Design Changes

- The layout of the GUI was changed several times to accommodate the available tools in Android Studio, combined with the team's limited knowledge of Android Studio. Eventually the team settled on a one layer app with buttons representing the game board for ease of use and programming.
- The team went back and forth between JNI and JNA, but eventually settled on JNI by following Jason Gould's guide to adding functionality to Android Studio

Difficulties and Solutions

- Linking C++ code to Android Studio ended up being one of the main design difficulties. Android Studio is not as simple as just running C++ in Java and many other considerations must be made.
- Using Android Studio presented many challenges in that there is more to consider than simple programming in a given language. There was a definite learning curve to using it.

Lessons Learned

- Because of the limited dependencies of each member's tasks to the other, the scrum method worked well in keeping all members up-to-date on where the other members were in their tasks and the difficulties they were facing. In a highly connected project scrum may be less useful since the team members already know this information.
- The division of labor and how much time needed to be devoted to each task was not as originally thought. The GUI was fairly straightforward while linking C++ code was very difficult.

Final Comments

- Getting C++ to run correctly in Android Studio is buggy and one of the most difficult parts of the assignment.

Division of Labor

- Austin Anker: 25%
- Bill Wang: 25%
- Ray Freeze: 25%
- Alif Maknojia: 25%