

Project Setup Guide

1. Hardware Setup

- Plug the smart plug into your device and connect it to the electricity.

2. Account Setup

- Install the Smart Life app on your smartphone.
- Create an account in the Smart Life app and add your smart plug device.
- Create an account at Tuya IoT Platform: <https://developer.tuya.com/>
- Create a project in the Tuya developer console and link your Smart Life account.
- Get the following details from the Tuya console:
 - - Device ID
 - - Client ID
 - - Client Secret
 - - Tuya API Region (e.g., `us`, `eu`, `in`, etc.)

3. MongoDB Setup

- Create a free cluster at <https://www.mongodb.com/cloud/atlas>.
- Get the connection URI string for your MongoDB cluster.

4. Backend Setup

- Unzip the backend folder.
- Create or recreate a `.env`` file with the following variables:
 - - `MONGO_URI=``
 - - `TUYA_CLIENT_ID=``
 - - `TUYA_CLIENT_SECRET=``
 - - `TUYA_DEVICE_ID=``
 - - `TUYA_API_REGION=``
- Run the following commands to start the server locally:
 - - `npm install``
 - - `npm run dev``

5. Backend Deployment

- Push your backend code to a GitHub repository.

- Create a new application on Render (<https://render.com/>) and connect it to the GitHub repository.
- Deploy the backend from Render.

6. Frontend Setup and Deployment

- Unzip the frontend folder.
- In the frontend directory, run:
 - - `npm install`
 - - `npm run dev` to test locally
- Push the frontend code to a GitHub repository.
- Deploy the frontend to Vercel (<https://vercel.com/>) by importing it from GitHub.

7. Final Notes

- Ensure all environment variables are securely stored.
- Monitor logs in Render and Vercel for any runtime issues.
- You now have a fully working setup!