

MICHIGAN STATE

UNIVERSITY

Alpha Presentation

Leveraging OpenAI for Business Analytics

The Capstone Experience

Team HAP

Evan Bean

Lily Hami

Ziqi Liu

Brendan Murphy

Sukruth Rao

Department of Computer Science and Engineering

Michigan State University

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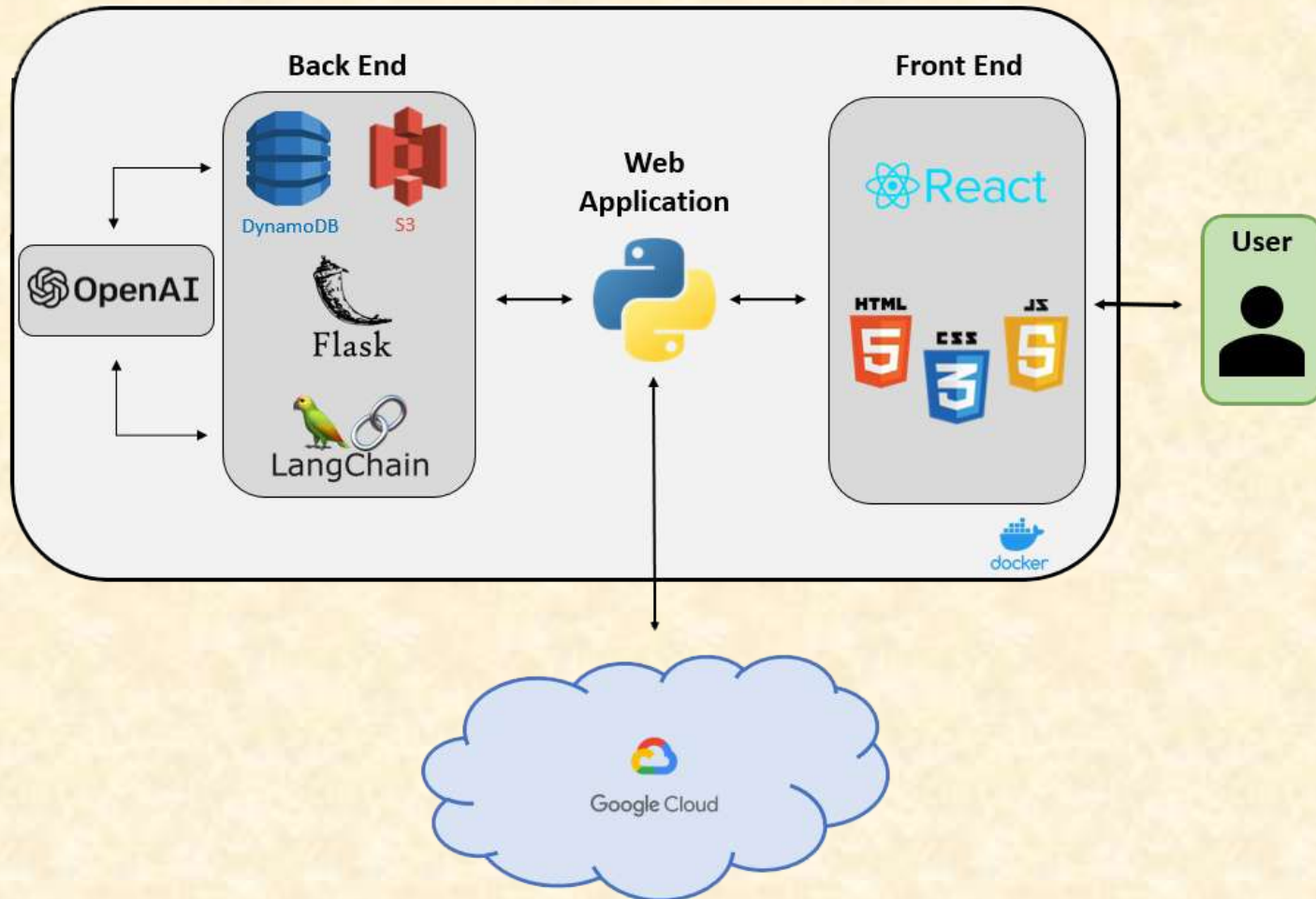
*From Students...
...to Professionals*

Project Overview

- Web application with three main features:
 - Chatbot
 - Call Summarization Tool
 - Plan Selector Quiz
- Utilizing OpenAI and machine learning algorithms



System Architecture



Call Summarization Tool

The screenshot displays the HAP AI Tools web interface. At the top, there is a navigation bar with the HAP logo and links for 'Agent Tools' and 'Customer Tools'. Below the navigation bar, there is a section for 'Upload Call Transcript' with a dropdown menu currently set to 'October'. The main content area is divided into two parts: a table of call transcripts on the left and a pie chart titled 'Call Subject Trends for October' on the right.

Date	Call Subject	Keywords	Transcript File
2023-10-06	Coverage	Medication, Coverage, Migraines	transcript01.txt
2023-10-13	Provider	Mental health, Psychologist, In-network	transcript05.txt
2023-10-10	Billing	Billing, Coverage, Lab tests	transcript22.txt
2023-10-10	Medical bill	Surgery, Billed services, Elective procedures	transcript77.txt
2023-10-23	Billing	Colonoscopy, Billing, Payment options	transcript47.txt
2023-10-04	Medication	Cost increase, Prescription drug, Medication	transcript48.txt
2023-10-12	Billing	Medical bill, Charges, Payment options	transcript36.txt
2023-10-15	Coverage	Coverage, Prescription, Zytax	transcript27.txt
2023-10-24	Update	Job change, Enroll, New employer	transcript43.txt
2023-10-01	Coverage	Letter, Coverage, Implications	transcript40.txt
2023-10-26	Surgery	Knee replacement, Scheduled surgery, Financial aspects	transcript70.txt
2023-10-20	Coverage	Type 2 diabetes, Coverage, Management	transcript53.txt
2023-10-06	In-Network	In-network specialist, medical condition, rheumatologist	transcript24.txt
2023-10-01	Medication	Lipidex coverage, Dosage, Affordability	transcript69.txt
2023-10-01	Medication	Swallowing problems, Butyrates, Butyrates	transcript89.txt

The pie chart, titled 'Call Subject Trends for October', shows the distribution of call subjects. The largest slice is 'Coverage' at 15.9%, followed by 'Billing' at 13.7%. Other significant categories include 'Medication' (4.8%), 'Update' (4.8%), 'Surgery' (4.6%), 'In-Network' (4.6%), 'Premium' (3.7%), 'Addition' (3.2%), 'Documents' (3.2%), 'Maternity' (3.2%), 'Marriage' (3.2%), 'Specialist' (3.2%), 'Options' (3.2%), and 'Alternative' (3.2%). A legend on the right side of the chart lists these categories with corresponding colored circles.



Chatbot

The screenshot shows a web browser window titled "HAP AI Tools" at the URL "localhost:3001". The page features the HAP logo and navigation links for "Agent Tools" and "Customer Tools". The main content area displays three overlapping brochures for the "2022 IMPACT REPORT" with the slogan "HAP IS HERE Improving the LIVES WE TOUCH". A chatbot window titled "Your Virtual Assistant" is open on the right, showing a message about PPO healthcare plans, a user question "What plans does HAP offer?", and a response detailing various HAP plan options.

Your Virtual Assistant

choose your healthcare providers. With a PPO, you have the flexibility to see any doctor or specialist without a referral, both in-network and out-of-network. However, you will typically pay less out-of-pocket if you choose a healthcare provider within the PPO network. PPOs also offer coverage for prescription drugs and may have additional benefits such as dental and vision coverage.

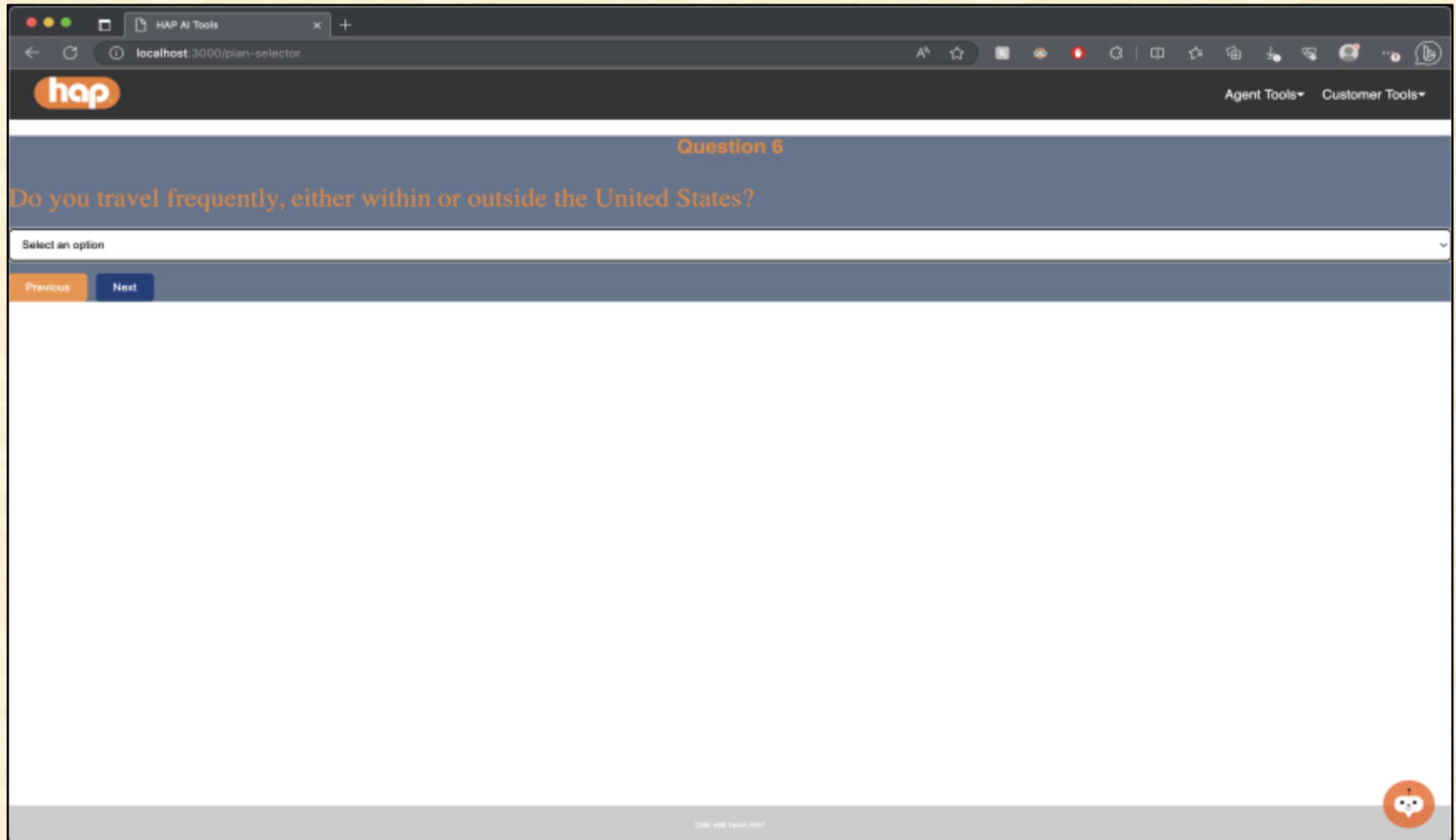
What plans does HAP offer?

HAP offers a wide range of plans including individual and family plans, group plans for small and large businesses, self-funded plans, Medicare solutions for those 65 and older, and Medicaid plans for those with a limited income or who live with a disability.

Type your response... Send



Plan Selector Quiz



The screenshot shows a web browser window with the URL `localhost:3000/plan-selector`. The browser's address bar and tabs are visible at the top. The page features the 'hap' logo in the top left corner and navigation links for 'Agent Tools' and 'Customer Tools' in the top right. The main content area displays 'Question 6' in orange text, followed by the question: 'Do you travel frequently, either within or outside the United States?'. Below the question is a dropdown menu with the text 'Select an option'. At the bottom of the question area, there are two buttons: 'Previous' (highlighted in orange) and 'Next' (in blue). The footer of the page is a light gray bar containing the text '© 2023 HAP' and a small circular icon with a plus sign and a speech bubble.



Plan Selector Quiz Results

The screenshot shows a web browser window with the URL `localhost:3000/plan-selector`. The page title is "Summary". The content consists of ten question-and-answer pairs, each in an orange box with a blue border. The questions and answers are as follows:

- Q1: What is your current age?
A: Under 65
- Q2: Are you currently enrolled in Original Medicare (Part A and Part B)?
A: Yes
- Q3: Do you have any specific healthcare needs or chronic conditions that require ongoing care? Please specify.
A: Eye care
- Q4: Are you currently taking any prescription medications? If so, please list them or describe your general medication needs.
A: No
- Q5: What is your preferred maximum monthly premium for a Medicare plan?
A: \$50 - \$100
- Q6: Do you travel frequently, either within or outside the United States?
A: Yes
- Q7: Are you interested in additional benefits like dental, vision, or fitness programs?
A: Yes
- Q8: Would you like coverage for prescription drugs (Medicare Part D)?
A: Yes
- Q9: Do you have a preferred network of doctors and healthcare providers you would like to continue seeing?
A: No
- Q10: What is your ZIP code or the area where you primarily receive healthcare services?
A: 48381

At the bottom of the page, there is a small "CAP: Ask Team HAP" logo and a red circular chat icon with a white speech bubble.



What's left to do?

- Chatbot
- Call Summarization Tool
- Plan Selector Quiz
- Finalize front-end design in accordance with HAP marketing guide



Questions?

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