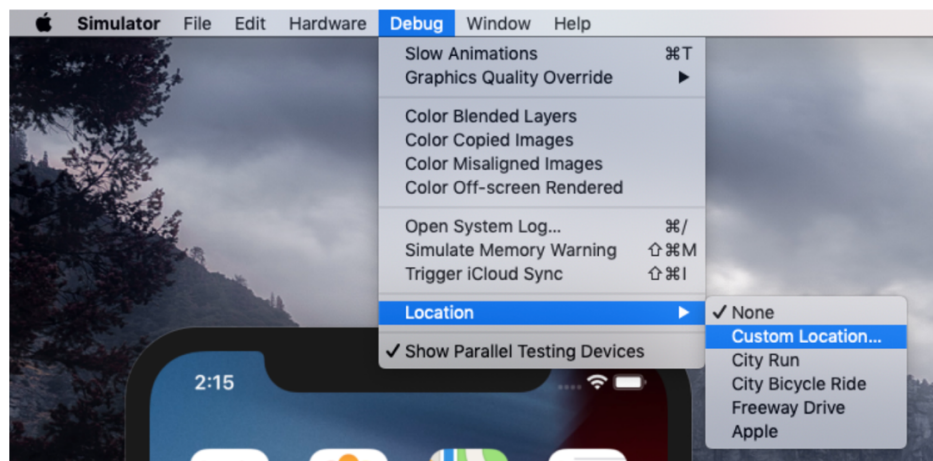


- 1.) open Visual Studio Code or another IDE and install “Dart” and “Flutter”
  - a. Windows: <https://www.youtube.com/watch?v=tun0HUHaDuE>
  - b. Mac: <https://www.youtube.com/watch?v=9GuzMsZQUYs>
- 2.) Open my project in your IDE and then go Code\_PlanB-Solution/CodeBase/app/lib/main.dart
- 3.) Start your ios or Android simulator (virtual device) and click on the start button in the main.dart file, or go into your terminal and type “flutter run”
- 4.) Change the location of the device to Berlin for that (latitude: 52,520008 Longitude: 13,404954)

a. IOS:

### XCode 11.3 and prior:

Debug -> Location -> Custom Location



### XCode 11.4+:

Features -> Location -> Custom Location



## b. Android:

The image shows an Android emulator window titled "Android Emulator - Nexus\_5\_API\_24:5554". The emulator displays a Google Maps interface with a search bar at the top containing the text "Try gas stations, ATMs". The map shows a street view of a neighborhood with labels like "Adobe Creek", "The Church of Jesus Christ of Latter...", and "E Charleste". A red arrow points from the map area to a red circle in the bottom right corner of the emulator, which contains three dots (a menu icon).

Below the emulator is the "Extended controls" panel. It has a sidebar on the left with various system controls: Location, Cellular, Battery, Phone, Directional pad, Fingerprint, Virtual sensors, Google Play, Settings, and Help. The main area of the panel is divided into sections:

- GPS data point**: Includes a "Coordinate system" dropdown set to "Decimal".
- Currently reported location**: A text box showing "Longitude: -122.1100", "Latitude: 37.4220", and "Altitude: 0.0".
- GPS data playback**: A table with columns for "Delay (sec)", "Latitude", "Longitude", "Elevation", "Name", and "Description".
- Change coordinates**: A section with input fields for "Longitude" (containing "-122.110") and "Latitude" (containing "37.422"), and an "Altitude (meters)" field (containing "0.0"). A red arrow points to the "Longitude" field with the text "Change coordinates".
- Then update it**: A red text label next to a "SEND" button.
- Speed 2X**: A dropdown menu set to "Speed 2X".
- LOAD GPX/KML**: A button at the bottom right.

Everything else should work out of the box, I started the server that is communicating with my DB on my raspberry pi 4, I had problems to have my db running stable so in the case of not having a connection:

- 1.) Download MySQL Workbench, create a new Connection and run, after that create a new schema and open a tap to run queries.
- 2.) Copy the script in Code\_PlanB-Solution/CodeBase/CODE-Challenge\_PlanB-App\_db.sql
- 3.) Execute the script
- 4.) After this open server script in Code\_PlanB-Solution/CodeBase/Back-End/app.py
- 5.) Because of privacy I separated the DB connection details into "config.py" which gets ignored by gitignore. So to get a connection to the db you have to create a new "config.py" file in the "Back-End" directory. Paste the following Code into the file:

```
import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd=" ",
    database="CODE_PlanB",
    port='3306'
)
```

If you will run the db somewhere else then on your local machine you have to edit the host. For the password insert the password you used for MySQL Workbench.

- 6.) Go into your terminal and type: "python3 app.py" this starts the server.
- 7.) Go in Code\_PlanB-Solution/CodeBase/app/lib/home/home.dart into line 24 and change to URL to the link the console printed when starting the server