Tracking Gaze during Meditation on Smart Phone

Wei Guo
Technical Report
Department of Computer Science
University of Pittsburgh
December 2017

Step1: Connect to wifi
    You need to connect to the internet because our system is sending/receiving message based on the internet.

Step2: Open Server (Open the app called SIS Server)
    Server is the center terminal and the foundation of SIS system. After open server, please click Start Server. There is IP address and port number appeared, which will be used later.
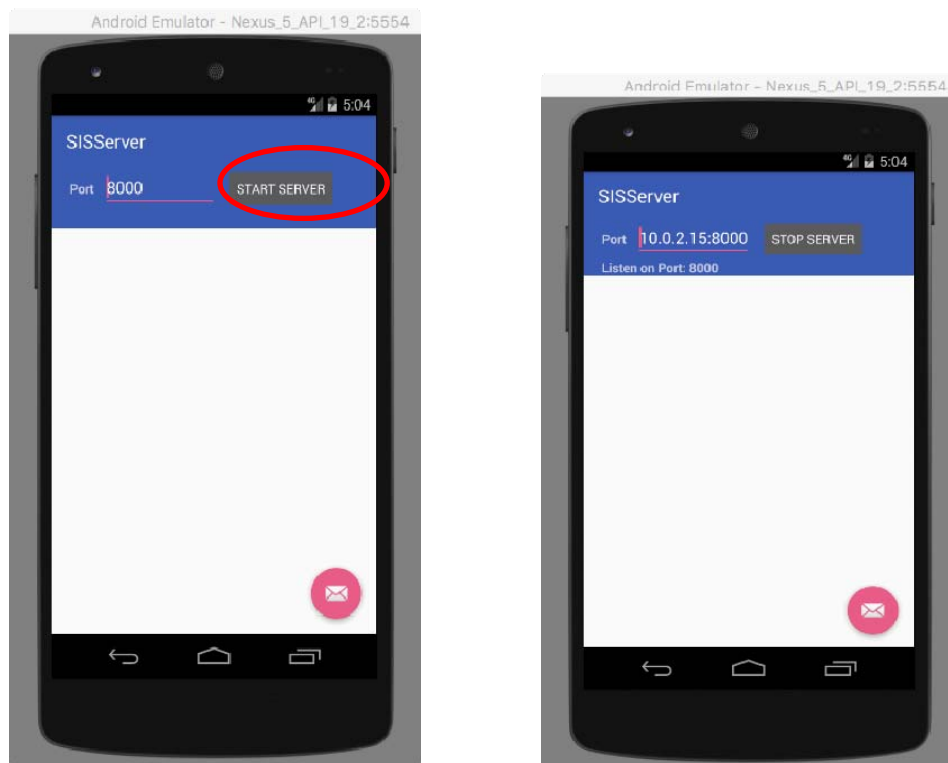
Step3: Open Gaze (Open the app called Gaze)
    Gaze is a component of SIS that measuring meditation via Gaze tracking. After open Gaze app, the Gaze app interface requires you to input *IP address* and *port*, please input the IP address and port in Server app. After insertion, click *Register* button, and then click *Connect* button.

Step3: Open Uploader (Open the app called Uploader)
    Uploader receives messages from other components, and upload to chronobot. After open Uploader app, the Uploader app interface requires you to input *IP address*

and *port*, please input the IP address and port in Server app. After insertion, click *Register* button, and then click *Connect* button.

Step4: Open PrjRemote (Open the app called PrjRemote)
    The PrjRemote is the GUI to control all the other components. After open PrjRemote app, the PrjRemote app interface requires you to input *IP address* and *port*, please input the IP address and port in Server app. After insertion, click *Connect* button.
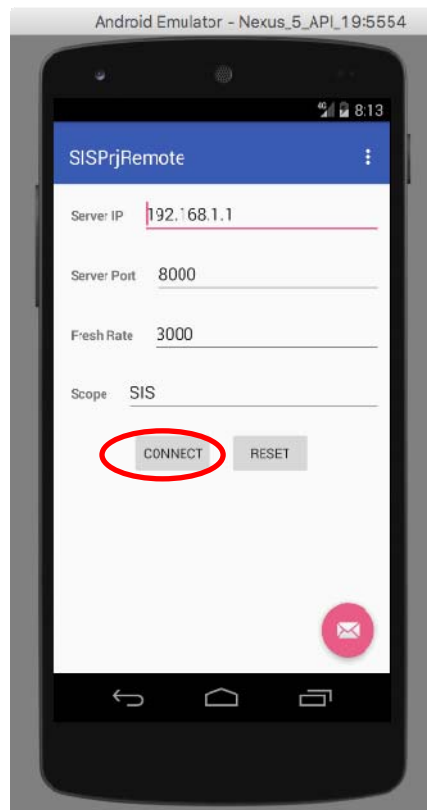

And then, scroll from right to left to flip a page. In the new page, insert Message type: Register, and click send (P.S. Register should start with capital R). And then change the Message type to Connect and click send (P.S. Connect should start with capital C).
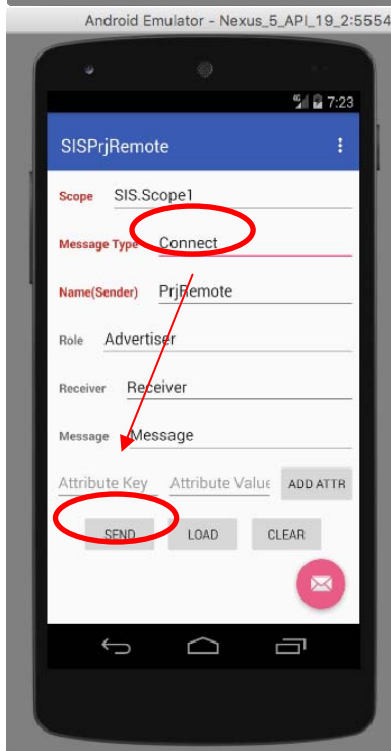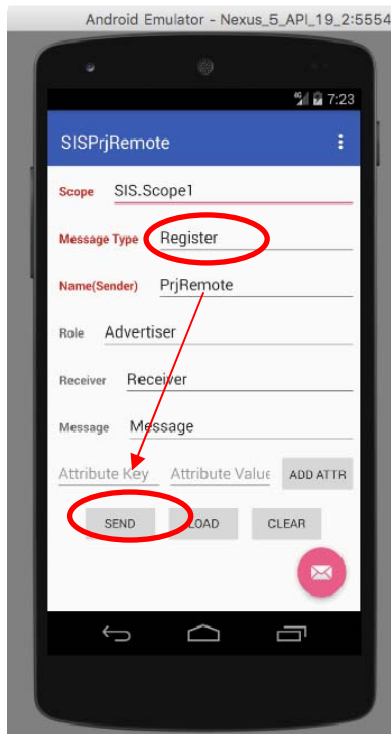
Step5: Send parameter to Gaze (Please stay in PrjRemote in this step)
     Scroll from right to left to flip page in PrjRemote, until you see this page. You can select or insert the **duration** of gaze tracking. After making your decision, click Send button.
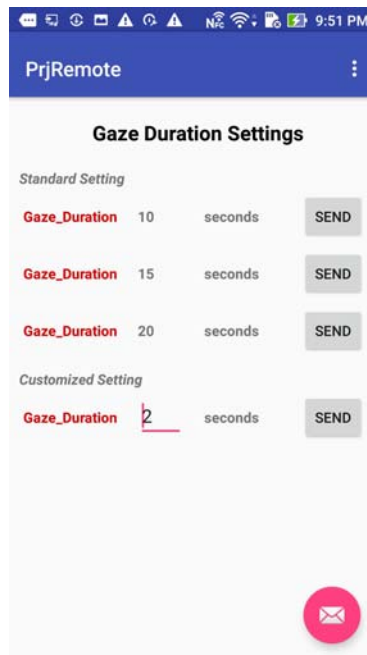
Step6: Go to Gaze app

Click the button called: START MENTAL STATE TRACKING. The meditation tracking page will open, with your front camera open tracking the eye gaze. Please let the camera see your face. You can start meditation. This will last for the duration you set in PrjRemote. After finishing meditation, it will automatically return to Gaze interface. And you should click the button called Collect Data first, and then the button called Send message. At this time, server will receive your data and forward it to both PrjRemote and Uploader. Please go to these two apps and check their message page.