

# Team Financially Illiterate

Ethan Shilo-Draper, Kasey Bourdier, Ryan Nixon



The background image is a composite of financial and business-related graphics. In the upper right, a portion of a white calculator is visible, showing keys for percentage (%), GPM, 0, 1, 2, and a decimal point. Below the calculator, a pie chart is partially visible, with one segment highlighted in dark green. In the lower right, a bar chart is shown with green bars representing data for the years 2004, 2005, and 2006. The 2006 bar is the tallest and is labeled with the value \$733.4. The overall image has a dark, semi-transparent overlay on the left side, which serves as a backdrop for the title text.

# Project Overview

# Project/Business Case

Problem: Keeping track of money is complicated

- Budgeting requires a lot of tracking
- Numbers have to come from many different places
- Automating calculations could save a lot of stress



# Project/Business Case

## Solution: Financial Planner

- Track income, bills and other payments
- Calculate monthly budget and savings
- Visualize spending and savings to make it understandable



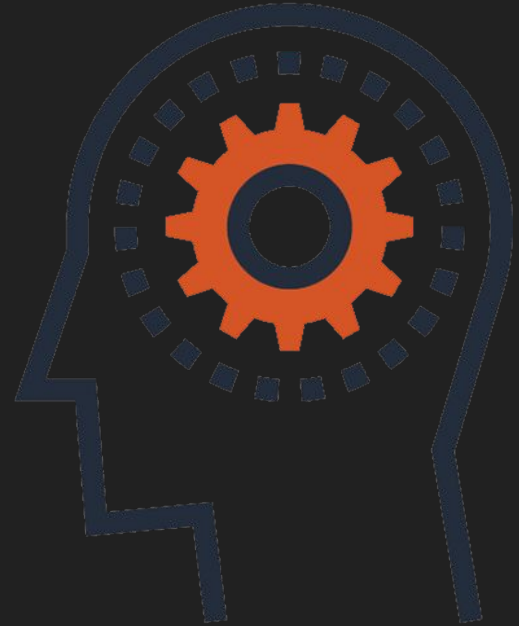
# What I've learned - Ethan Shilo-Draper

- Difficulties of group coding
  - Making progress without stepping on each other's toes
  - Importance of frequent communication and progress sharing
- Plan for things to go wrong
  - Tight schedules are near impossible to adhere to
- Different development frameworks are more similar than I realized
  - More of my .Net knowledge was transferable to React than expected
  - Being a good software developer is as much about methodology as language knowledge



# What I've learned - Kasey Bourdier

- Team
  - I've gained experience with working with a team in a large project
- Communication
  - I learned being punctual is very important when working with team members
- Project
  - I gained knowledge of new technologies I was not previously familiar with like React



# What I've learned - Ryan Nixon

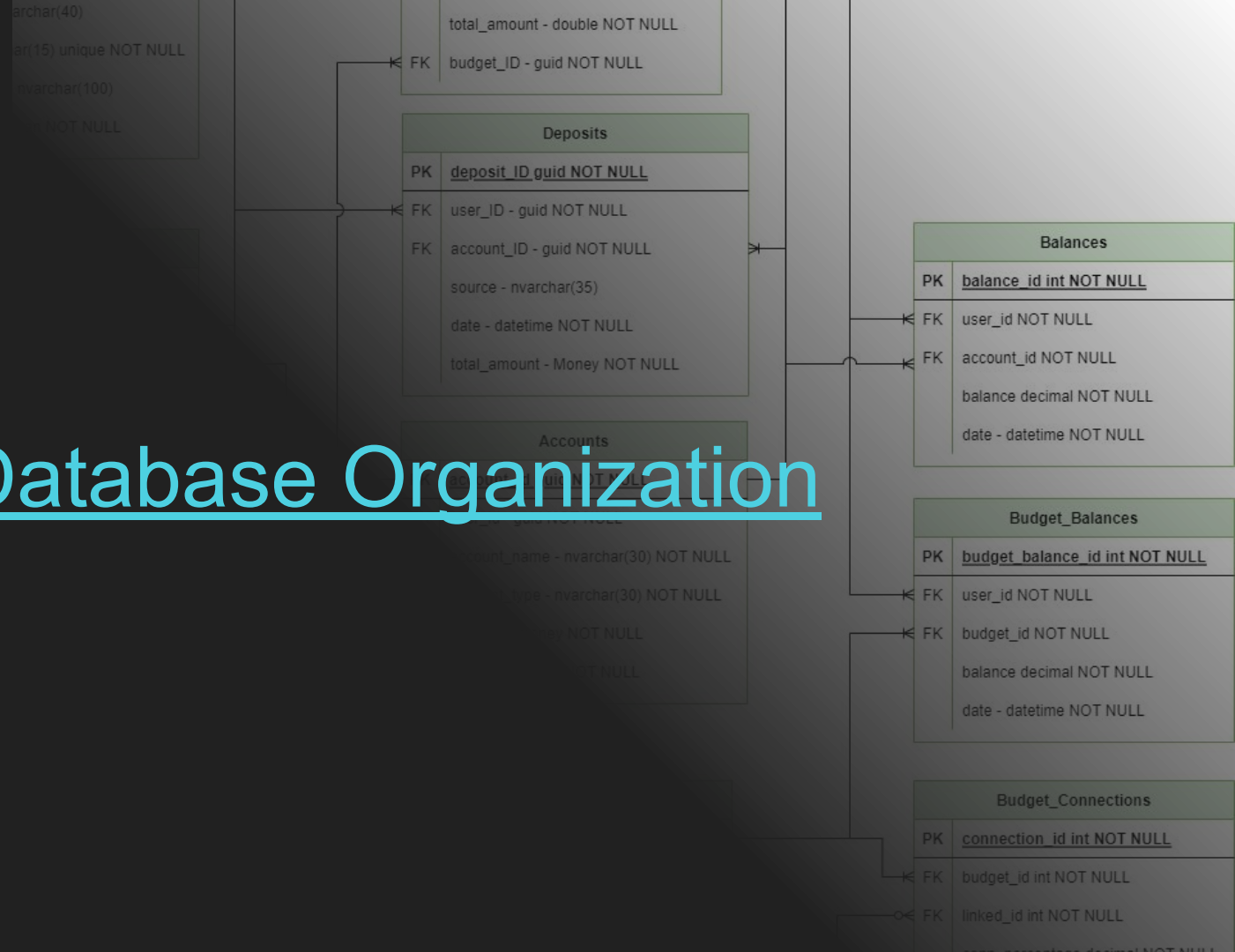
- Communication
  - Clear Communication is key
- Thorough planning is important
  - Plans always change
- Technologies
  - Familiarized myself more with Node, Express, React.js, AWS, and Heroku



DUE DATE	DURATION	PCT OF TASK COMPLETE	STARTING DAY	WEEK 1							WEEK			
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# Database Organization



# Stored Procedures



## Stored Procedures List:

Create\_Budget  
Create\_Deposit  
Create\_Snapshot  
Delete\_Deposit  
Delete\_Expenditures  
Edit\_Deposit  
Edit\_Expenditures  
Edit\_Income  
Take\_Snapshot  
Update\_Bills  
Update\_Income

# Project Obstacles

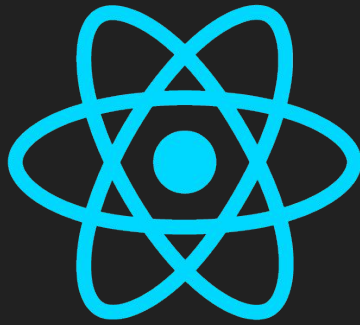
- Technology Unfamiliarity
  - Some technologies were unfamiliar to us
- Keeping Deadlines
  - Catching up on overdue tasks while continuing forward progress
- Team Communication
- Increase of Scope



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Technical Design

# Client Side



# React

- Built in React.js
  - Mix of Javascript and Typescript
- MVC design
  - Model - Handled by backend and MySQL server
  - View - JSX pages and components
  - Controller - React hooks using Ajax calls
- Use of components
  - Keeping CSS centralized through reusable JSX
  - All forms, modals, buttons, etc. are handled together

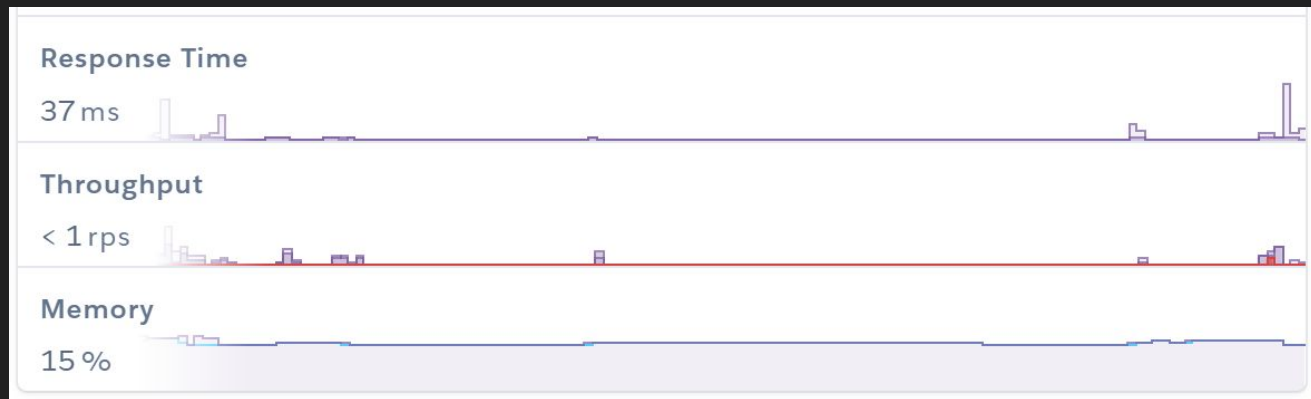
# Backend

- Server
  - Express
  - Structure
    - Routes
- MySQL Database
  - Run in AWS
  - Connected and escaped using MySQL node module



# Deployment

- 2 Heroku Dynos
  - ~\$7 a month each
- AWS Relational Database Service
  - Free Tier 20gb/750 hours month
- Backend
  - Application config var's set on heroku
    - Db info



# Summary



To Summarize:

- Project scope
  - What we initially planned can always change
  - Technical design changes
  - Changes in team assignments
- Gained more technical experience
  - Group coding / Working with teams
  - Communication
  - Became more competent software engineers



## Dashboard

### Savings



### Bills

#### Upcoming Bills

No upcoming bills!

Keep track of all of your bills. Here, you can view all of your regular payments broken down by date, company, and amount.

[Go To Bills](#)

# Project Demonstration