CH43.2.2 Capstone II Project Ideas

Idea I: DIY URL-Based Content Parser

There are url parsers like "cooked.wiki" which allows users to prefix any recipe url with "cooked.wiki" and it will summarize the recipe instructions and the ingredients list and lay it out in a way that is much more mobile phone friendly than conventional recipe pages. The idea is to do the same thing but with DIY projects like building a bird house or fixing vinyl siding. The idea is to not only summarize the steps but to also get an estimate on material costs for the DIY project by tapping into the Home Depot API to look up materials in their catalog and toggle required material amounts.

Data

- I will utilize web scraping to pull the text content from the url that I will be prefixing.
- I could either do my own text mining or utilize the Chat GPT API to summarize the data and render a page with the summarized instructions as well as a checklist of materials and the amount needed.
- The Home Depot API will also be utilized to look up materials and material cost that matches what is listed in the instructions. (Reference: https://serpapi.com/home-depot-search-api)

Idea II: Resistance Training Analytics

Collecting data from resistance training is helpful but only if you have a way to analyze the data thoroughly. Tracking your workouts based on the sets, reps and resistance can be made easy. The results of day over day and week over week training will be displayed in graphs and charts so that the user has a holistic view of where they are excelling and where they need more work. This can greatly continue to motivate users to keep up with their workout routine or even find ways to improve it.

Data

- Database of exercises and their target muscle groups will need to be compiled and stored in the database
- User input will be required while they are training so this will mean streamlined forms and good userform is required in order to make logging sets, reps and resistance as seamless as possible

Idea III: Client Scheduling Platform

The goal is to build a proprietary client booking app for my wife's aesthetician service business. Existing solutions are rather expensive and inflexible so I plan on creating a browser based application that allows my wife and her staff to schedule clients, retain client information such as service history, preferences, materials logged per service and integrate with Google Calendar for ease of tracking client visits and sharing appointment details with clients.

Data

- This idea will require a connection to Google Calendars API in order to schedule appointments that can be seen by studio staff and clients.
- Other data will mainly be sourced by user input either from the staff or by the clients through the client-facing pages