Implementation & Documentation

1. Design Pattern & Refactoring

* For a design pattern, we used structural patterns that allowed us to easily make more functioning classes and activity layouts. The ‘EditContact’ Class is a good example of this, you only need change the name of the class before its ready.

1. Testing:

* Test cases are located under java/com.example.briantruong.smsapplication (androidTest)/RecieveSmsActivityTest.java

1. Instructions

* To build the software, all you must do is open “SMSApplication” and run it through an emulator, or two if you want to test the message feature that way. Your android studio might have to download some stuff before it will compile properly.
* Once the app is running, it will open to the send message page. The ‘inbox and send activity’ will let you add in a phone number and type a message out before you send it. For testing with emulators, use the 4-digit number to send a message to that one, shown at the top bar of the emulator on the right side.
* To delete a message, just hold left click, or with your finger if on a phone, and select the delete option.
* The ‘sent messages activity’, which can be accessed by selecting the ‘Sent Messages’ button, allows you to see all your past sent messages; you can also delete these the same way as before, by holding left click and selecting the delete option.
* When a message is received, you can select the reply option next to the notification to quickly send a reply.
* The messages are shown by most recent from bottom to top with a time stamp, phone number being received from, and the message itself.
* We used the phones local memory, or Virtual Device Database, to store the messages for the sake of persistence.
* We ended up dropping the contact functionality and sticking to a core SMS application (Send Message, Receive Message, Persistence, and Delete Message) as linking contacts with sending messages proved to be difficult.

![A screenshot of a computer

Description generated with very high confidence]()

![A screenshot of a cell phone

Description generated with very high confidence]()