

SpotCheckAI: Installation Manual

About

SpotCheckAI is a PWA that employs a full-stack approach to detect potentially cancerous skin lesions. By uploading an image to the website, users can obtain a probability score indicating whether the lesion is benign or cancerous, based on a Convolutional Neural Network Model. In addition, the website features a chatbot that utilizes OpenAI's GPT-3 model to respond to inquiries about the results or the platform itself.

Accessing SpotCheckAI

The Webpage

On The Web

Go to <https://raleung2-capstone-spotcheckai.web.app/> to access the front-end locally.

Locally

Prerequisites: git, npm, Ionic, React

Installing git: <https://git-scm.com/downloads>

Installing npm: <https://docs.npmjs.com/downloading-and-installing-node-js-and-npm>

Installing Ionic/React: <https://ionicframework.com/docs/intro/cli>

1. Once critical packages have been installed, navigate to the Github repository (<https://github.com/htmhw/SpotCheckAI>). Press Code > Copy the HTTPS link
2. Navigate to a suitable directory (ie. Desktop, Documents) in the terminal. Once navigated use `git clone https://github.com/htmhw/SpotCheckAI.git` in the terminal.
3. Navigate to `frontend-website > spot-check-ai`
4. In the terminal, run `ionic serve --external` and the webpage will open in the default internet browser.

The Backend Interface

About

The backend runs locally on a user's machine due to storage size of the repository and machine learning model. This section of the guide will show you how to interface with the backend of the application.

Locally

Prerequisites: Python < 3.10.7 (newer versions of Python will not work), OpenAPI Key (<https://platform.openai.com/account/api-keys>), pip, Macbook M1 users: homebrew

Installing Python: <https://www.python.org/downloads/release/python-3107/>

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Installing pip: <https://pip.pypa.io/en/stable/installation/>

Create a Python Virtual Environment: <https://python.land/virtual-environments/virtualenv>

Activate the Python Virtual Environment: <https://python.land/virtual-environments/virtualenv>

1. Once the virtual environment has been activated, navigate to where you have the SpotCheckAI repository installed.
2. Install dependencies using the prompt `pip install -r requirements.txt`
3. Navigate to `gpt-web-crawl-qa` and install dependencies using `pip install -r requirements.txt`
4. Note: If you are using a Macbook M1, you will need to install HomeBrew (<https://brew.sh/>). The terminal will indicate which packages will need to be installed with HomeBrew and the prompt to enter in the terminal.
5. Back in the root folder, create a `.env` file and paste the OpenAI API key:
`OPEN_API_KEY = <PASTE YOUR API KEY HERE>`
6. Navigate to the backend folder.
7. Use the prompt `python manage.py runserver 7000` to run the server on <http://localhost:7000/>
8. Using the front-end webpage or front end local webpage, you should be able to make predictions and chat with the chatbot.
9. Note: to use this application on your phone, you need to replace “localhost” in <http://localhost:7000/> with your computer’s IP address.
 - a. How to obtain your computer’s IP address: type “What is my IP address?” into Google.