Corsi Block-tapping Task

Concept: A short-term memory test that records the longest sequence a participant can correctly repeat.

Functionality:

1. The developer shows nine blocks arranged randomly on the screen to the user
2. The developer first taps a sequence of blocks (starting with a sequence of 2 different blocks). Tapping is simulated by highlighting "tapped" blocks yellow.
3. The user is then expected to tap the blocks that the developer showed, in the same order. When the user is finished, they must click the "Done" button
4. If the user correctly reproduces the sequence, steps 1-3 are repeated with an additional block added to the sequence. Otherwise, the task ends, and their score is presented to the user. The user can get at most 1 incorrect sequence before the task terminates.

Resources:

- A firebase database is needed to keep track of user high scores
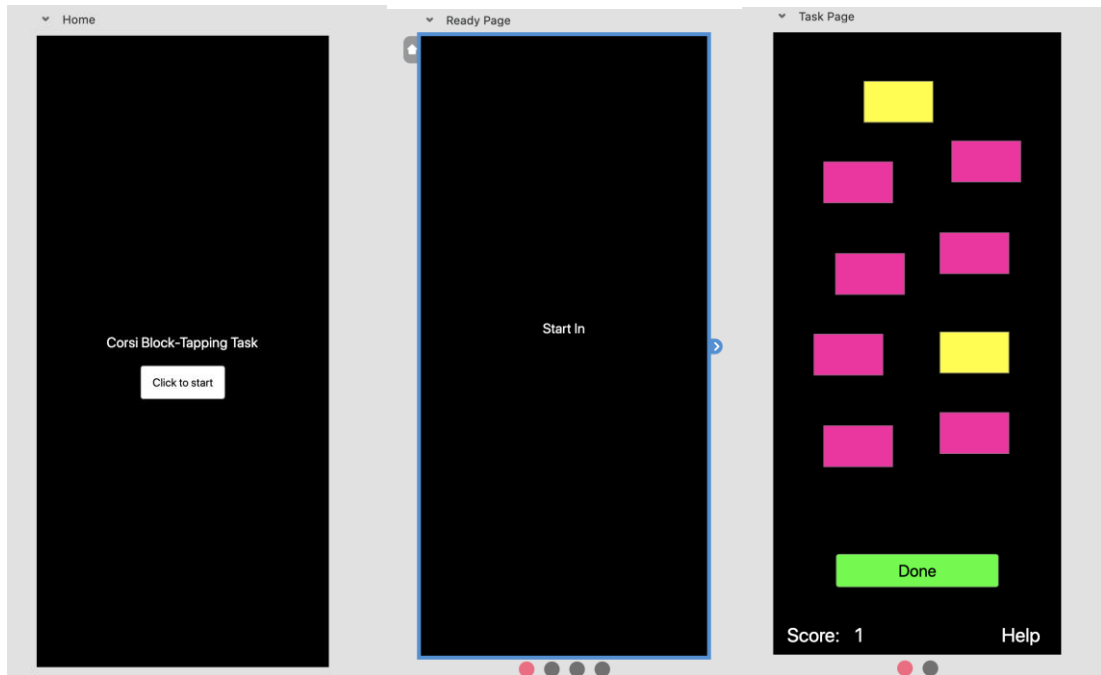
Android Components:

- Activities
- Content providers
- Views
- Layouts
- Intents
- Firebase
- Manifest

Sherief El-Ghazawi will oversee the database implementation

Randy Verduguez will oversee the UI

Muhammad Abdel Motagaly will oversee user functionality

Mockup

This is a wireframe that we created in Mockupplus. The user will start in the Home page where they must click "Click to Start" to begin the task. In the Ready Page, a count down from 3 will be presented to the user under "Start In". After the countdown, the user will be taking the Task Page where they will be expected to take the test. Nine pink blocks will be presented to the user initially. First, 2 blocks will be tapped in a sequence. Tapped blocks will be colored yellow for an instance before returning back to pink. When the user finishes reproducing the sequence, they must click done. Their score will be presented at the bottom left corner. A help button in the bottom right corner will be presented to provide instructional aid to the user.