ReciPull
A Project by
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What is ReciPull?

- ReciPull is a web application made by college students for college students
- ReciPull returns recipes that contain user-inputted ingredients for easy access to recipes that you can make with the ingredients you already have
What Does ReciPull Solve?

- Inability to produce quality food on a tight budget.
- Loss for inspiration in recipes to cook.
- Easily access recipes that they can make with the ingredients they already have.
What Does ReciPull Solve?

Users are saving:

- Time
- Money
- Food
Existing Solutions

- **SuperCook**
  - “Clunky”
  - Hard to navigate
  - Checklists
What Are ReciPull’s Features?

- A convenient search bar to input ingredients from
- Upvote and downvote buttons for users to share their opinions on a recipe
- Recipe filters to help narrow down recipe searches
- Easy access to a variety of recipes through ReciPull’s recipe cards
- An Amazon Alexa skill to easily input ingredients
Technologies Employed

- **Java**: for back-end processing of ingredients and recipes
- **MySQL**: for databases containing ingredients and recipes
- **Python/JSON/Alexa API**: for Amazon Alexa integration
- **React/HTML/CSS**: for user interface implementation
- **JUnit/Jest/Enzyme**: for testing all the code
Basic Flow

UI

Take User Input

Display Recipes

Back-End Processor

Recipe Table

MySQL

Return List of Recipes

Match Recipe ID to Recipe

Pivot Table

MySQL

Match Recipe IDs to Ingredient IDs

Ingredient Table

MySQL

Match Ingredient to Ingredient ID

Send Ingredient List

Match Ingredient to Ingredient ID
Web-App Demo
Echo Dot Demo

“Opening ReciPull!”
Echo Dot Demo
Challenges Faced

● The biggest challenge we faced was figuring out how to connect our user interface with our back-end.
  ○ This was the primary problem that we sought to overcome throughout all three sprints.
● We eventually were able to solve this problem using the jetty server and get requests to pass information back and forth between React and Java.
Moving Forward

- Some features that we’d like to implement in the future are:
  - Web host for people to access from anywhere
  - Suggestive search bar to avoid naming errors (i.e. “eggs” instead of “egg”)
  - Recipe API - no more manual insertions
  - Social media integration (Pinterest)
  - Nutritional value information
  - More seamless user interaction: single button search
  - Multilingual functionality
  - Ability to input multiple ingredients through Alexa
Thank You