Functional Specifications

• In a digitized world, consumers want to feel “special” in their business relationships
  ▪ MSUFCU wants to: better understand members’ financial needs, provide a more personal banking experience and financial education

• “Hopes and Dream” is a hyper-personalized banking platform that uses an iOS mobile app, Amazon Alexa, and employee facing CRM

• Members will take a quiz about spending habits and financial goals that will build out a personal profile
  ▪ Combined with analysis of current spending habits, will provide member with financial tips and tailored MSUFCU offers

• A web employee CRM will allow employees to view these profiles and provide a unique, more personal experience in member interactions
Design Specifications

• Quiz to build personalized profile for customers
• Financial tips and offers based on the user's goals and spending habits
• Expense tracking through visual charts and budgets
• Integration with Amazon Alexa
• Web-based content management system for employee use
Screen Mockup: Mobile App Quiz

If you suddenly received $20,000, what would be the first thing you did with it?

- Spend it on things I want
- Put it somewhere safe, like a savings account
- Invest it
- Donate it

Next Question →
Screen Mockup: Mobile App Dashboard

Your Budgets

Platinum Plus Visa (...
Edit Budget

You Have Spent
$118.19
of $262.64

TIP OF THE DAY: Try to commit to one No-Spend day each month. This will help you to reset and re-evaluate your spending habits.

Available Offers

Starbucks
9 days left
10%
back

Amazon
10%

More tips →
Screen Mockup: Mobile App Expenses
Screen Mockup: Backend dashboard
Technical Specifications

• Front End:
  ▪ Web application
  ▪ Mobile application(IOS)
  ▪ Alexa

• Back End:
  ▪ Server(CentOS)
  ▪ API layer(Python)
  ▪ Database(MySQL)
  ▪ Web Portal
System Architecture
System Components

• **Hardware Platforms**
  - iOS device
  - Rack Mounted Server

• **Software Platforms / Technologies**
  - Xcode
  - Alexa Skills Kit
  - AWS Lambda
  - MySQL
  - Flask
  - Python 2.7
  - C++
  - Nginx
  - HTML5&CSS3
  - PHP
Risks

• **Quiz Complexity**
  ▪ Users will have to complete a quiz when they first use the app. User might lose interest thus not able to gather enough data.
  ▪ The questions will be created with the assistance of a UX designer to ensure users stay engaged. More questions will be offered later on in order to gather more data.

• **Necessary vs. Unnecessary Expenditures**
  ▪ Difference between necessary and unnecessary expenses in order to offer advice or warn users about their spending habits is vague.
  ▪ Necessity will be set using merchant category codes. Users can keep the default values or edit the necessity of certain groups to further customize it for themselves.

• **Different Platforms Communicating Through API**
  ▪ Multiple platforms that may not communicate the same way through the API.
  ▪ Conduct research on the different platforms and how they request data.

• **Securing Alexa**
  ▪ The app will contain user information that can be accessed by Alexa
  ▪ Develop functionality for user verification either through the app or by a unique voice code.
Questions?