

Distinction Experience Report

COS30017 - Software Development for Mobile Devices

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1. Introduction

Perspective: Design Communication Perspective

This document covers the experience of writing a non-trivial Android application from the perspective of communicating the design of the app, including class diagrams, navigation model and data model. It also covers limitations of API used in developing the program, as well as a short section on the experience of using RAPPT for prototyping during initial phases of development, and how that affected the continued development.

2. Project Structure

The application is structured in part as per the Android standards, and also by how RAPPT has generated package structures and various utilities such as RESTful API client, error dialogs, listview and list adapters.

2.1. Resources

Resources are separated into;

- anim
- drawable
- layout
- menu
- values

There are different styles specified for API 21 than API 15+ due to the need to use the AppCompat themes and libraries for backwards compatibility of Material Design components, visual and navigation design patterns.

2.2. Source

Java source is separated as suggested by the output of RAPPT into the following packages;

- activities
- adapters
- fragments
- interfaces
- model
- views

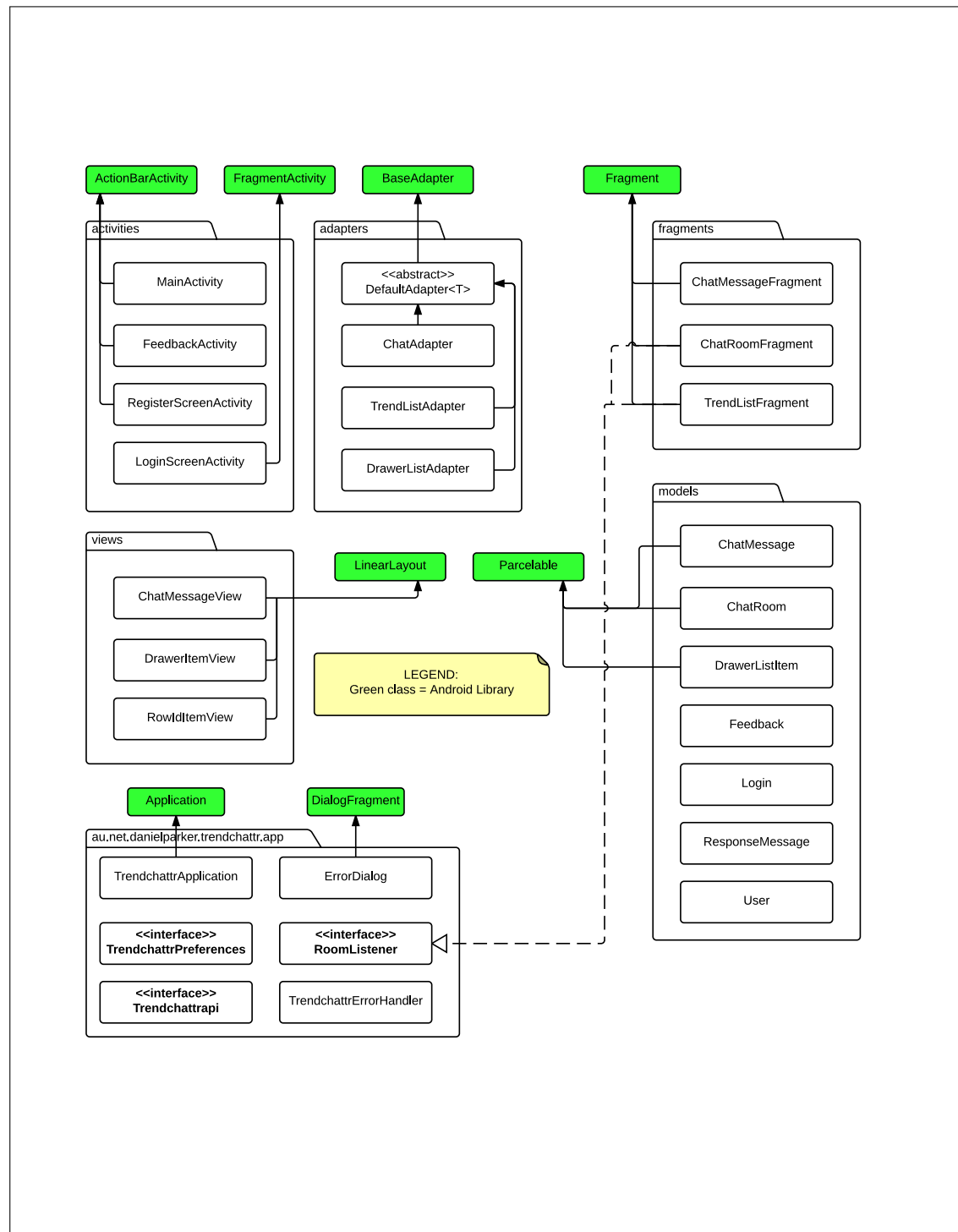
Some application level source files are in the root of the java source to indicate their global importance to the project.

2.3. Libraries

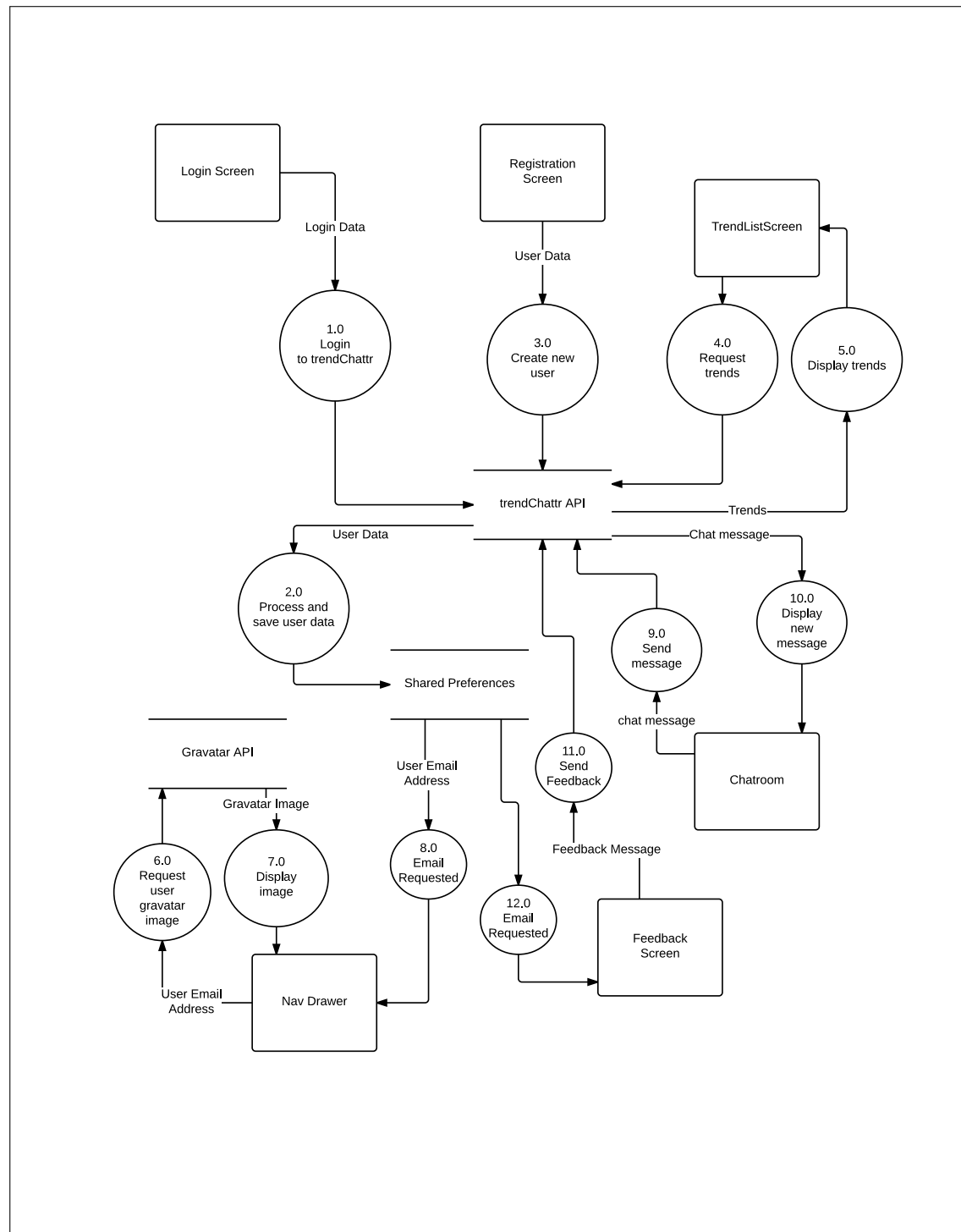
Most libraries are included by gradle at compile time, however one library needed modifications, and has been packaged as a jar archive and added to the libs directory and as a gradle dependency.

3. Program Structure

3.1. Class Diagram

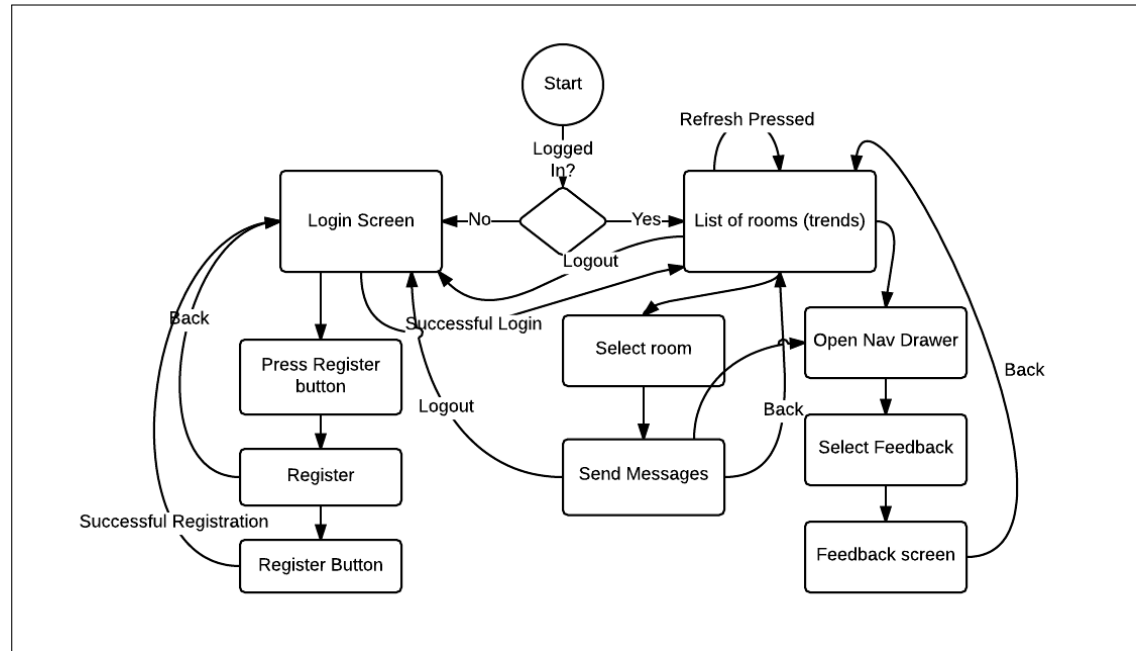


3.2. Data Model



4. Visual Structure (Navigation)

4.1. Navigation Flow Diagram



5. API Limitations

6. Summary

7. References