Team01

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For Project 4, the team is asked to develop an Android Stopwatch application which can be preset up to 99, then countdown. The team has five members, before starting we came up with a plan for development. After the pair programming plan, we set out to do the project.

Our pair programming was standard. We first set out to start the project individually. After everyone was getting stuck on the same problem we decided to combine all the code into one project. Beforehand, each of the members did download the Android repo and work on meeting the requirements of the assignment. We communicated with each other via email and during in-class discussion. Finally, once the requirements were met, we worked on refactoring. Refactoring followed the same process, were changes were sent to the team. In this way, everyone has been involved in the whole process and pair programming makes sure that the program goes on smoothly.

Designing a state machine model before coding was more beneficial than coding directly without model. A model gives us a starting point and a reference as to what classes are needed and implemented during the coding process. The code based off what states and values were outlined in our state model machine. The difference between model and code is in that when designing models, designers visualize their ideas through those models; while when coding, designers implement those models to achieve their ideas by software engineering techniques.

After modifying the states in the default stopwatch code, and removing some unnecessary states, we decided we needed to add an alarming state. The state names were also changed to reflect a better representation. The increment state was now a counter state, and decrement became running. Since there was not major difference between our state model and application, we feel that it was very effective to begin with a state model first. No changes were need to our state machine model after completing development, other than name changes.