**CAPSTONE IDEAS**

**Capstone Idea 1**

**Nervous System Explorer: Learning tool**

**Function:**

A tool that aims to facilitate a deeper understanding and learning of the nervous system´s structure and function, supporting educational endeavors in health-related fields.

**What does it do?**

Users can search for an element by name and receive an informative overview that includes images, anatomic locations, functional descriptions, and relevant connections related to various components in the nervous system, brain regions, or sensory systems.

**Basic Resources to build the app:**

* Build my own API.
* Use an external database along with my API.

**Challenges and Solutions**

* Identifying the appropriate database that offers access to the necessary information to include in the self-hosted API.
* Would it be an option to build a custom-made database using external resources such as free versions of ChatGPT, online books, and other publicly available materials?

**Capstone Idea 2**

**Mental Health Learning and Diagnosis Tool**

A learning tool for mental and behavioral health. It provides detailed insights into signs, symptoms, and pathologies based on the ICD classification for "Mental and Behavioral Disorders." Additionally, the app would assist in the diagnostic process by guiding users through relevant symptoms and criteria.

**Further information / What does it do?**

**ICD** stands for *“International Classification Diseases.”*

Chapter 6 of the ICD on *Mental and Behavioral Disorders*. Published and regulated by the "World Health Organization"

This application serves as both an educational resource and a professional reference, offering a structured exploration of mental and behavioral disorders as outlined in the ICD.

Users can access an extensive list of signs, symptoms, and syndromes, retrieving critical information such as descriptions, associated symptoms, related pathologies, and cognitive classifications.

The app facilitates deeper understanding by linking signs and symptoms to the disorders they are associated with, making it an invaluable tool for students, educators, and healthcare professionals.

**Basic Resources to build the app:**

* External API.

Options:

* + The ICD API
  + The Infermedica API: Crafted by world-class physicians.
* My own database along with the API.

**Challenges and Solutions**

I would like to use the ICD API due to its prestige and recognized accreditation. However, I’ve encountered some challenges, particularly in navigating the documentation and understanding what type of information can be retrieved and how to access them.

If using the ICD API isn’t feasible, I would opt for the Infermedica API. While it may not carry the same level of prestige, it provides all the necessary information for my project.

**Capstone Idea 3**

**APA Style App**

**Function:**

A tool that applies APA Style guidelines to streamline citation, content structure, and formatting for academic papers and publications, primarily in disciplines like psychology, education, sociology, and related fields.

**What does it do?**

**APA** stands for *"American Psychological Association style"*.

APA Style is a set of guidelines for writing and formatting academic documents, particularly in the social sciences. Developed by the American Psychological Association (APA), it provides a standardized approach to elements like citation, formatting, and organization to ensure clarity and consistency in scholarly writing.

This app is designed to support students, researchers, and professionals in managing the citation and formatting aspects of their academic papers and publications. Users can easily classify references, access simple guidelines and examples for different citation types, and retrieve detailed formatting instructions for specific reference components. Whether working on a research paper, thesis, or publication, the app ensures that citations and formatting are handled with precision and ease.

**Basic Resources to build the app:**

* Build my own API.
* Use an external database along with my API.

**Challenges and Solutions**

* Identifying the appropriate database that offers access to the necessary information to include in the self-hosted API.
* Would it be an option to build a custom-made database using external resources such as free versions of ChatGPT, online books, and other publicly available materials?

Of the three ideas two stand out for my application: **Idea 1, *“Nervous System Learning Tool”***, and **Idea 2, “*Mental Health Learning and Diagnosis Tool***.”

Given the challenges each presents, the second idea seems more viable for development at first glance.