Use Case Name: “Setup Players”

Primary Actor: User

Stakeholders and Interests:

- User: Wants to add three other players, who are either human or the computer. Wants the process to be clear and simple. If a user wants to play against a computer player or computer players, they need to be able to choose the same difficulty for all the computer players.

Preconditions: The user chose the option to start a new game.
The user has chosen to play on either on a simple board or a complex board.

Success Guarantee (Post-conditions):

1. User has successfully chosen all player settings for the game.

Main Success Scenario:

1. The system gives the user the opportunity to choose either a human or computer player for the three other players of the game.
2. The system shows what player is fixed to a certain robot with a certain colour and shape.
3. The system shows the user the default selection for all players is currently “Human Player”.
4. The system shows the user the default setting for the computer’s difficulty as “Easy”.
5. The system records the default selections.
6. The system shows the user the opportunity to start the game.
7. The user chooses to start the game. [Alt1: The user wishes to change a player’s type from human to computer.] [Use Case Ends]

Alternative Flows:

Alt1: The user wishes to change a player’s type from human to computer.

1. The user selects which player they wish to change from human to computer.
2. The system records the new selection. [Alt 2: The user wishes to change a player’s type from computer to human] [Alt 3: The user wishes to change the difficulty from easy to hard] [Alt 4: The user wishes to change the difficulty from hard to easy.]
3. Flow resumes at Main Success Scenario Step 6.

Alt2: The user wishes to change a player’s type from computer to human.

1. The user selects which player they wish to change from computer to human.
2. The system records the new selection. [Alt 1: The user wishes to change a player’s type from human to computer] [Alt 2: The user wishes to change a player’s type from computer to human] [Alt 3: The user wishes to change the computer’s difficulty from easy to hard] [Alt 4: The user wishes to change the computer’s difficulty from hard to easy.]
3. Flow resumes at Main Success Scenario Step 6.

Alt3: The user wishes to change the computer’s difficulty from easy to hard.

1. The user selects the hard computer difficulty.

2. The computer records the new selection. [Alt 1: The user wishes to change a player's type from human to computer] [Alt 2: The user wishes to change a player's type from computer to human] [Alt 4: The user wishes to change the computer's difficulty from hard to easy.]
3. Flow resumes at Main Success Scenario Step 6.

Alt4: The user wishes to change the computer's difficulty from hard to easy.

1. The user selects the easy computer difficulty.
2. The computer records the new selection. [Alt 1: The user wishes to change a player's type from human to computer] [Alt 2: The user wishes to change a player's type from human to computer] [Alt 4: The user wishes to change the computer's difficulty from easy to hard.]

Exceptions: If the system is unable to retrieve, record or provide details then the system informs the user there has been an error, and the use case ends.

Special Requirements: User interface must be designed in a way that takes into account users with colour deficiencies.

Open Issues:
- How to determine if we need to implement the difficulty setting or not before starting the game (if no player is a computer).