Software specification

Backend:

Python 3.9.6

FastAPI (pip install fastAPI) for back- frontend communication

Uvicorn (pip install Uvicorn) for webserver

Frontend:

Angular CLI: 15.0.5

Node: 18.12.0

Package Manager: npm 8.19.2

OS: win32 x64

Angular: 15.2.4

API:

REST with FastAPI and Angular (HTTP)

Webhosting:

AWS (Amazon Web Services)

EC2 (Amazon Elastic Compute Cloud)

Docker deploy (when I have better internet)

Log

Project Setup

* Set up Github Repository
* Set up project structure (folder structure, specification doc etc.)
* (Install software Python & Angular if not already done)
* Set up frontend (*ng new frontend*)
* Set up fastAPI (*pip install FastAPI*)
* Create component (*ng generate component HexTest*)
* Change routing to display HexTest component
* Install angular/material (*npm install --save @angular/material*)
* Build light application including front and backend connection (had to add CORS setting in backend)
* Initial Push

Webhosting

* Create AWS Account
* Create EC2 instance (Windows)
* Connect with RDP
* Install Python, NodeJS, VSCode, PyCharm, Git
* Realize this is way too slow and clunky
* Decide to use Docker for deployment
* Realize I need better Internet to build the [docker images](https://www.youtube.com/watch?v=bi0cKgmRuiA&ab_channel=PatrickLoeber) ☹
* Pause webhosting until I got better internet (hopefully 5th of April)

Developer manual

Start frontend: *HexHelper\src\frontend> ng serve*

Stop frontend: Strg + C

Start/Stop backend: Run/Stop main application in Backend

SwaggerUI (with example URL): <http://127.0.0.1:8000/docs> may be useful in developement