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Deployment Manual

This is a step by step guide into deploying the locationt system. The hosting servers used in this guide will be MongoDB Atlas and Google Cloud Platform App Engine. However, you can deploy this on any machine following the README.md file in github.

Requirements

First, we need to install the tools we will be using to build our applications.

- Nodejs version 16+
- npm
- Flutter SDK version 2.8+
- git

Please follow the official guideline to install these tools.

Cloning the files

First, clone the file by running

git clone https://github.com/dxing20/Locatient

This should download install the folder consisting of four projects onto your local machine. In the following sections, we will talk about how to build the following projects.

Setting Up Database

In this example, we will be hosting MongoDB from MongoDB Atlas. First follow the MongoDB Getting Started tutorial to create a cluster instance. After the instance is created, make two empty collection by pressing the plus icon on the menu of the

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dashboard. After for press connect, connect from your application, and find your database connection url.

Setting up Backend

First, navigate into the backends folder. In the backend folder, create a new file named ".env". Inside the ".env", we have to fill in the following information:

```
MONGODB_CONNECTION=""
MONGODB_UNITS_CONNECTION=""
PASSPORT_KEY=""
```

Set the MONGODB_CONNECTION url and the MONGODB_UNITS_CONNECTION url to the urls you retreived in the previous step. Set the passport key to a private string.

Next, navigate to the backends folder and run

```
npm install
```

This will install all the backend dependencies.

Then, in the same folder, run

```
npm run start
```

This will deploy your server in localhost:8080!

Deploying Dashboard

First, navigate to the locatient-frontend folder and run:

```
npm install
```

Depending on where your backend is deployed, you are requrired to change the base url of the API in the service files under the src/service folder. In our case, you can simply set them as localhost:8080.

Lastly, run npm run start to deploy your application to localhost:3000.

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AdminUI

First, navigate to the AdminUI folder and run:

```
npm install
```

Depending on where your backend is deployed, you are requrired to change the base url of the API in the service files under the src/service folder. In our case, you can simply set them as localhost:8080.

Lastly, run npm run start to deploy your application to localhost:3000.

Scanner

First, navigate to the scanner folder and build the flutter apk.

```
flutter build apk
```

Then, get the plug-in used in the project.

flutter pub get

Run the main program.

flutter run

Finished

The full system is now deployed!

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