

MICHIGAN STATE

U N I V E R S I T Y

Alpha Presentation

Benefit Plan Recommender Engine

The Capstone Experience

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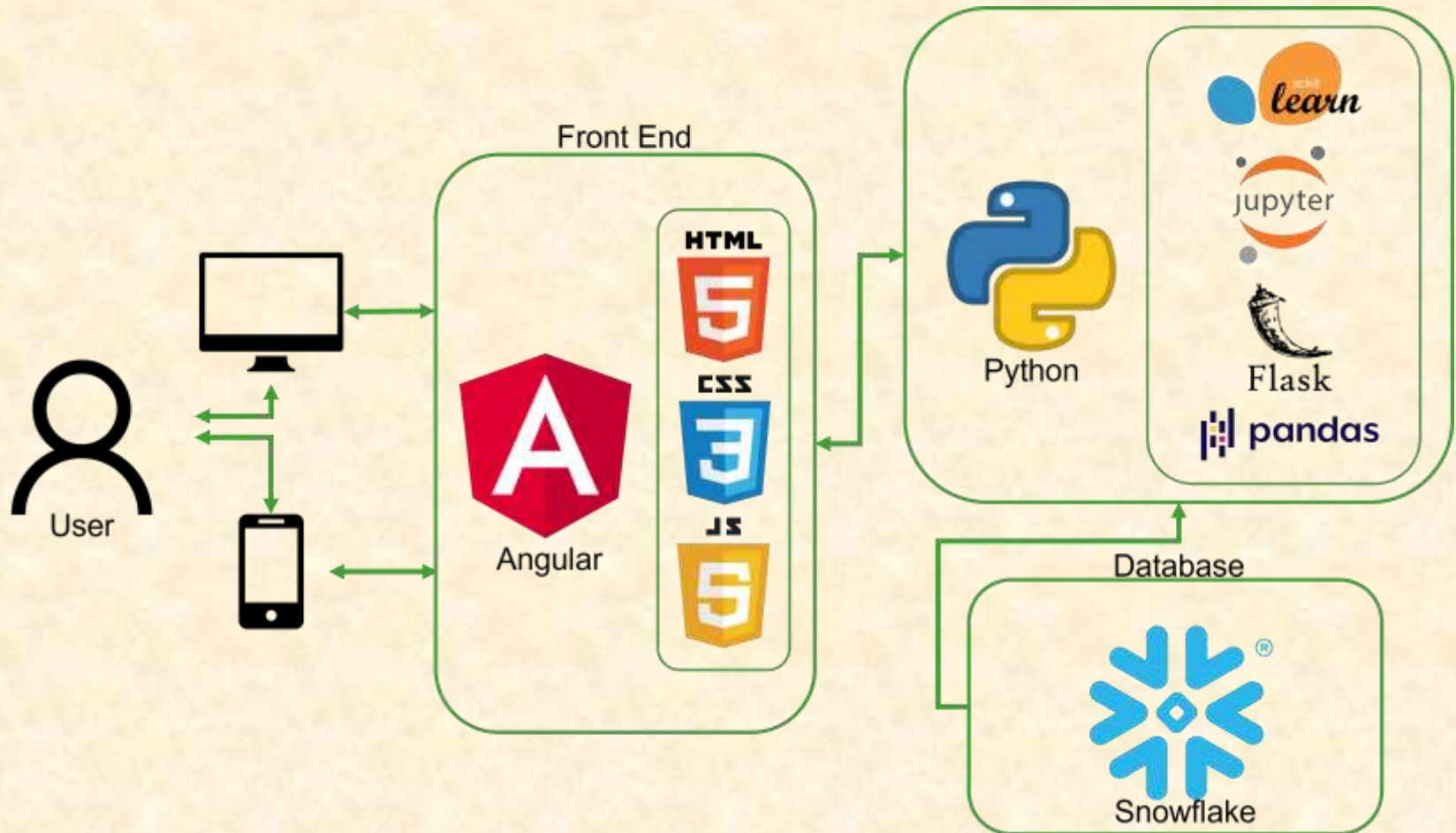
*From Students...
...to Professionals*

Project Overview

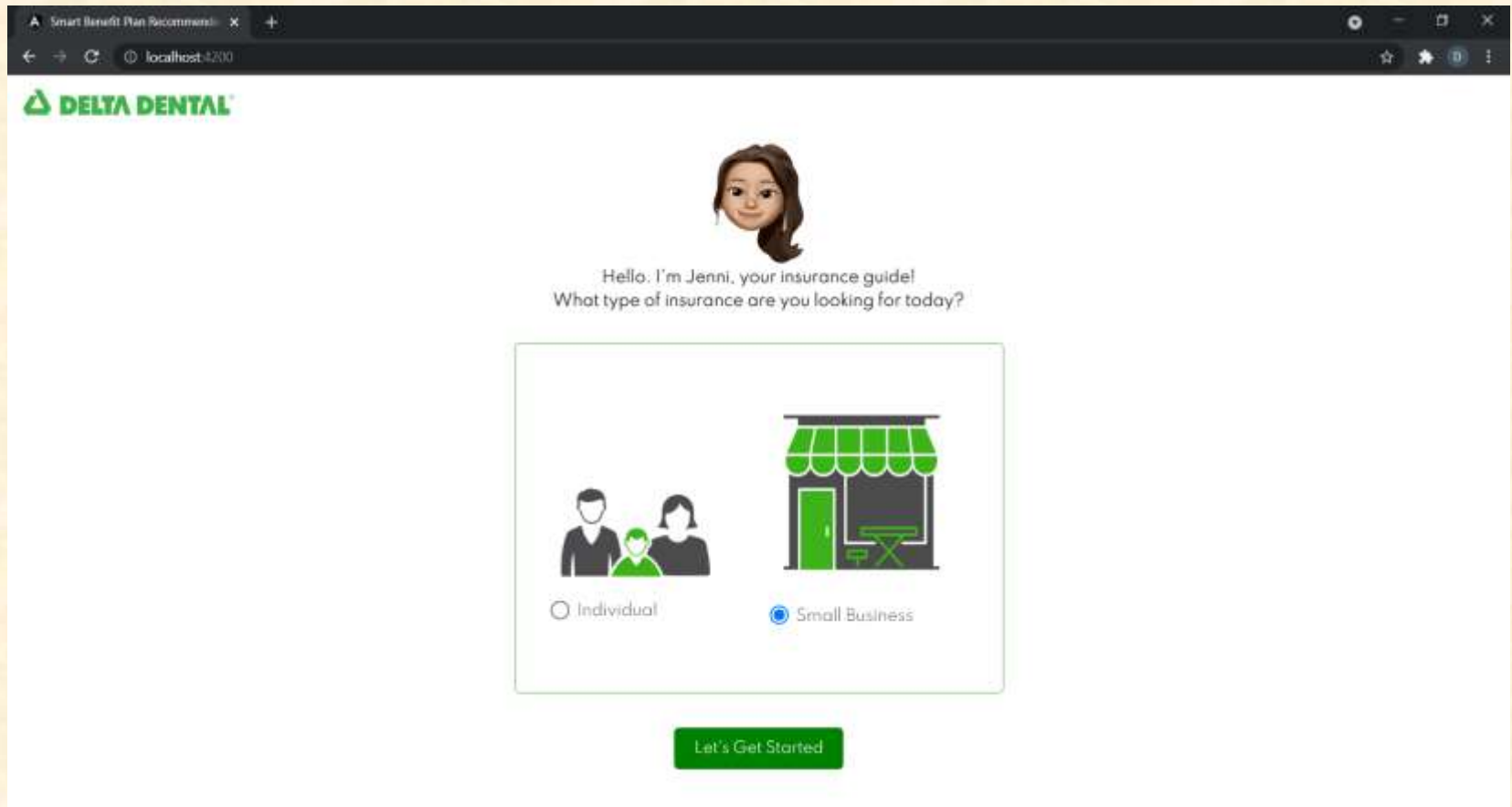
- Data inputs are collected through a series of web pages
- We use an unsupervised learning method (k-means clustering) to create customer segments in the back end
- New customers are then mapped to the created customer segments
- Each segment is tied to an insurance plan provided by the client



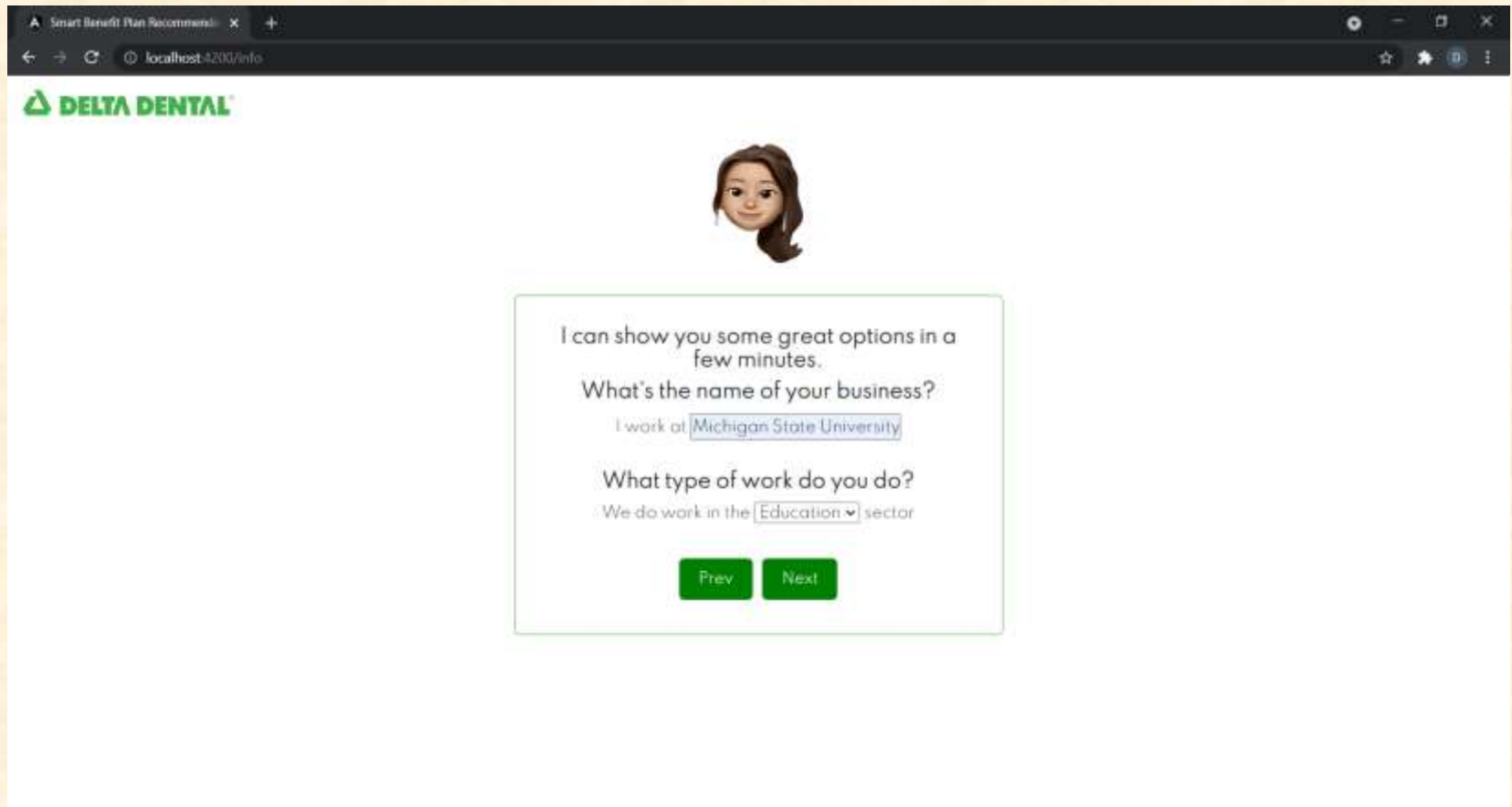
System Architecture



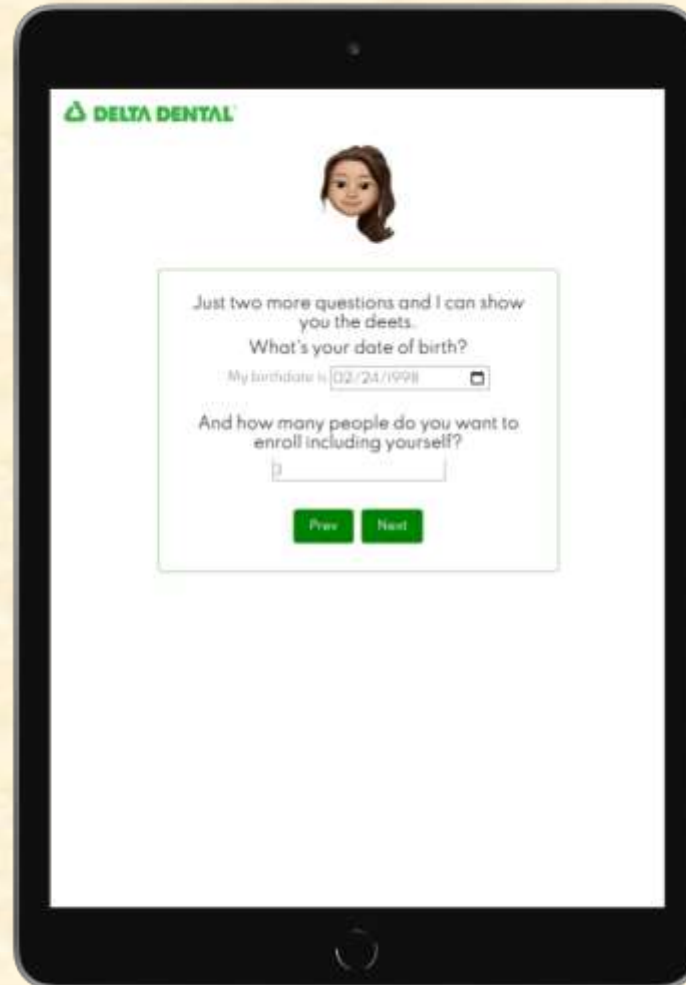
Choosing a Path



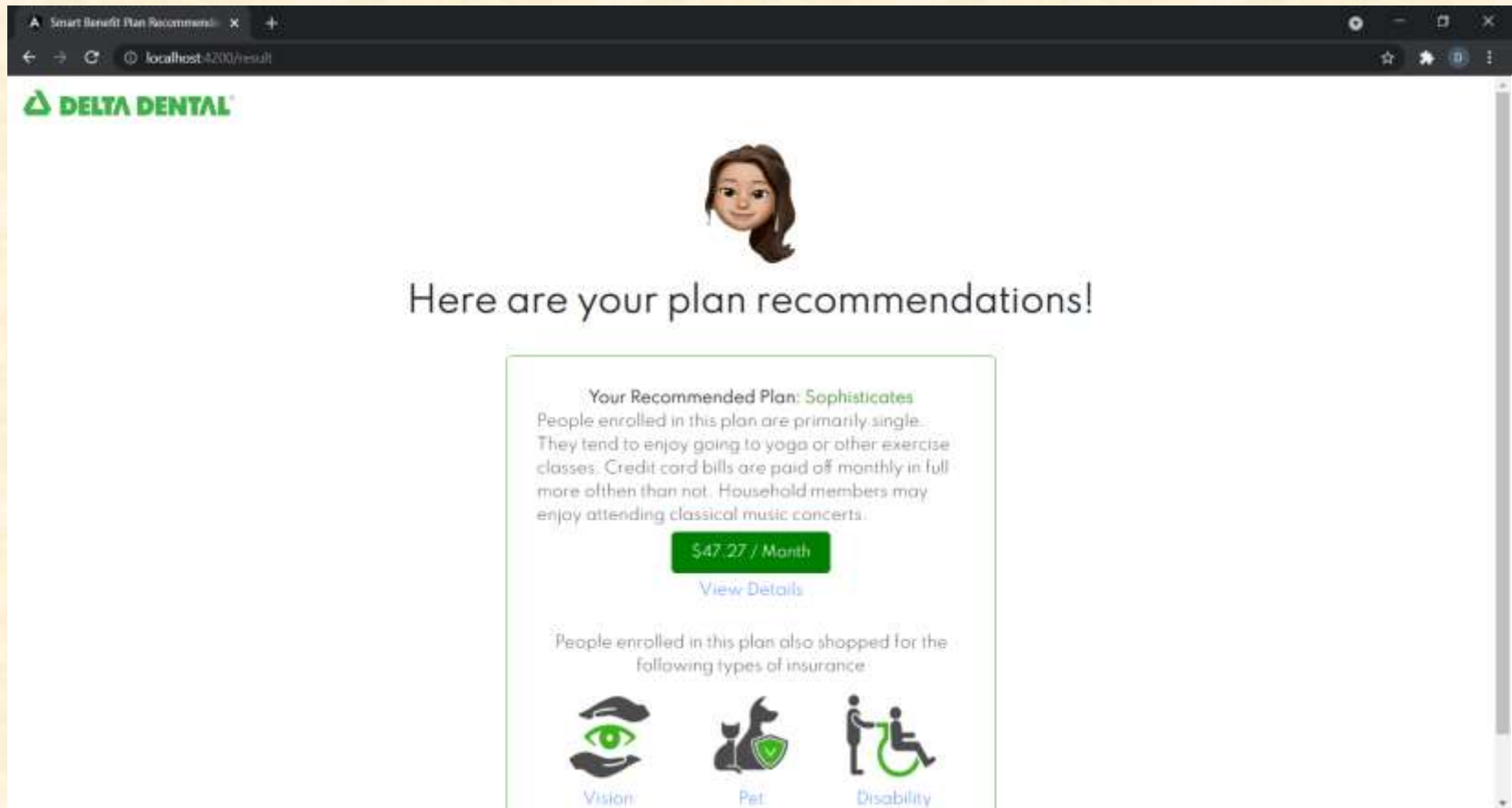
Small Business Track



Mobile Individual Track



Insurance Results



The screenshot shows a web browser window with the address bar displaying "localhost:4200/result". The page features the Delta Dental logo in the top left corner. In the center, there is a female avatar. Below the avatar, the text reads "Here are your plan recommendations!". A central box contains the following information:

- Your Recommended Plan: Sophisticates**
- People enrolled in this plan are primarily single. They tend to enjoy going to yoga or other exercise classes. Credit card bills are paid off monthly in full more often than not. Household members may enjoy attending classical music concerts.
- \$47.27 / Month** (highlighted in a green box)
- [View Details](#)
- People enrolled in this plan also shopped for the following types of insurance:

Below this text are three icons representing different insurance types: Vision (an eye), Pet (a dog and a cat), and Disability (a person in a wheelchair).



What's left to do?

- Smooth out user experience
 - Require field to have input before moving to next
 - Auto fill address field
 - Cleaning up HTML/CSS
- Create the individual clusters
- Create the corresponding plans to the clusters



Questions?

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