Client Project

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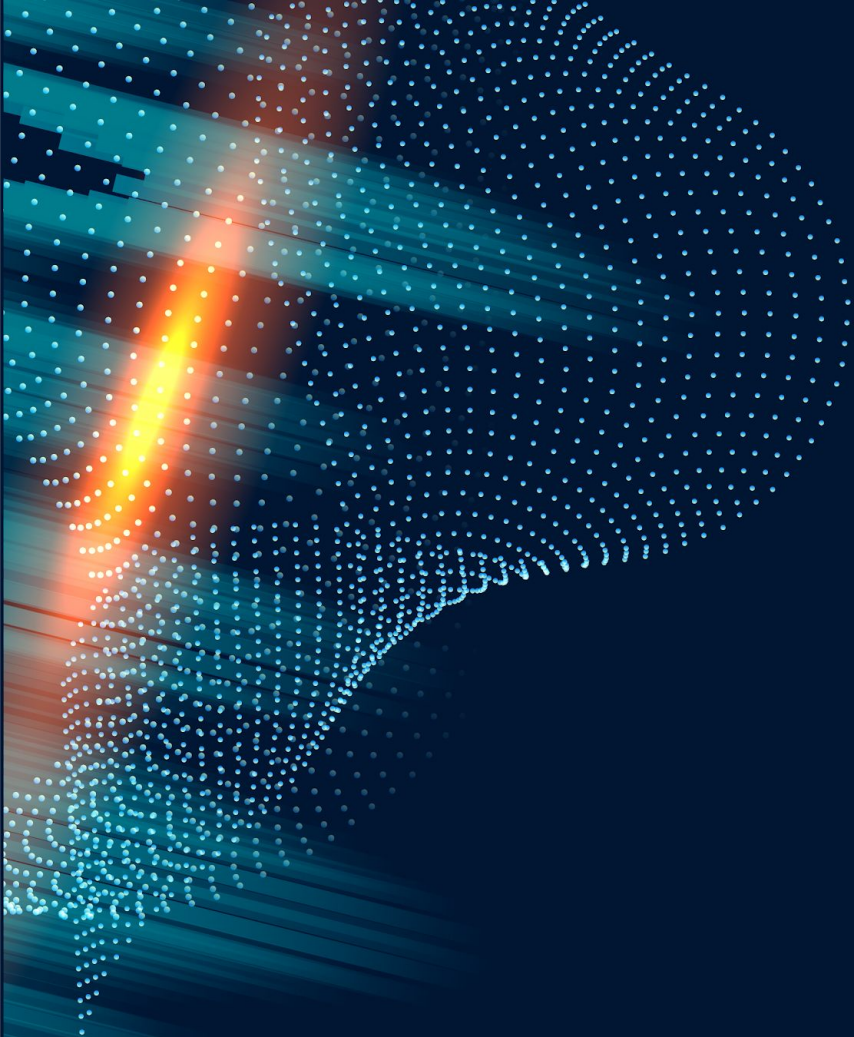
Introducing our client.

Client's Name: *Tirth Patel*

Client's Department: *Undergraduate Nursing Student*

Client's Problem:

Due to a reliance on text-heavy study material, nursing students have trouble recalling, memorizing, and applying complex patient diagnosis information.

Our solution

Creating a studying program of which our client can use to study for his exams

Key Features

- **Research diagnoses based off its name:**
  - Users can quickly find the corresponding information of a diagnoses they know the name of

- **Study (easy mode):**
  - Our system provides either the condition's name or a handful of symptoms of a unspecified diagnosis, users must try to guess which diagnosis/symptoms correspond.

- **Study (hard mode):**
  - Our system provides the name of a condition, users must input the rest of the information (symptoms,tests,differential diagnoses, treatments, prognosis).

Research diagnoses based off it's symptoms:
  - User enters one/many of the symptoms of a diagnosis
  - Our system compares the symptoms the user input to every diagnosis in our database, rating and outputting the top 5 closest matches

Add a new diagnosis:
  - Incase a condition users need to study isn't in our database, users can add a new condition to the database.

How will our solution benefit our client?

01

Make study sessions more engaging

Our program has a fun interactive way to practice active recall in two modes (Easy and Hard).

02

Reduce the risk of errors

Manually reading and writing data make misunderstandings and errors more likely

03

Quicker access & organization

Information about 30+ different conditions are all stored in one program that helps users study

Our Journey

Weeks 1-2:
Met as a group to find a problem we can solve on campus

Weeks 4-7:
Created a general layout for our program

Weeks 9-10:
Implemented research by symptoms function

Weeks 11-12:
Implemented hard study mode

Week 14:
Present!

Weeks 3-4:
Planned our solution and created a flowchart for our program

Weeks 7-9:
Implemented research by name function

Weeks 10-11:
Implemented the easy study mode

Weeks 12-13:
Implemented a function which allows users to add a condition to our database

Biggest Challenges

- Having to switch our data from being hardcoded to outsourced.
  - Initial exclusion of the symptoms attribute.
  - Not having a set plan before beginning coding.

Comparable Study Systems

Anki is a spaced-repetition flashcard app designed to help you memorize information more efficiently by showing cards right before you're likely to forget them. It supports text, images, audio, and customizable card types, making it useful for any subject. With consistent daily reviews, Anki drastically improves long-term retention and study efficiency.

In conclusion:

Our client Tirth had an issue with sitting for long hours and not being able to comprehend the information he was looking at. Now with our program he can not only learn about different conditions and illnesses but he can actually practice and use our program as a way to help him do well on upcoming exams.

Thank You!