Sure! Here’s a simplified, user-friendly guide to setting up a FastAPI project using a GitHub repository and an SQL database from XAMPP, tailored for someone without a software development background.

## Easy Guide to Setting Up a FastAPI Project with XAMPP

### What You’ll Need

1. **XAMPP**: A tool that helps run a web server and a database on your computer.
2. **Python**: A programming language that runs the FastAPI project.
3. **Git**: A tool to download the project from GitHub.

### Step-by-Step Instructions

#### Step 1: Install XAMPP

1. **Download XAMPP**:
   * Go to the [XAMPP website](https://www.apachefriends.org/index.html) and download the version for your operating system (Windows, macOS, or Linux).
2. **Install XAMPP**:
   * Open the downloaded file and follow the instructions to install it.
3. **Start XAMPP**:
   * Open the **XAMPP Control Panel** (it should be available in your start menu or applications).
   * Click **Start** next to **Apache** and **MySQL** to run these services.

#### Step 2: Install Python

1. **Download Python**:
   * Visit the [Python website](https://www.python.org/downloads/) and download the latest version.
2. **Install Python**:
   * Run the installer and make sure to check the box that says “Add Python to PATH” before clicking **Install Now**.

#### Step 3: Install Git

1. **Download Git**:
   * Go to the [Git website](https://git-scm.com/downloads) and download the version for your operating system.
2. **Install Git**:
   * Follow the instructions to install it on your computer.

#### Step 4: Download the FastAPI Project

1. **Open the Terminal**:
   * On Windows, search for "Command Prompt" or "PowerShell".
   * On macOS, open "Terminal" from your Applications.
2. **Navigate to Your Folder**:
   * Use the cd command to change to the folder where you want to download the project. For example:
   * cd C:\path\to\your\folder
   * Replace C:\path\to\your\folder with your desired folder path.
3. **Clone the Project**:
   * Copy the link of the GitHub repository (it should look like https://github.com/username/repository-name.git).
   * In the terminal, type the following command and paste the link:
   * git clone https://github.com/username/repository-name.git
   * Press **Enter**. This will download the project files to your folder.

#### Step 5: Set Up the Database

1. **Open phpMyAdmin**:
   * In your web browser, go to http://localhost/phpmyadmin.
2. **Create a New Database**:
   * Click on the **Databases** tab at the top.
   * Enter a name for your database (e.g., fastapi\_db) and click **Create**.

#### Step 6: Configure the Project

1. **Open the Project Folder**:
   * Find the folder where you cloned the GitHub project and open it.
2. **Locate the Configuration File**:
   * Look for a file that might be named something like config.py or settings.py.
3. **Update Database Connection**:
   * Find the line that mentions DATABASE\_URL and change it to:
   * DATABASE\_URL = "mysql+pymysql://root:@localhost/fastapi\_db"
   * This tells the project to connect to the database you just created. (root is the default username; leave the password blank).

#### Step 7: Run the FastAPI Application

1. **Open the Terminal Again**:
   * Make sure you’re still in the project folder.
2. **Run the Application**:
   * Type the following command to start the application:
   * uvicorn main:app --reload
   * Press **Enter**. This will start the FastAPI server.

#### Step 8: Access the Application

1. **Open Your Web Browser**:
   * Go to http://127.0.0.1:8000 to see your FastAPI application running.
   * You can also check the interactive API documentation by visiting http://127.0.0.1:8000/docs.

### Additional Tips

* **Stopping the Server**: If you want to stop the server, go back to the terminal where it’s running and press Ctrl + C.
* **Troubleshooting**: If you see any error messages, double-check that Apache and MySQL are running in the XAMPP Control Panel and that you entered the correct database settings.

### Conclusion

You now have a FastAPI project set up and running with XAMPP! Feel free to explore the project files and learn more about how it works. If you have any questions, don’t hesitate to ask for help!