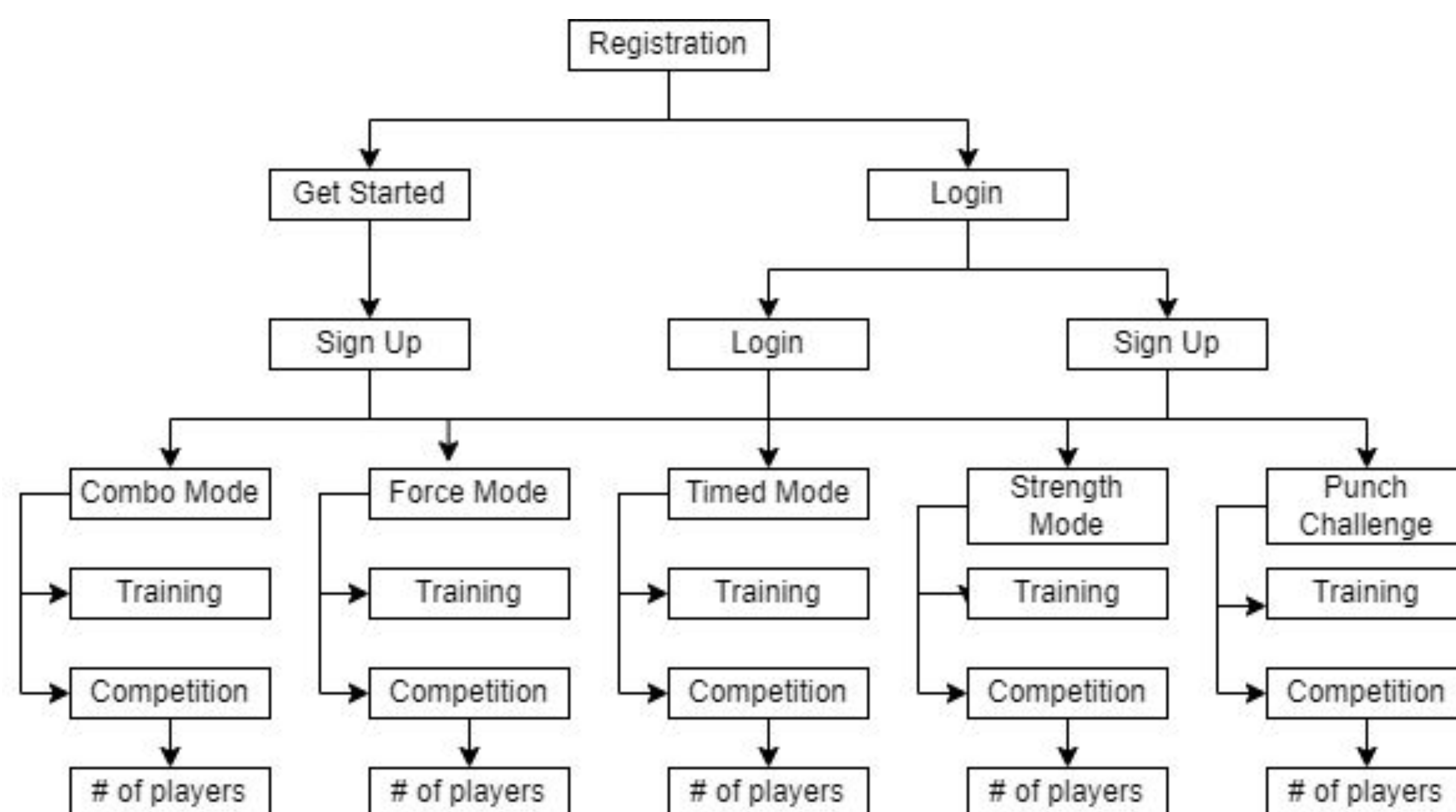


Problem

ComboCounter is a Java project using JFrames and a MySQL database to gamify a punching bag workout. It includes a user login system to store individual games aka “activities”. Although, many of the underlying features have been implemented, many more Improvements can be made such as improving the login interface, adding more functionalities, and fixing bugs or glitches in the application.

System Design



Verification

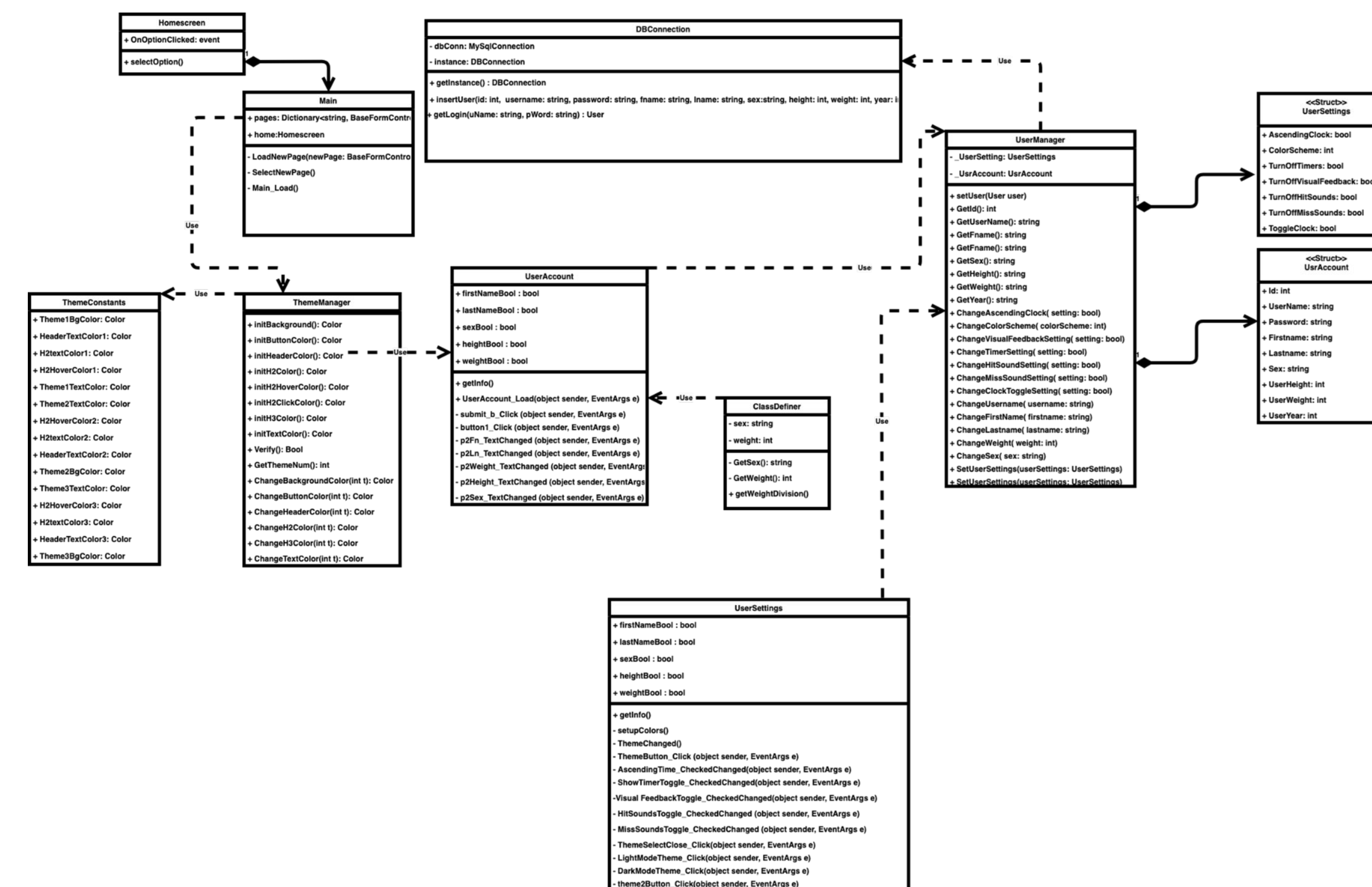
As Capstone I students we would aid in the verification process of the application by running it on our personal machines, testing to make sure the logins would work, how functional the interface was, and if the interface would properly save all the adjusted player settings. Capstone I students also tested to make sure the force counter was properly functional and the user could easily stop the training and reset the progress. All bugs and issues were actively reported to Capstone II students in order to enhance the experience of the program.

Current System

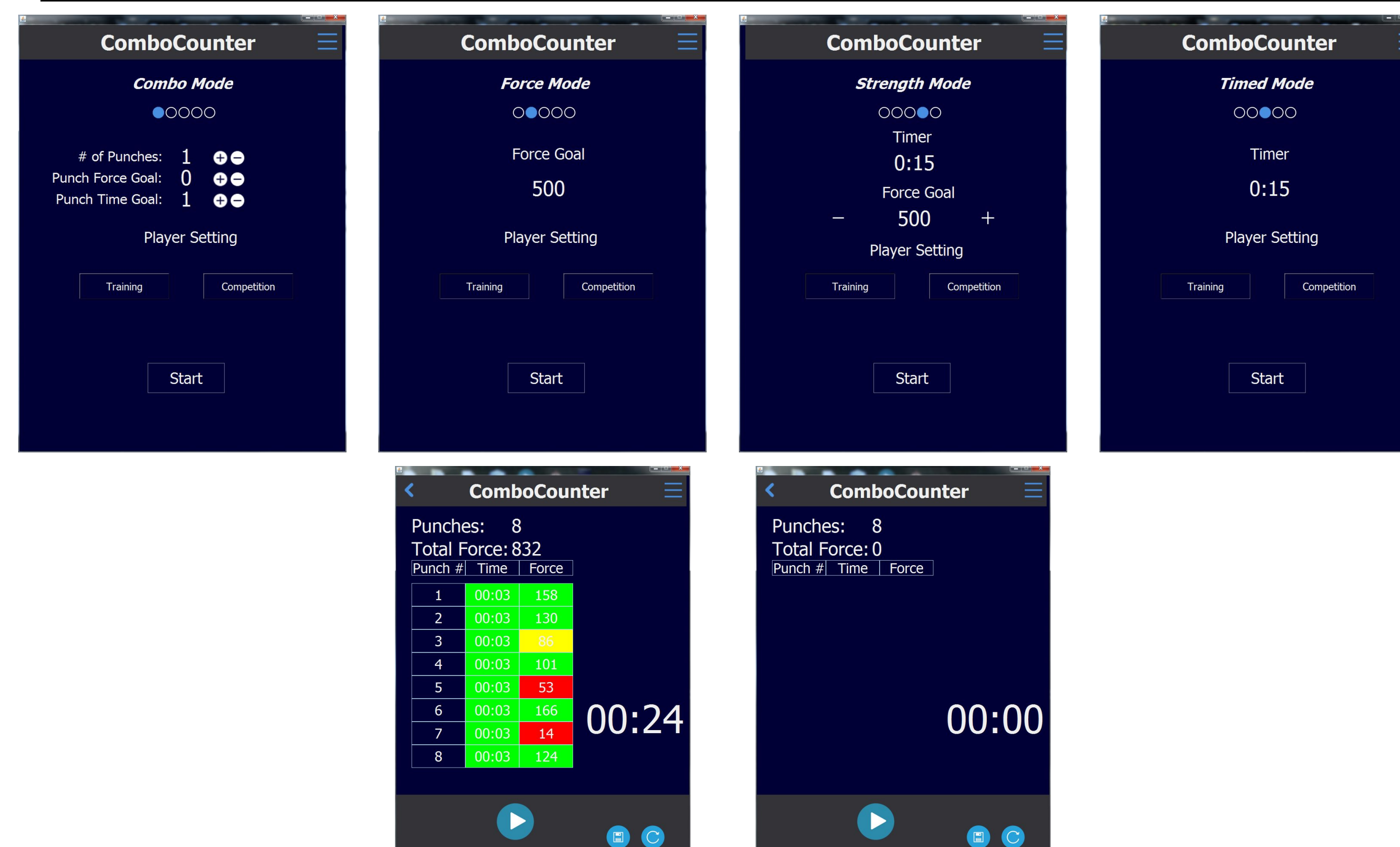
There are currently 5 activities in Combo-Counter.

- **Combo Mode**
- **Timed Mode:** User set a timer and punches until the timer runs out. The punches are added to a rolling sum. The sum, and timer are recorded.
- **Force Mode:** User sets a Force Goal, and punches until the sum of the punches force reaches that goal. The amount of time to reach the goal, the Force Goal, and the sum of the force are recorded.
- **Strength Mode:** Like timed mode, however no time limit is placed on the user.
- **Punch Challenge Mode:** User sets a minimum force for each punch, then punches.

Object Design



Screenshots



Requirements

Develop:

- Access to a computer system that is able to run the Combo Counter application. The system must be powerful enough to simultaneously run MySQL and Apache.
- A repository for version management and source code management such as GitHub
- Any IDE that can support Java and version control such as NetBeans.

Implementation

- We used Java through the Netbeans IDE to program the project
- JFrames was used to create the pop-out windows.
- MySQL was used for our database. SQL workbench can be used to access it.
- GitHub was utilized to assist in collaboration with the group.

Summary

The updates made this semester to the Combo Counter application will enhance user functionality and enjoyment. As of now, the user can workout while trying to get the most punches under a certain time, the most force until it reaches a goal, the combination of strongest punches, and a minimum force per punch. This increase in choices will provide more flexibility to present and future Combo Counter users in what they want to practice.

While cooperating with and learning from the Capstone II students, the Capstone I members have familiarized themselves with JFrame and SQL databases, as well as the Combo Counter design and source code. This will allow for a smooth transition in the upcoming semester.