MICHIGAN STATE UNIVERSITY

Project Plan Presentation Predictive Chatbot

The Capstone Experience

Team MSUFCU

Alexandra Case
Yu Chen
Will Kelly
Nick Wallace
Kaezar Leonard
Rikitio Takai

Department of Computer Science and Engineering
Michigan State University

Spring 2023

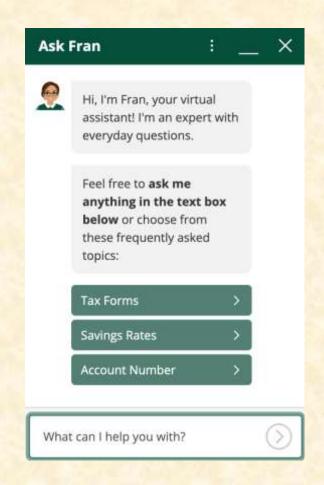


Project Sponsor Overview // msufcu.

- Headquartered in East Lansing, MI
- Largest University Credit Union
- Mission: To provide superior service while assisting members and employees to achieve financial security, their goals, and ultimately, their dreams.

Project Functional Specifications

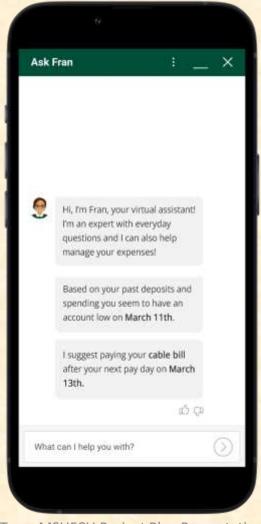
- Seeking to improve their digital channels
- Fran, chatbot that answers
 FAQs and
 provides suggestions to
 their members
- Fran now will initiate the member first



Project Design Specifications

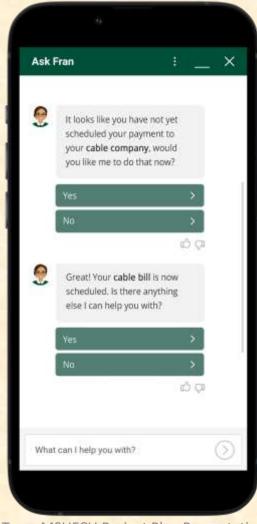
- Analyze spending
- Schedule payment date
- Unusual spending
- Display spending
- Compatible with both computer screens and mobile devices

Screen Mockup: Analyze Spending

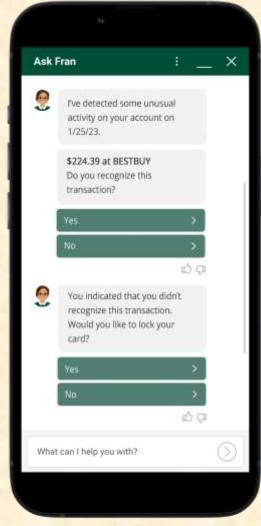




Screen Mockup: Schedule Payments

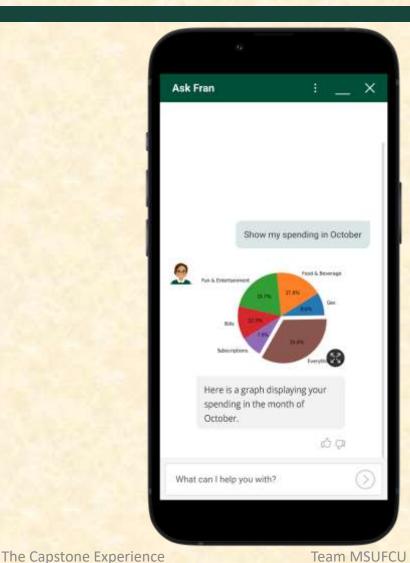


Screen Mockup: Unusual Activity



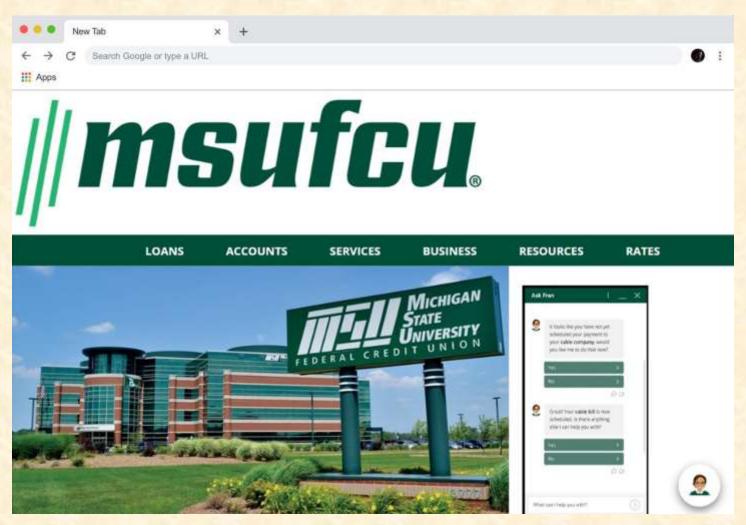


Screen Mockup: Display Spending





Screen Mockup: Web Interface





Project Technical Specifications

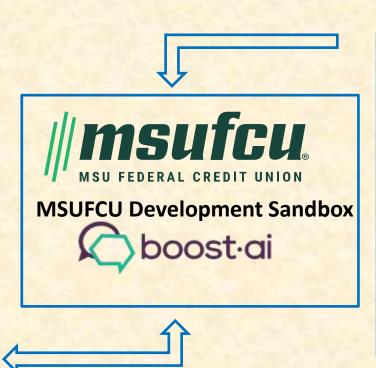
- The User Interface
- Database
- Machine Learning
- Boost.Al
- Sandbox
- API

Project System Architecture

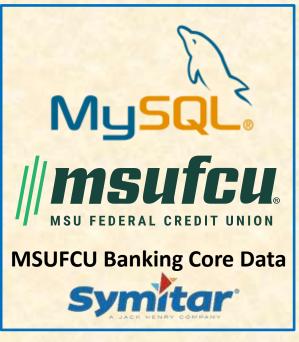
Front-End



Middleware



Back-End



Project System Components

- Software Platforms / Technologies
 - Jupyter/PyCharm
 - Android studio
 - Swift/iOS
 - Visual Studio

Project Risks

- Risk 1
 - Can't access the real data
 - Using fake data for the project
- Risk 2
 - Backend connections are outside of our scope
 - Work on it to make sure everything is functional with hopes
 MSUFCU can implement it later
- Risk 3
 - Produce useful features/patterns for Fran to detect
 - Brainstorming, Research
- Risk 4
 - Annoying the member: healthy balance between what we send to member
 - Write better algorithms



Questions?

