## **1. Setting Up the MySQL Server**

### **Prerequisites**

* MySQL Server
* MySQL client (mysql CLI or GUI like MySQL Workbench)

### **Step-by-Step Guide**

#### **a. Start Server:**

# On Linux:

sudo service mysql start

# On Windows/macOS: Use MySQL Workbench/CLI

#### **b. (For Linux Only) Log in to MySQL as root:**

mysql -u root -p

#### **c. Create database and tables:**

CREATE DATABASE stock\_db;

CREATE TABLE users(

email VARCHAR(50) PRIMARY KEY,

username VARCHAR(10) NOT NULL,

jwt\_token VARCHAR(500)

);

CREATE TABLE watchlist(

ticker VARCHAR(20),

name VARCHAR(100),

email VARCHAR(50),

PRIMARY KEY (ticker),

CONSTRAINT FK\_User FOREIGN KEY (email) REFERENCES users(email)

);

## 

## **2. Setting Up the Flask Backend**

### **Prerequisites**

* Python 3.8+
* pip (Python package installer)
* (Optional) Virtual environment tool: venv or virtualenv

### **Step-by-Step Guide**

#### **a. Navigate to the backend folder:**

cd finance-server

#### **b. (Optional) Create and activate a virtual environment:**

# On Linux/macOS:

python3 -m venv venv

source venv/bin/activate

# On Windows:

python -m venv venv

venv\Scripts\activate

#### **c. Install dependencies:**

pip install -r requirements.txt

#### **d. Run the Flask server:**

# Define custom host to communicate with Android Emulator/Physical Device

flask --app src run --host=192.168.122.1

The backend should now be running at http://192.168.122.1:5000/.

**3. Setting Up the Android Project**

### **Prerequisites**

* Android Studio (latest version)
* Android SDK & Emulator or physical device

### **Step-by-Step Guide**

#### **a. Open Android Studio**

1. Select **"Open an existing project"**.
2. Navigate to yfinance-app/ and open it.

#### **b. Configure Backend URL**

If your Android app communicates with the Flask server:

* Open local.properties.
* Replace the BASE\_URL with http://192.168.122.1:5000/.

#### **c. Build and Run the App**

1. Select an emulator or connected device.
2. Click the green "Run" button in Android Studio

## **4. Troubleshooting**

1. Sometimes periodic changes in yfinance library make previous version’s code unusable or error prone. To prevent this, update yfinance library used in Flask backend code before starting the Flask server.

pip install --upgrade yfinance