Building A Website For Project-Based Science: Tiny Worlds Project.

Project Charter

Scope:

This Project-Based Science project is meant to enable students in Nova Scotia to take pictures of plants, upload this image to the proposed website, have it be analysed by an A.I image recognition, and then have the image displayed on the site. The analysis done by the A.I will determine various things about the plant, such as what kind of plant it is, if it is being affected by any kind of disease, and other details.

Goal:

Create a platform for Tiny Worlds where students can upload images of plants, have it be analysed by A.I., and then display the image with comments as well as details of the analysis done.

Team:

This project is built by a team of two, I will be working with a colleague from where I work.

My Responsbilities:

Front-End design, (HTML, CSS, JavaScript).

Creating or embedding image recognition AI. Help Back-End when needed (Python, Django).

Finding datasets in order to utilize in image recognition classifier.(Kaggle, or external res.)

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Learning Expectations:

This project is a great opportunity to have real work experience in building a complete website/web service. I will be applying what I have learned in web development and programming courses to create interactive interfaces.

- **What's new:**

Django (Web Framework), having worked with Python before I will now be utilizing it in a popular and industry level framework which will teach me certain architecture and structure for building websites. Django uses SQLite 3.8.3 that has its own GUI on the admin panel so I will also be organizing a dataset.

Another great skill I will be practising and improving is front-end design with HTML, CSS, JavaScript. Being a visual person front-end is the area I excel at. On Tiny World's website, one of our main target audience are kids, creating a visually attractive website will require and teach useful CSS and JavaScript skills.