# Team 3 Requirements Document

#### Needs:

- 1. Software currently has command line interaction
- 2. Players are forced to do tasks in a set order when they should be allowed to choose
- 3. UI is unintuitive and does not convey player information
- 4. Robber is non functional
- 5. Game only allows the same player to win

#### Features:

- 1. Automatically gives resources to player based on dice roll
- 2. Clickable GUI to interact with
- 3. Allows custom colors for users
- 4. Displays icons to quickly identify resources
- 5. Allows users to set names
- 6. Allow users to click on the game board to place roads and structures
- 7. Allow users to set custom colors
- 8. Allow users to play alone with a computer player
- 9. Controllable robber

### **Functional Requirements:**

- 1. System allows user to roll dice and appropriately updates the user's resource count if the user owns a structure next to the appropriate hex
- 2. System allows users to click on hex intersections on the game board to place structures
- 3. System allows users to click on hex intersections on the game board to place roads
- System displays name, resource count, and victory points of each player during the game and updates when these statistics are updated
- 5. System displays each player's dice roll during each turn
- System displays icons on the game board to represent resources and structures
- 7. System allows users to set their name at the beginning of the game
- 8. System allows users to set a custom player color at the beginning of the game
- 9. System allows users to choose a number of computer players to play the game

## Nonfunctional Requirements:

- 1. The software uses Java
- 2. The software runs on Windows computers