Tutorials

Git with SourceTree:

<https://www.youtube.com/watch?v=UD7PV8auGLg>

How to test your code with Junit:

<http://www.vogella.com/tutorials/JUnit/article.html>

Server

REST concepts + working with Java web services: <https://www.youtube.com/watch?v=xkKcdK1u95s&list=PLqq-6Pq4lTTZh5U8RbdXq0WaYvZBz2rbn>

Google Sign-in backend authentication

<https://developers.google.com/identity/sign-in/android/backend-auth>

Working with Hibernate (mappings from database to objects and vice versa)

<https://www.youtube.com/watch?v=Yv2xctJxE-w&list=PL4AFF701184976B25>

The division algorithm

http://www.cs.wustl.edu/~cytron/cake/Reports/PDFs/sachertorte.pdf

Client

For just general Android best practices and basics I am taking this:

<https://www.udacity.com/course/new-android-fundamentals--ud851>

Client architecture:

<https://developer.android.com/topic/libraries/architecture/guide.html>

Retrofit – a library that helps communicate with the server API:

<https://www.youtube.com/watch?v=R4XU8yPzSx0>

Google Sign-in:

<https://developers.google.com/identity/sign-in/android/start-integrating>

Google Cloud Messaging (push notifications):

<https://developers.google.com/cloud-messaging/gcm>

Installation components

General:

Source Tree (version control)

Android studio (Client-side IDE)

Eclipse J2EE (Server-side IDE)

Apache Tomcat 9.0 (Java Server container)

Jersey (JAX-RS implementation)

Installation log

1. Download SourceTree for version control

* Clone repository with URL : https://github.com/quwala/dingy-server.git
* Select any location in your pc to be the repository path, doesn't matter where.

Client

1. Download & install android studio for client-side development

* If you don’t have JDK or JDE then you will have to install them as well and the installer will tell you how (maybe)

1. In Android studio, go to open=> open existing project => select the client project that's in the repository you cloned in step 4)

At <repository path>/code/client/Dingy

1. You may need to do some things to get the Google sign-in service to work, in which case follow the steps in:

<https://developers.google.com/identity/sign-in/android/start-integrating>

(I already did it, but I don't know if it's per-app or per-developer).

Server

1. Download & install eclipse J2EE for server-side development

* When you open eclipse, set the workspace to be <repository path>/code/server so you can work on the server code.
* Go to the REST tutorial part 10 to see how to install server environment
* You'll need to set environment variables for JDK and tomcat, don't remember if it's in the videos or not but Google it.

1. Download & install PostgreSQL latest version in order to make your pc a Database server as well as a regular application server. (Hibernate needs it)
2. Download & install pgAdmin latest version, it helps with looking at the data in the database in a comfortable way.