Sequence Diagram:



iii. Class Diagram:



b. Functionalities:

i. In our application, we plan on implementing a fully featured Blackjack game, supporting up to 4 players. This will include the card game itself, betting (with each player starting with a fixed number of chips), and the ability to save and display stats in a meaningful way for each player.

5. Proposed Demo

- a. **Core Functionality:** The core functionality of our application is to be able to play a simple Blackjack game
- b. **How User Will Interact:** Users of our application will be able to play Blackjack through a GUI, place bets on themselves (with fake money), and save and display their stats over time.
- c. What Will It Look Like: Our GUI will display the table with all cards on it, with only the current player's cards facing up. It will display the total chips in the pot, each players total chips, and have options for "hit", "stay", and "place bet".
- d. **Mid Project Demo:** By the mid project demo, we plan on having basic Blackjack functionality, mainly being able to play a game to 21 on a graphical interface.