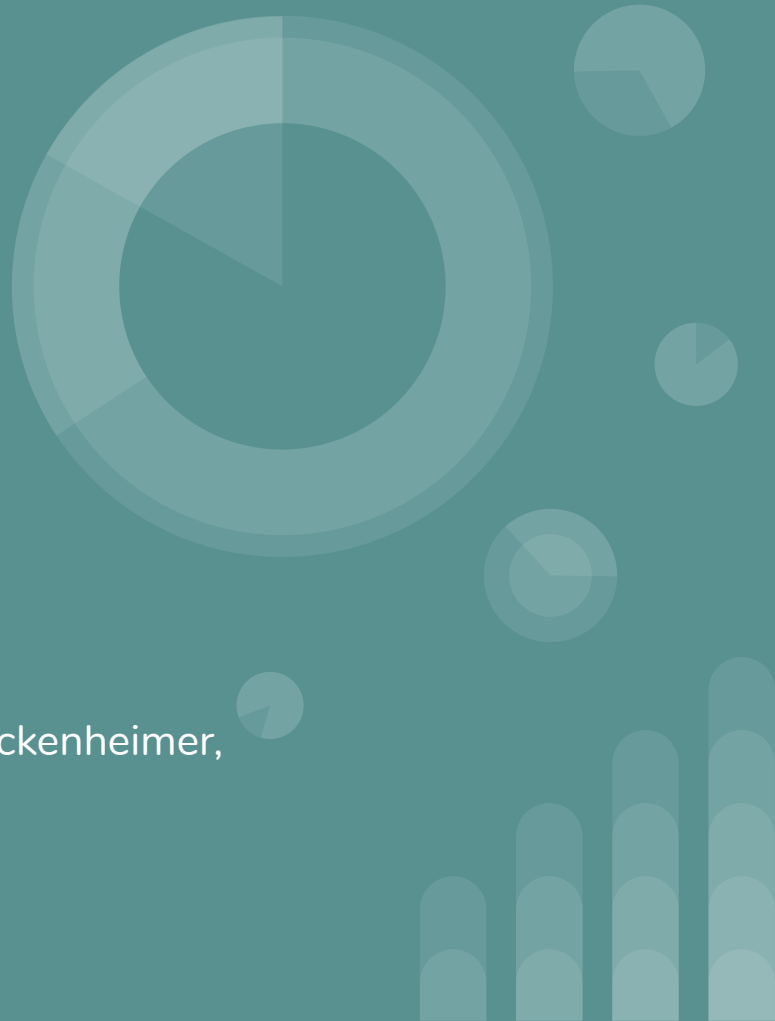# FinWell Apps

Team: Nathan Malitz, Zachary Criswell, Adam Gackenheimer, Alex Thomas, Parker Carlson

How Zachary Feels About Pie Charts

malevolence
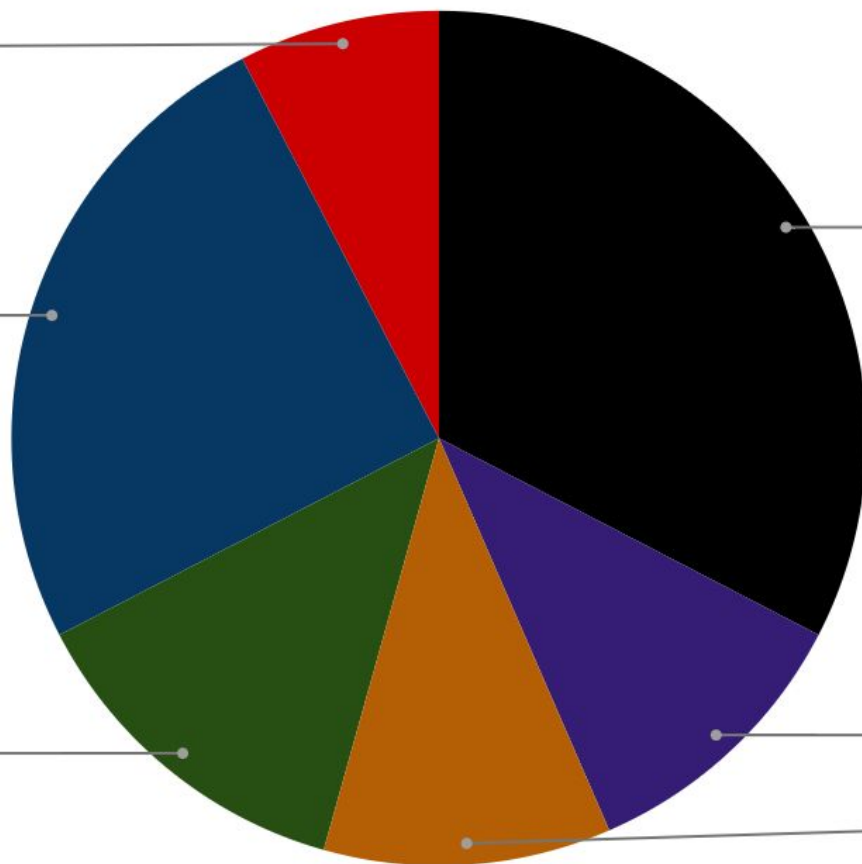7.6%

Hate
32.6%

Revolted
25.0%

Loath
10.9%

Disgusted
13.0%

Resent
10.9%

Prototype - Zachary

Mute your excitement while Zachary opens the prototype

First Iteration Features - Zachary

FR7 - Show how the money being saved by adhering to a budget can affect the age a user can retire.

FR8 - Users can create financial saving goals.

FR18 - Users will be able to create a budget using the Envelope method.

FR30 - The "Monthly Payment" value returned by the Debt Free Calculator will be able to be applied to the corresponding allocation category within the user's budget.

FR35 - Users should be able to manually update their transaction history.

Summary:

No graphical interface will be made. The goal is to have a program that can create a budget. The budget should be dynamic, in allowing you to create and edit categories, and it can add transactional data that shows the user how much they have left to spend in a certain category, and if they are meeting their goals

Business Requirements - Parker

BR1 - Encourage and improve financial literacy as well as awareness of one's own finances in our clients and users.
 Our app will educate users on how to manage their money better, to increase their fiscal responsibility. This will benefit MoneyTree's reputation for dealings with corporate networks and financial institutions.

BR2 - Exposure for MoneyTree to prospective corporate clients.
 Moneytree is trying to expose itself to more corporate networks and banking entities. MoneyTree helps these companies by helping their employees.

BR3 - Encourage partnerships with corporations through tax benefits and employee engagement.
 A large reason for companies to use and promote the app is for tax benefits. By encouraging their employees to invest in a 401k program, it increasing employee satisfaction and can allow for an early retirement.

Use Cases - Nathan

Actors
- **Users**

  Users are everyone who uses the app. From employees of an admin user, to everyday users not related to any company
- **User's Bank Account(s)**

  A user's bank account may be linked to the users account for a better knowledge of how much money they have available to them
- **User's Credit Card Account(s)**

  A user's credit card information may be linked to a users account for better information on what their transaction history is, when they have their credit card bill due, and what their credit score is.
- **Admin - Business owners/Management**

  An admin is a business owner or someone who has a group of users beneath and tied to them. Admins are able to monitor how certain users use the app, and help provide them with money
- **System Server**

  The system server will send and pull information from and to the database
- **Database System**

  The database will hold all of the users accounts information, budgets, goals, achievements, etc. Everything should be encrypted and admins will have specific access to parts of it if they have employees in their domain.

Use Cases

What are we aiming for?

Accounts: - Nathan
UC1 - Create an account
UC2 - Edit an account

Finances: - Parker
UC3 - Create a budget
UC5 - Visualize spending habits
UC9 - Provide users with financial wellness content.
UC12 - Set bill/payment reminders

Administration: - Alex
UC22 - Match with a MoneyTree adviser if the consumer wants help
UC25 - Admins can see how their employees are using the app
UC26 - Have company admins put money into the system for its employees' benefit.

Requirements

Education - Parker

FR5 - Provide 3rd party and MoneyTree article links about financial wellness to the users outside of the app.

FR7 - Show how the money being saved by adhering to a budget can affect the age a user can retire.

Simplicity - Alex

FR14 - Users can aggregate their financial accounts with their user-account.

NR9 - The color palate used for the Graphical user interface as well as any financial illustrations should be composed of colors that are easily distinguishable by Color blind users.
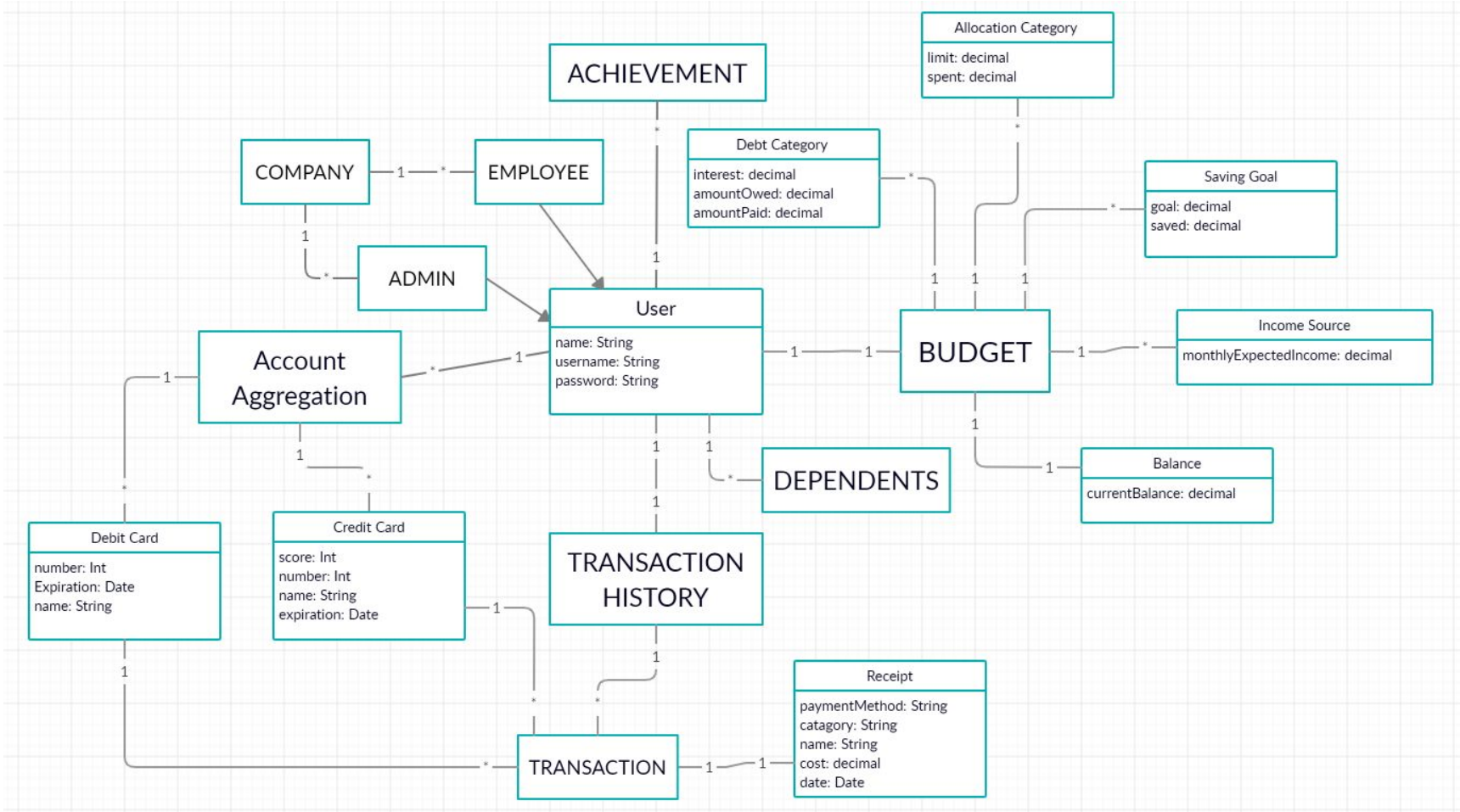
Incentivize - Nathan

FR24 - Employee Admins can add money to an incentives fund to pay out to employees as rewards for staying on budget.

FR26 - Users will receive in app "badges" for completing different savings and budgetary milestones.

FR31- Employee admins can view usage statistics on how their employees are utilizing the app.

Domain Model - Adam

Tech Stack - Nathan

- Developer Platform:
  - .NET Core
  - ASP.NET
- Programming Languages:
  - C#
- IDE:
  - Visual Studio
- Frameworks:
  - Xamarin
- Package Manager:
  - NuGet

- Libraries / Packages:
  - Newtonsoft.Json
  - Microsoft.Extensions.Logging
  - Microsoft.Extensions.DependencyInjection
  - Microsoft.EntityFrameworkCore
  - Microsoft.AspNet.Mvc
  - Microsoft.AspNet.WebApi
  - Moq

Mentor Feedback - Zachary

- Added time stamps for transaction history
- Used decimals data type instead of floats. (For a more accurate way to measure money)
- *Positive encouragement WE ROCK at being cool!!!!!!!!!*

Client Feedback - Alex

- Added line graph to prototype showing money that the user has saved over time
- Refocus prototype to simplify home screen to view savings and spending.
- Words from the financial planning domain that users may be unfamiliar with will 'link' to a pop-up definition built into the UI/UX of the app when the word is unavoidable. Where ever possible, layman's terms will be used instead jargon where possible.
- Change allocation categories to allow custom ones defined by user.
- Clients are overall very satisfied with our results.