

Cancer Outcome and Recurrence Prediction Tool

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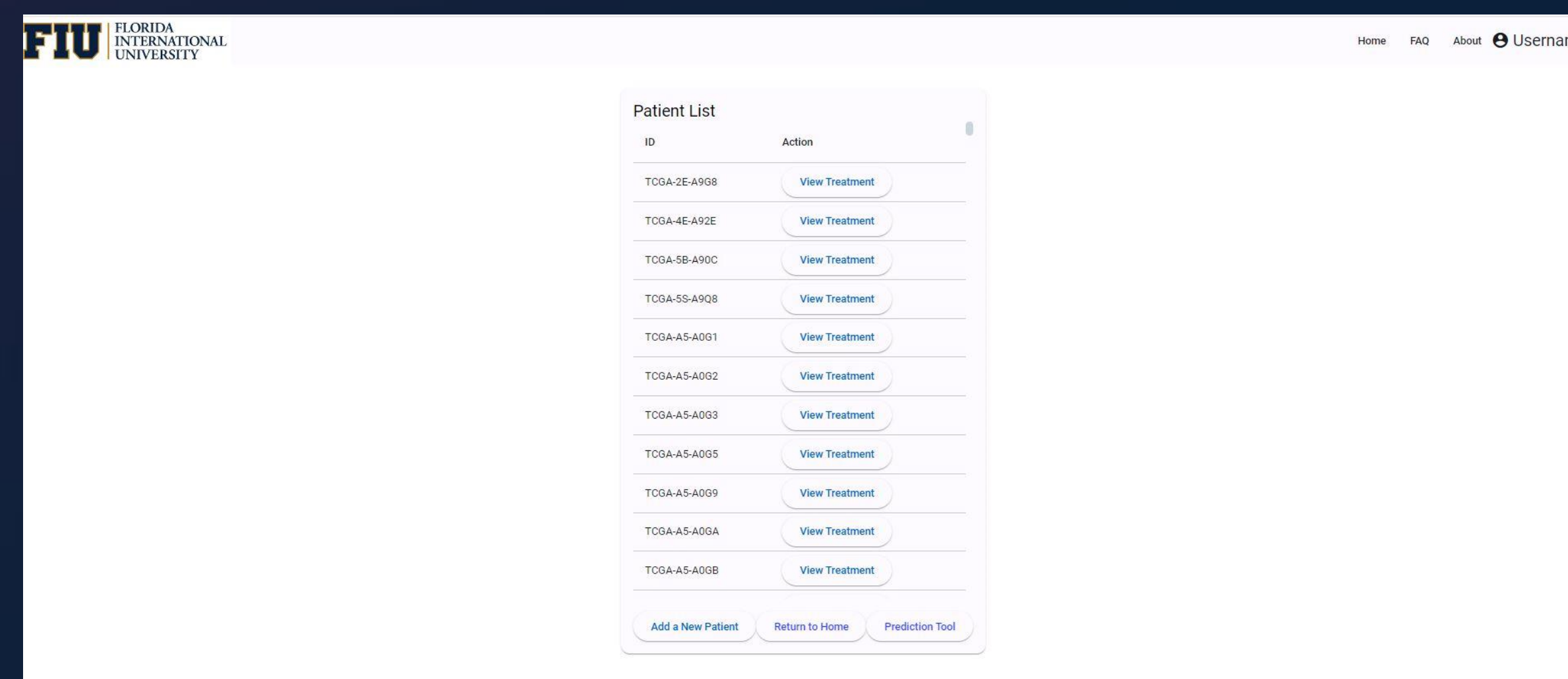
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PROBLEM

Cancer is a complex disease with varied outcomes depending on numerous factors, including the type and stage of cancer, patient demographics, and specific treatment regimens. Predicting the effectiveness of cancer treatments and the likelihood of recurrence is critical for improving patient outcomes.

IMPLEMENTATION

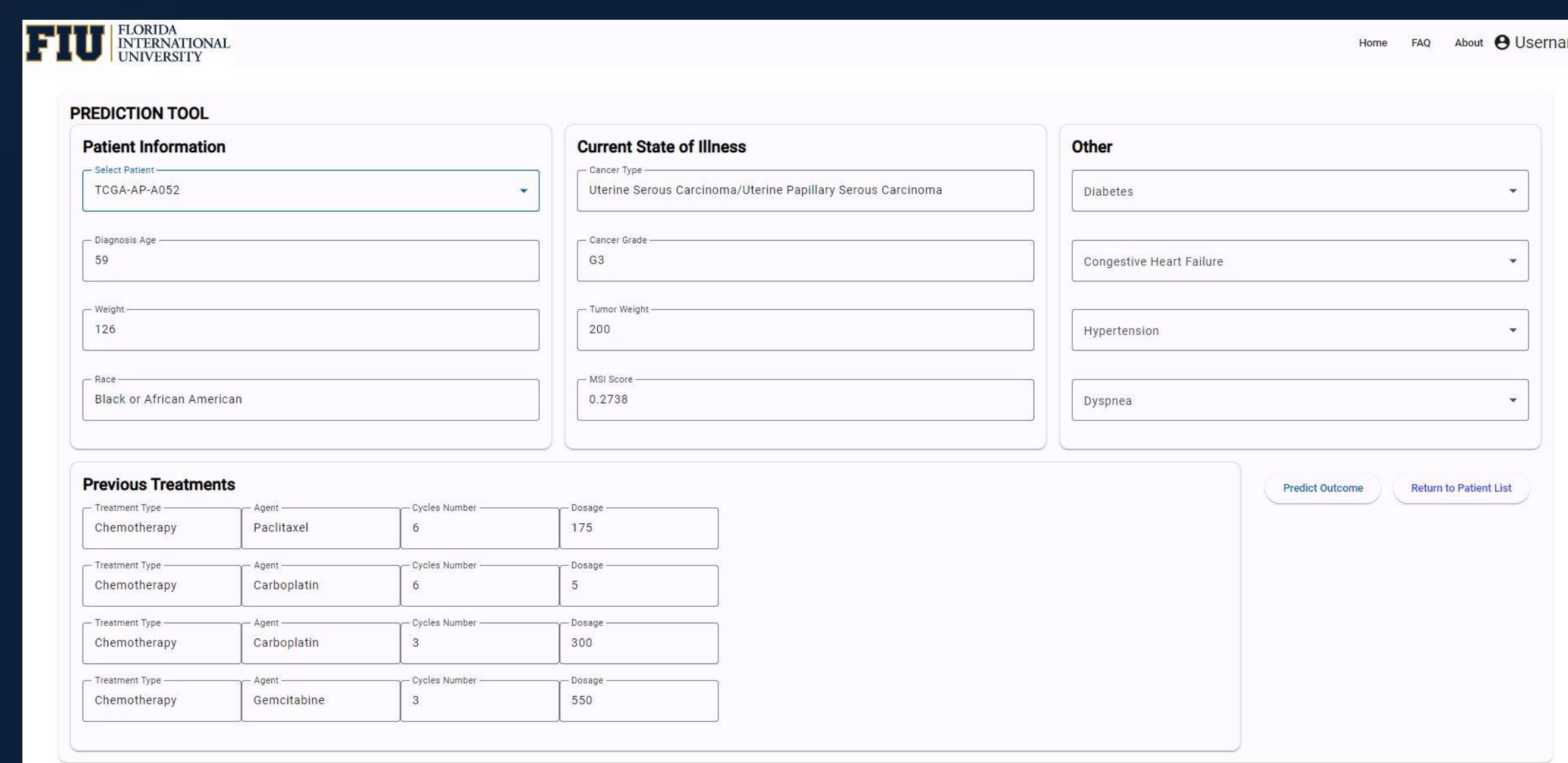
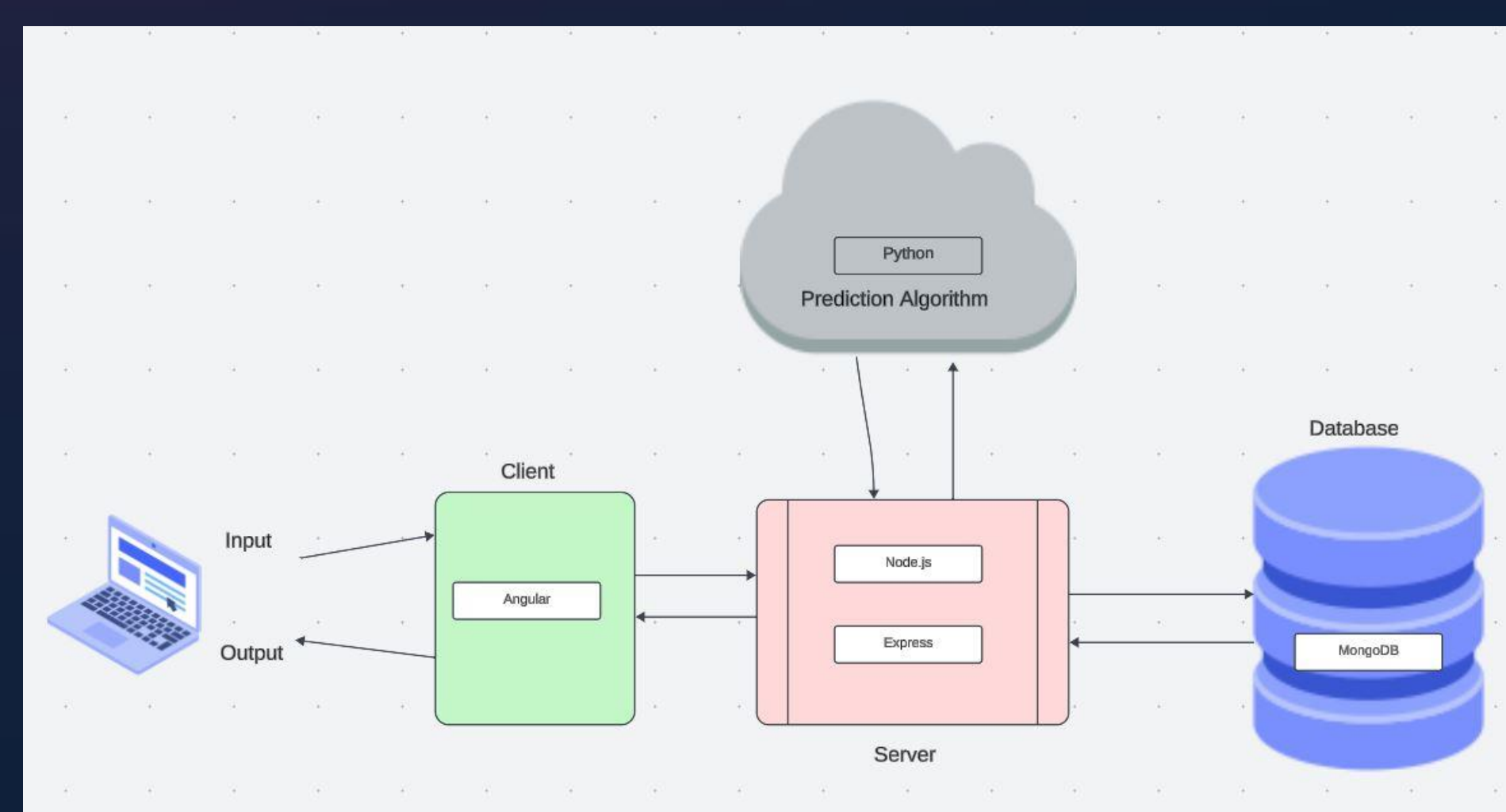


OBJECT DESIGN

Components:

- Patient List: Displays a list of patients with their ID and options to view details or treatment results.
- Person Details: Shows detailed information about a selected patient.
- Prediction Tool: Allows input of patient data for generating treatment and recurrence predictions.

SYSTEM DESIGN



REQUIREMENTS



Data Flow:

- 1.Data Entry:** User inputs patient data through the frontend. (Angular for creating user interfaces).
- 2.Data Processing:** Backend processes the data and communicates with the database. (Node.js with Express framework to handle API requests and MongoDB for storing patient data and prediction results).
- 3.Prediction:** Processed data is sent to the machine learning model for prediction. (Using Python with scikit-learn models).
- 4.Output:** Prediction results are displayed on the frontend.

SUMMARY

Our job was to create a portal allowing a doctor to engage with a thorough database. This project gave us a great chance to use and improve our knowledge in several technologies, therefore generating an interesting and instructive experience. Working with full-stack development during this project gave our staff invaluable expertise.

REFERENCES

- <https://www.mongodb.com/resources/languages/mean-stack-tutorial>
- <https://nodejs.org/docs/latest/api/>
- <https://expressjs.com/>
- <https://v17.angular.io/docs>
- <https://scikit-learn.org/stable/>

ACKNOWLEDGEMENT

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