**BANG!**

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CS 342 Program 5

12:30 pm Section, Spring 2019

Group 19

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[BANG!](https://en.wikipedia.org/wiki/Bang!_(card_game)) is a turn-based card game developed by Emiliano Sciarra based on deducing the roles of other players in order to win. Our group implemented a simplified version, as a fixed, 4 player game with limited items and no characters. The roles in our game are 1 sheriff, 1 renegade, and 2 outlaws. The goal of the sheriff is to eliminate the outlaws, the goal of the renegade is to be the last person alive, and the goal of the outlaws is to kill the sheriff. Each player is randomly assigned a role, and play starts with the sheriff. During a turn, each player could play one bang card to shoot someone in their range, drink beers to restore health, or play weapon upgrades to increase their range. The game ends when one of the players completes their goal.

Our group implemented BANG! in Java, using JavaFX. BANG! can be played between 4 clients connecting to the server, which could all be different systems (if Localhost is no longer specified, however a line of code must be altered). The client acts mostly as a communication between the server and the user, as most of the game logic is played through the server.

Implementing the game, our group first focused on getting a JavaFX Server-Client GUI chat system. Once that was working, we implemented the Game, Player, Card, and Weapon classes. The next step was to get a text-based version of the game running using the previously created classes and Server-Client communication. Next, we implemented a client UI, and integrated this client UI with the text-based game, and finally remove the text-based version and clean up any loose ends.

We had some issues completing this project. At first, we were considering designing an UNO game, but when we found out other groups had a similar idea we decided to move on to BANG. An issue we had with project 4 was communication and scheduling, so for project 5 we met up more often, especially during the week before and week of finals, to make sure all our code worked together. Github was a very helpful addition to make all of our code work together, as it was easier to see other people’s ideas and keep the project updated.



