

# **Henry Gets Moving**

# **Team and Client Information**

### **Team Information**

- Mars
- Kiri
- Melody

### **Client Information**

- Nicole Koontz
  - Associate Lecturer of Exercise Science
- Immersive Learning Class
- Ball State



# **Business Requirements**

1

Increase usage both during and after immersive learning project

2

Increase parental engagement in the immersive learning program

3

Encourage kids using the app to make healthier choices

# Requirements

#### **Functional**

- FR1: Users should be able to log children's exercise, including time exercised and type of exercise (BR3) [HIGH]
- FR2: Should include a page for healthy recipes, with low-cost, simple recipes (BR2) [HIGH]
- FR3: Includes a daily Recipe of the Day which changes every day (BR1) [MEDIUM]
- FR4: Recipes should be filterable by ingredients they include (BR1) [MEDIUM]
- FR5: A maze game, similar to the ones the immersive learning project already has on paper (BR1) [LOW]
- FR6: Demonstrations of healthy alternatives to unhealthy choices, and information as to why said choices are unhealthy (BR3) [MEDIUM]
- **FR7**: An 'About' page, including information about the immersive learning project from the Henry Gets Moving Delaware County Facebook page, with a picture of the immersive learning team (**BR2**) [**HIGH**]
- FR8: A list of exercises and information about them grouped into sections based on the type (BR1) [HIGH]
- FR9: An Exercise of the Day which changes every day (BR1) [MEDIUM]
- FR10: Users should have an account linked to a username which stores their exercise log data (BR1) [HIGH]
- FR11: Information about which fruits and vegetables are currently in season to go with the healthy recipes (BR2) [LOW]
- FR12: An administrator section where daily recipes and exercises can be interchanged and the catalogs for each can be updated (BR1) [MEDIUM]

# Requirements

#### Non-Functional

- NR1: The app should be accessible to both children and guardians to use (BR1) [HIGH]
- NR2: Design elements from the book and the immersive learning project should be included (BR1) [MEDIUM]
- NR3: Include pictures of the characters from the book (BR3) [LOW]
- NR4: Provide a small celebration when 60 minutes of exercise is logged (BR1) [LOW]
- NR5: The app should be functional both on desktop and on mobile, as it will primarily be used on iPads (BR1) [MEDIUM]
- NR6: Language written at a pre-school ~ second grade level to be easy for kids to read (BR4) [HIGH]
- NR7: Site should be colorful and designed in a way appealing to kids (BR1) [MEDIUM]

# **Prototype**



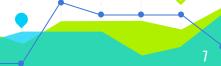
## **Tech Stack**

#### ReactTS

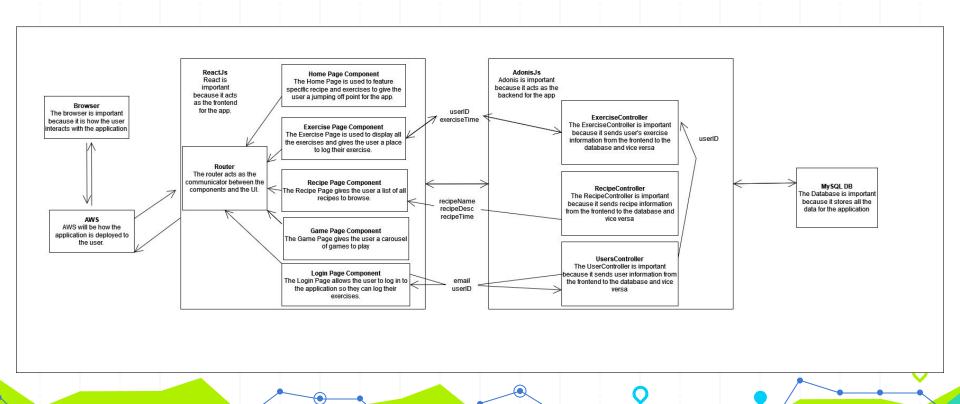
We selected ReactTS because it is the frontend library our group is most comfortable with and it is relevant to the current state of the web industry.

#### **AdonisTS**

We selected Adonis because it is the backend library our group is most comfortable with, it connects easily with our frontend stack, and it reflects the current (and future) state of the web industry.



## **Architecture**



## **Use Cases**

#### Log exercise

- Parents will be logging the activity of their child once or multiple times a day.
- Logging the exercise also brings the user to a new part of the application, which gives them more pages to interact with. (BR2)

#### **Play games**

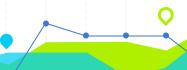
- Page of many games for children to play with.
- The games will help with the mission of making kids learn more about being healthier by playing games teaching about good habits. (BR1

# Log in to the application

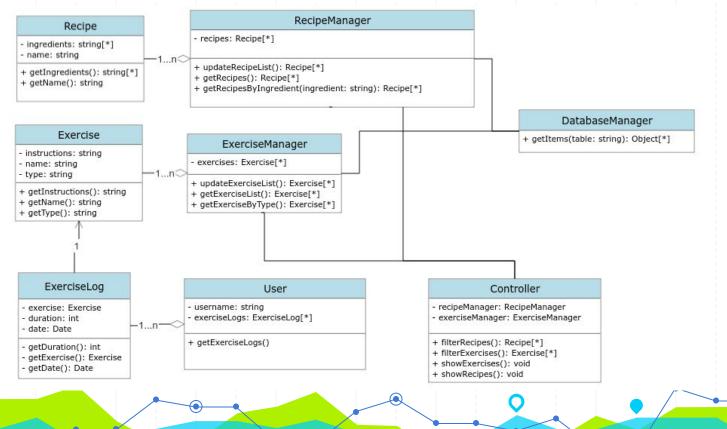
- This account will be used to be able to log the exercise of their child.
- They will be able to register for an account with an email on the register page.
  (BR2)

### **Read recipes**

- There is a page that displays all the recipes that the parent could make for their child to eat healthier.
- There is a featured recipe every day and each recipe has its own page. (BR2)



## **Domain Model**



## **First Iteration Features**

- FR1: Users should be able to log children's exercise, including time exercised and type of exercise (BR3)
   [HIGH]
- FR2: Should include a page for healthy recipes, with low-cost, simple recipes (BR2) [HIGH]
- FR3: Includes a daily Recipe of the Day which changes every day (**BR1**) [**MEDIUM**]
- FR7: An 'About' page, including information about the immersive learning project from the Henry Gets Moving Delaware County Facebook page, with a picture of the immersive learning team (**BR2**) [**HIGH**]
- FR8: A list of exercises and information about them grouped into sections based on the type (BR4) [HIGH]
- FR9: An Exercise of the Day which changes every day (BR1) [MEDIUM]
- FR10: Users should have an account linked to a username which stores their exercise log data (BR1) [HIGH]
- NR1: The app should be accessible to both children and guardians to use (BR4) [HIGH]

# **Feedback**

#### **Mentor**

- Business Requirements
  - Needed less because one was considered a use case

#### Client

- Prototype
  - Added extra assets, fields for exercise form, and pages due to recommendations from the client

