Senior Project Proposal

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Introduction

What are we trying to develop?

We are going to develop a progressive web application for biologists to store protein-protein interactions into a database and display their interactions with a graphical interface.

Why?

Progressive Web Applications (PWAs) are a newer form of website that acts more as an app than a native webpage. Users are able to download the PWA regardless of device and use all of its functionalities on and offline. This provides an application with ease of use to biologists in wetlabs and other environments with poor/unstable internet connections to continue logging their data.

Tools

PWAs are primarily developed using JavaScript service workers and basic HTML but we will also utilize MySQL to host the main database.

Planned Features

Database

Full database interactivity for adding, deleting and viewing all data

Generated Graphics

Have a way to display PPI data with a graph that is interactive and automatically updates when a new entry is added (think web graph)

Full Compatibility

The entire idea of making a PWA is to make it accessible to most, if not all, devices unlike a native application

Challenges

JavaScript

Neither of us are versed in JS, but we are up for the challenge to learn it

Hosting

We plan to host the site on Odin for ease of use, but eventually would like to host it on our own

Questions?