

MICHIGAN STATE

U N I V E R S I T Y

Alpha Presentation

New Customer Channel

The Capstone Experience

Team Consumers Energy

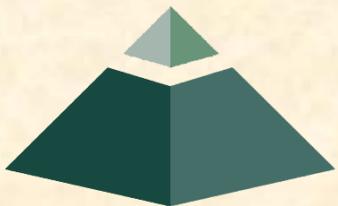
Ibraheem Saleh

Muhammed Zahid

Ben Weinstock

Hang Zhao

Andrew Morrisette



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

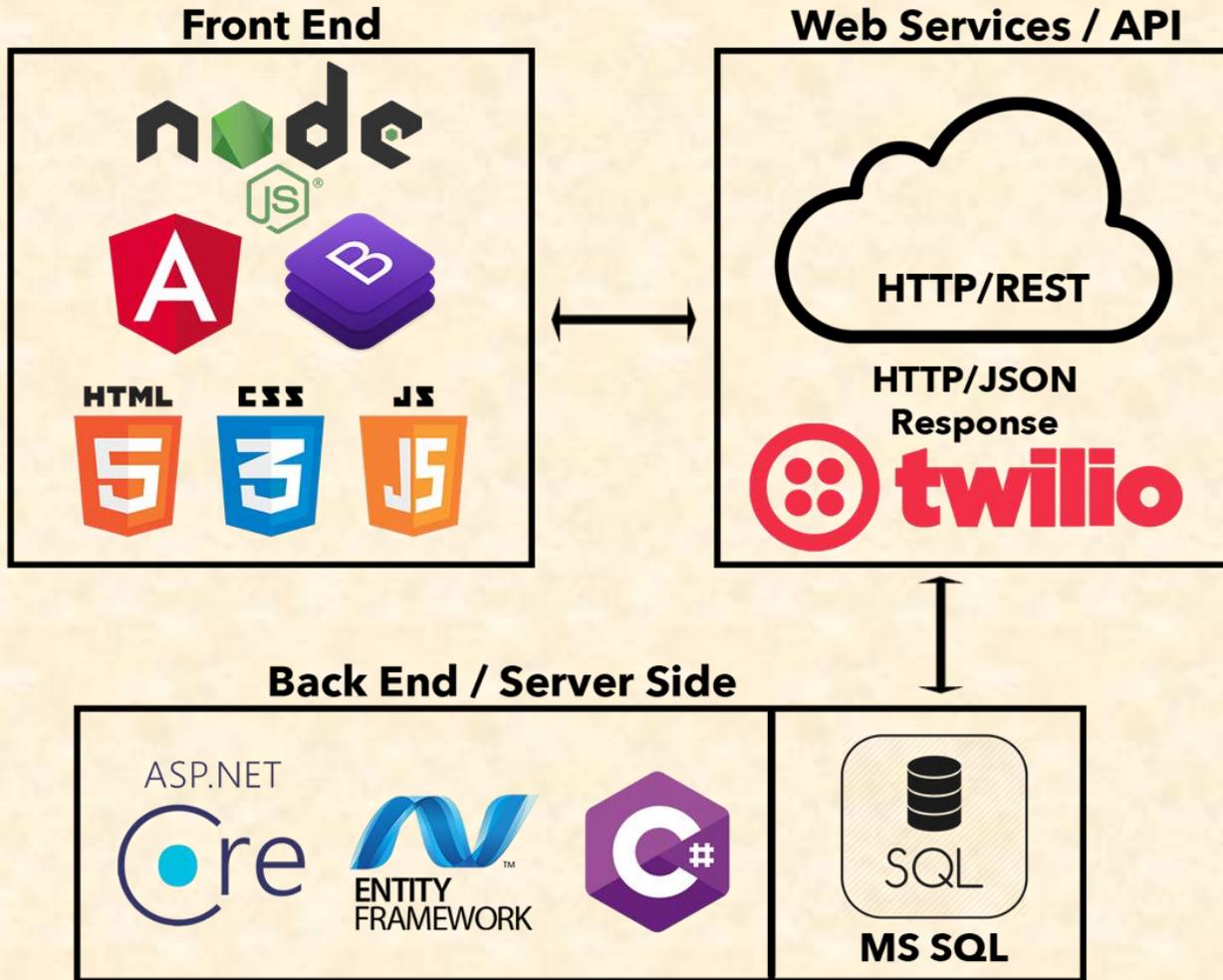
Department of Computer Science and Engineering
Michigan State University
Spring 2019

Project Overview

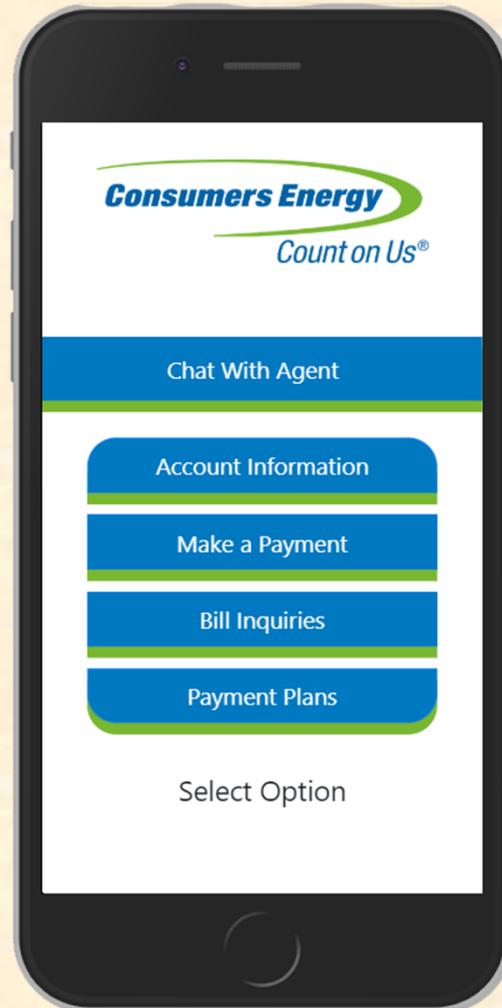
- Create a web application that utilizes technologies to sync with an ongoing phone call that allows the user to navigate a call tree and save valuable time.
- The web application would allow the user to make payments, inquiries, and setup other services that do not require a phone representative's help.
- If the specific inquiry requires a phone representative's assistance, the user can select to resume their position in the call queue and be routed to the next available representative for further assistance.



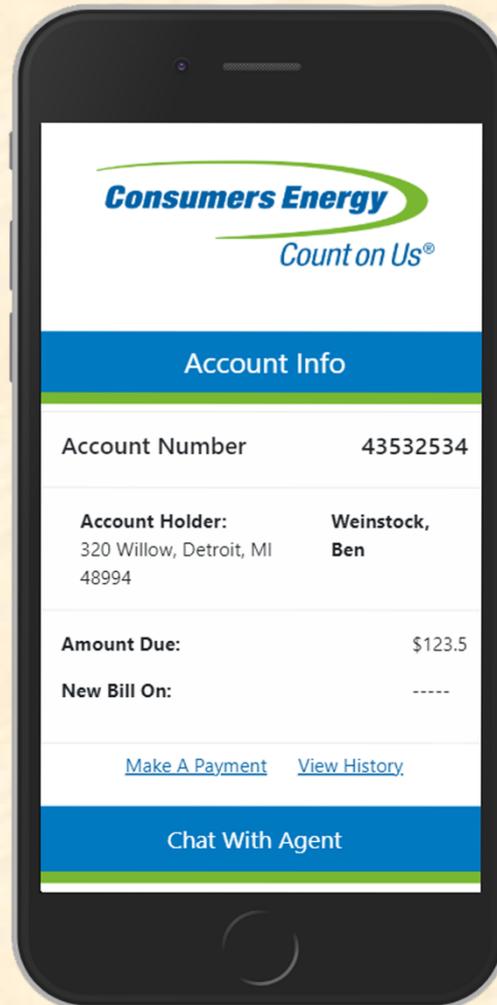
System Architecture



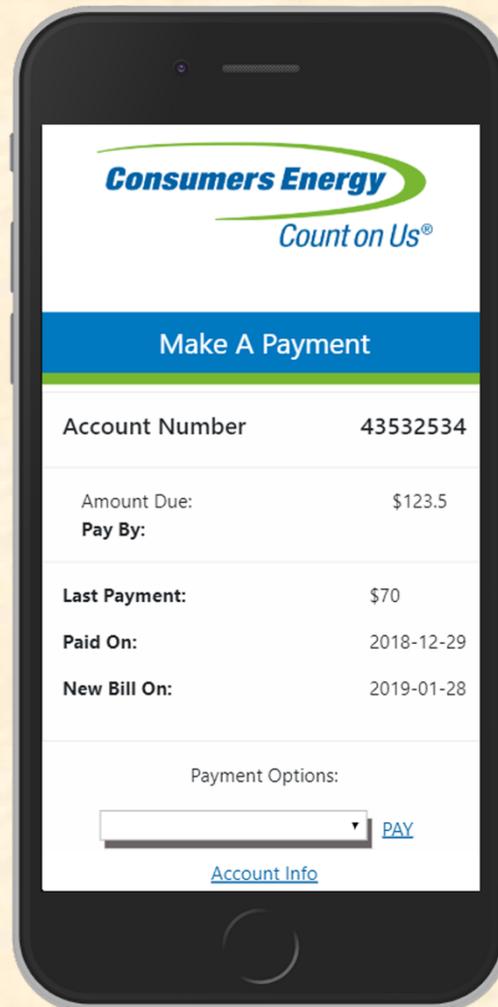
Main Menu UI



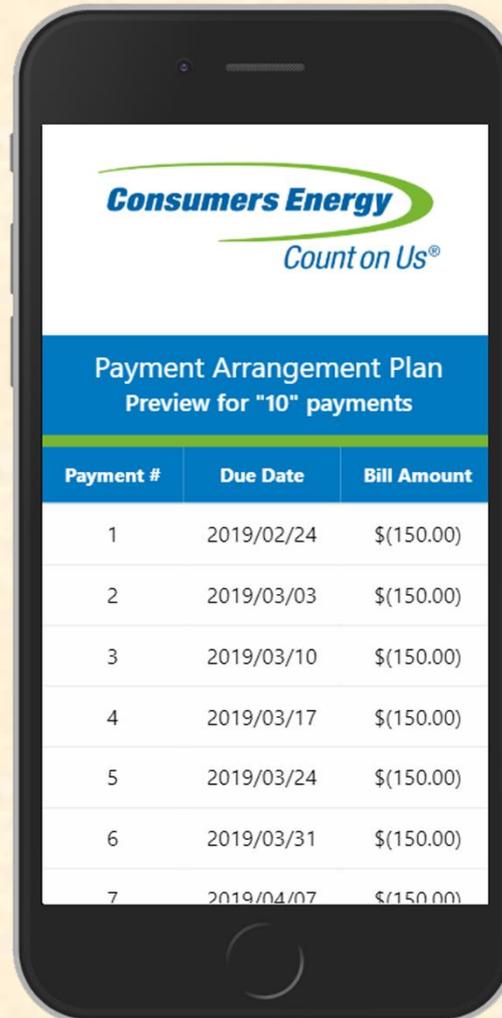
Account Information



Make A Payment



Payment Arrangements Plan



The image shows a smartphone screen displaying the Consumers Energy logo at the top, followed by the text "Count on Us®". Below this is a blue header with the text "Payment Arrangement Plan" and "Preview for '10' payments". The main content is a table with three columns: "Payment #", "Due Date", and "Bill Amount". The table lists seven payments, each with a due date in early 2019 and a bill amount of \$(150.00).

Payment #	Due Date	Bill Amount
1	2019/02/24	\$(150.00)
2	2019/03/03	\$(150.00)
3	2019/03/10	\$(150.00)
4	2019/03/17	\$(150.00)
5	2019/03/24	\$(150.00)
6	2019/03/31	\$(150.00)
7	2019/04/07	\$(150.00)

What's left to do?

- Implement call queue system to support a large volume of users
 - Pending further input from Consumers Energy team on whether the queue system should be handled on Twilio's end or integrated into their already existing queue system.
- Fully integrate web application with the IVR system
- Properly authenticate users using a token-based authentication system
- Allow users to create a budget plan based off account status and payment history



Questions?

?

?

?

?

?

?

?

?

?

