

## Technology Stack Overview

- Back end
  - Apache Tomcat Java application sever
  - RESTful Web service
    - Apache Derby database
    - Hibernate ORM
    - All entity classes
    - Spring Boot Data
    - All repository interfaces
  - Service Controllers
    - Spring MVC
    - Controller classes
  - View building and serialization
    - Jackson JSON
    - All View classes
  - Authentication
    - Google OAuth Bearer Token
- Front end
  - Android OS
  - Data model
    - SQLite
    - Custom entity and other model classes
    - Data access object (DAO) interfaces
  - Remote service interfaces
    - SQLite
    - Room ORM
    - Custom entity and other model classes
    - Custom type converters
    - Data access object (DAO) interfaces
  - Viewmodel componets
    - SQLite

- Room ORM
  - Custom entity and other model classes
  - Custom type converters
  - Data access object (DAO) interfaces
- View
  - RecyclerView.Adapter and RecyclerView.ViewHolder
  - Many custom layouts
- Controller
  - Main activity
  - All other fragments
- Authentication
  - Google Sign in - OAuth
  - Sign in class