CSE 5473 Project P5

Nick Forquer, William Greer, Gerard Pulhalla, Trevor Rambacher

API implemented

The project was implemented using a variety of add-ons from the android library. The security portion of this was done using portions of the math, security and crypto libraries. These were used to implement the Diffie Hellman key exchange between the two devices once they were connected with either Wi-Fi or Bluetooth. The crypto libraries had specific DH packages to expedite the process. Security gave the ability to generate keys and key pairs necessary to verify a secure connection. Big integer was used in the calculations for the exchange.

The Bluetooth connection was created using several of the Bluetooth packages, including adapter and device (to use the phone’s own capabilities), as well as socket and socketServer to create a connection between the two phones. In a similar manner, Wi-Fi direct used several packages from net.wifi libraries. These were used to find networks and then connect the two devices to one another (through several p2p packages).

Several of the base packages such as os, widget, and view were used for the base part of the app to have a staring page that connects to others.