

Project 4 Proposal  
Bobby Eshleman  
Chris Clark  
11/10/18

### **Simon Multi-Player App**

**Description:** We would propose to use an application that would be located on the users phone. We would also have some hardware that would have 4 separate large and illuminated buttons. We would recreate the game Simon using the phone and this piece of hardware. The app would store user information (separate users) with high score information for each user. A stretch goal would be that the app would look for local app users that also had the app and if a game was initialized it would notify local app users to see if they wanted to join.

**Approach:** In this project we will once again utilize the Android Things architecture for the Raspberry Pi as it drives the actual game. We will use a random number generator so that no game is the same. We will also use a firebase database to pass data between the hardware and the software.

We will be splitting the work where we each get to do some hardware and some software. We will show success by having a user select the game, the difficulty and then play with the score being saved across multiple users. If we run out of time we will cut out the multiple user saves. But we did add stretch goals so that we could do something cool if we had time.

### **Milestones:**

The first milestone (11/25/18) will be getting versions of the hardware and software applications up and running as independent features. The second milestone (12/1/18) will be getting the two separate parts working together. The third milestone (12/5/18) will be testing and adding features from our stretch goals.