

## **Explanation of Patterns Used in Ricochet Robot's Game**

From the GRASP Collection of Patterns, the game this team has been working on captures the following patterns:

**Information Expert**: The class "Game" has the responsibility of an information expert since depending on the command assigned per panel, the "Game" class will communicate with a respective class to fulfill a required task. For example, pressing the button "play" will result on the "Game" class displaying the information contained in the class "secondPanel", and remove the contents of the class "firstPanel".

**Controller**: The team implemented a Controller pattern in the project. An example of this would be in the "firstPanel" class, where there exist the settings option to change the difficulty of the game. An additional example is the "bidPanel" class, which controls the users bid throughout the game.

**Creator**: Creator pattern has been used in the "Player" class, where the user has the option to pick players and assign them names. Another example would be in the "firstPanel" class, where there is the settings option where the creator gets to choose the level of difficulty.

**High Cohesion**: The team created classes that were focused on their specific tasks in the game, resulting on an increased cohesion. An example of this would be the "firstPanel", "secondPanel", and "thirdPanel"(final panel) classes, where each panel had its own class making everything organized. This is an example of high cohesion.