



# Housemates

*Capstone Group #9*

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# The Problem



Housing Situation in Canada



Increasing Number of People  
with Housemates

# Challenges of Living with Housemates



MANAGING  
EXPENSES



BALANCING  
CHORES



EVENT  
COORDINATION



COMMUNICATION

# User Needs



EXPENSE  
SPLITTING



TASK  
MANAGEMENT



EVENT  
SCHEDULING



WIDE  
AVAILABILITY



USER-FRIENDLY  
INTERFACE

# Existing Solutions

## Expense-Splitting

- Splitwise
- Splitser
- Settle Up

## Task Management

- Google Tasks
- Todoist
- Tody

## Scheduling

- Google Calendar
- Apple Calendar
- Outlook Calendar

Housemates



All-in-one solution

Expense  
Splitting

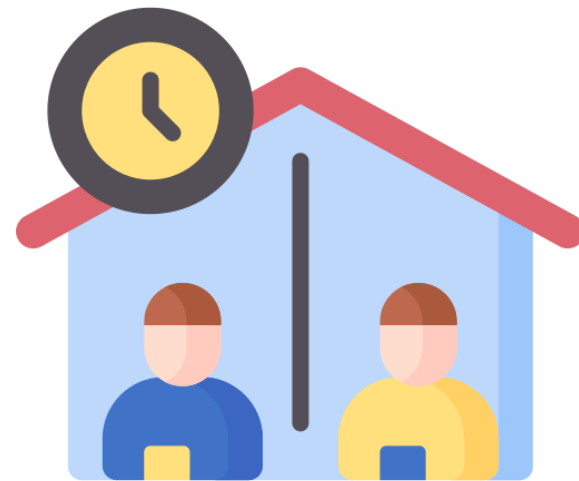
Task  
Management

Event  
Scheduling



Streamline Household  
Management

# Demonstration



# Technologies Used

React

MongoDB

Firebase

Node.js

Express



# Target Users

College Students

Young Workers

Families

Property Managers

# Usability Survey

First Impressions



```
graph TD; A[First Impressions] --> B[How easy is it to locate main features?]; B --> C[Visual Appeal?]; C --> D[How responsive does it feel?]; D --> E[Would you use Housemates in real life?];
```

How easy is it to locate main features?

Visual Appeal?

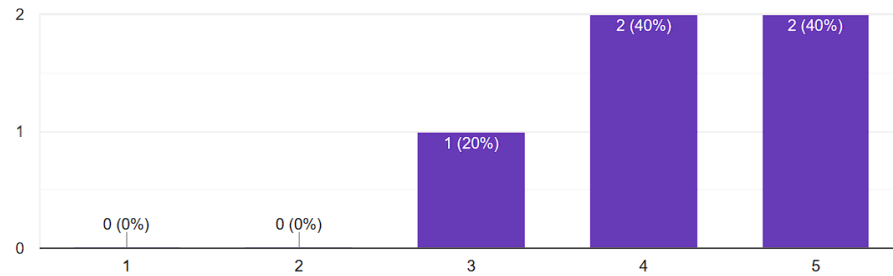
How responsive does it feel?

Would you use Housemates in real life?

On a scale of 1 to 5, how easy was it to locate the main features or functions of the app?

 Copy

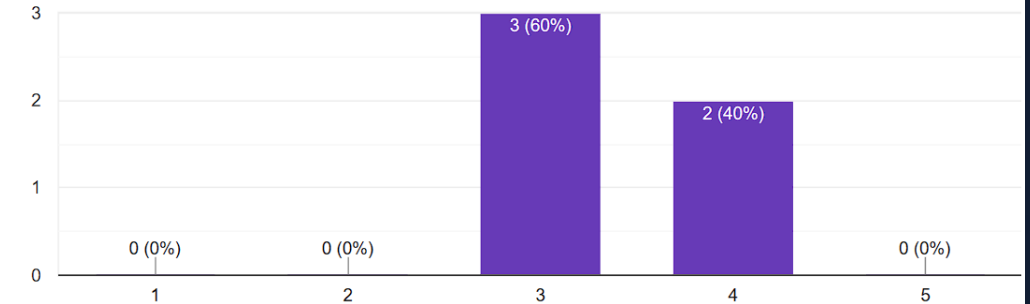
5 responses



On a scale of 1 to 5, were the instructions provided clear and easy to understand?

 Copy

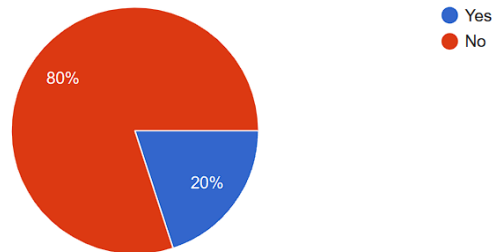
5 responses



Did the app provide helpful feedback or guidance when you made a mistake or encountered an issue?

 Copy

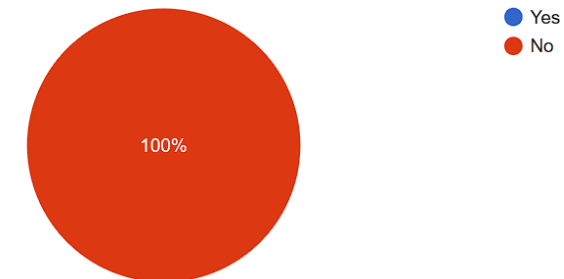
5 responses



Did you find the layout of the app to be visually appealing?

 Copy

5 responses



# Revision 0 Feedback

# Revision 0 Feedback

“Unpolished”

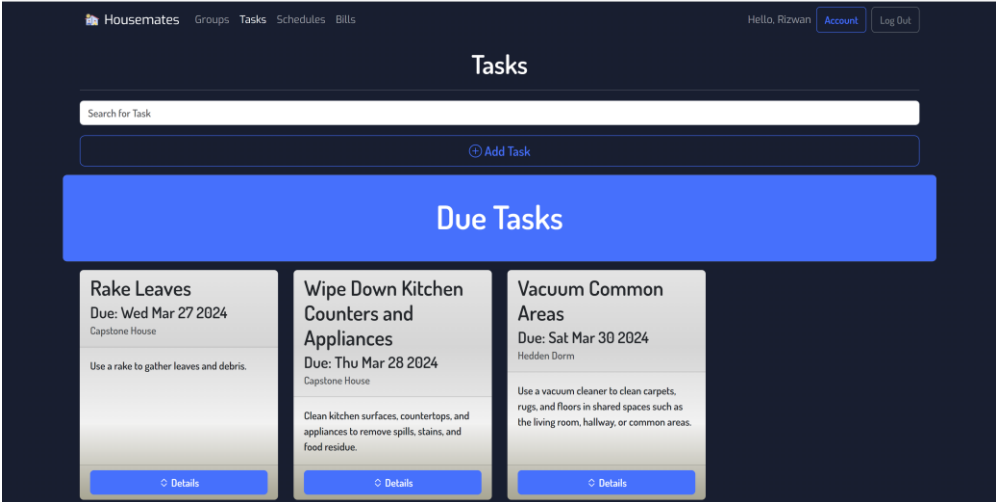
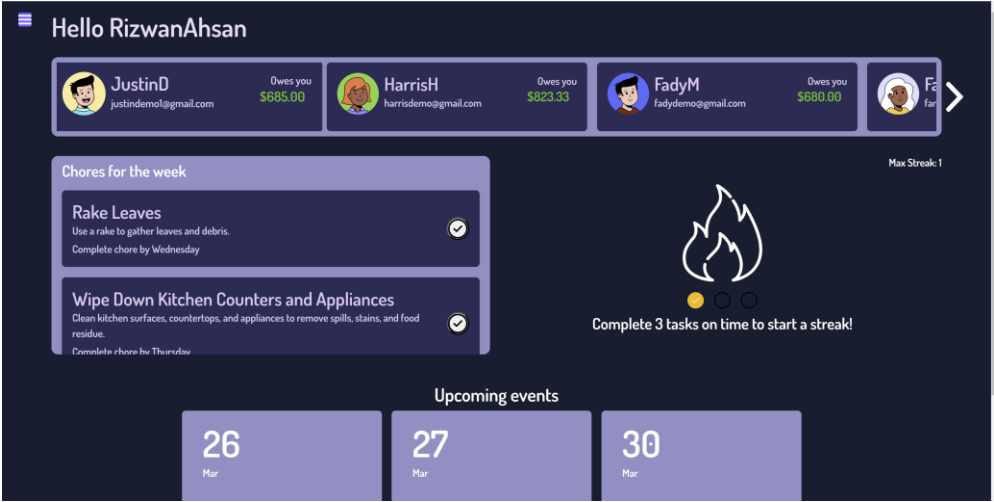
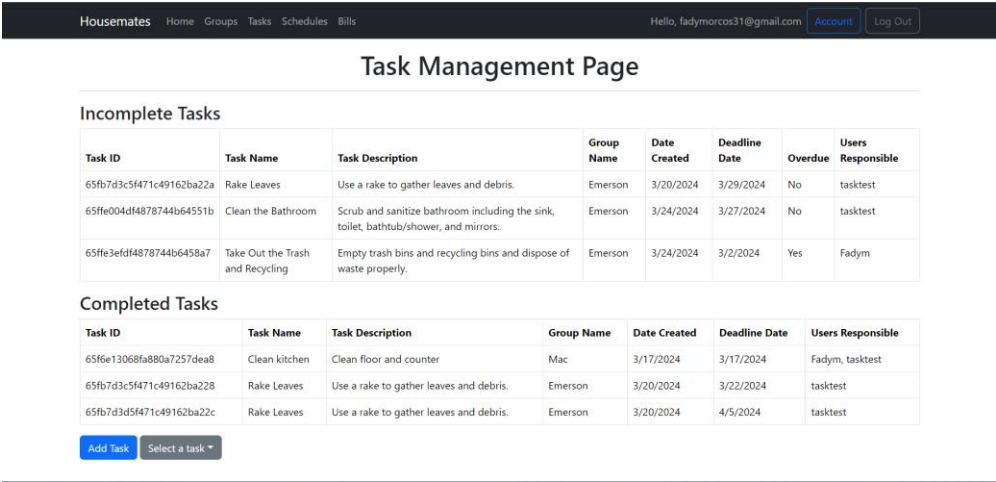
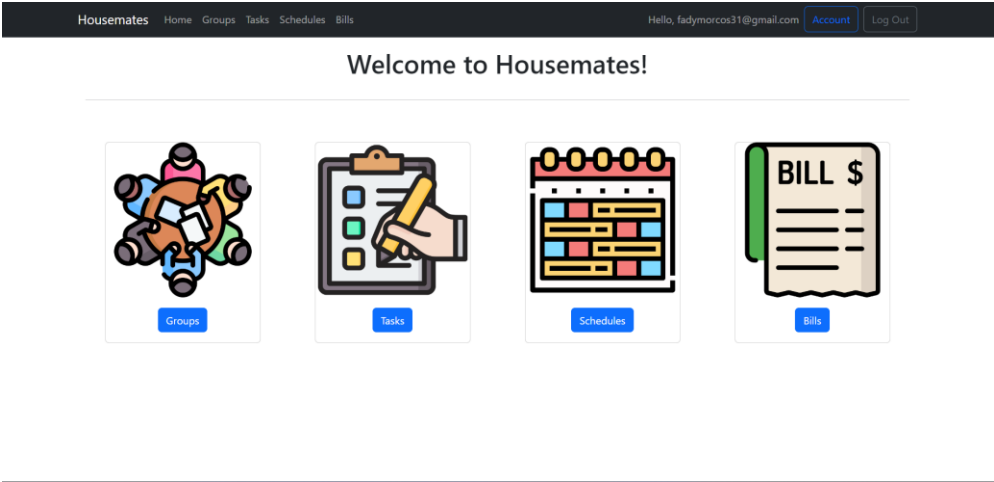
“Bland”

“Generic”

“Nothing that  
catches the  
eye”

“Too much  
typing”

# Before and After



# Usability Improvements

## New User Interface

- Less Typing Required
- Enhanced Responsiveness
- Faster Navigation

## Additional Features

- Search Bars
- Calendar Display
- Task Presets

# Performance



Main Goal: Fast Response  
Times



Performance Testing Of  
Housemates Conducted  
Using Jmeter



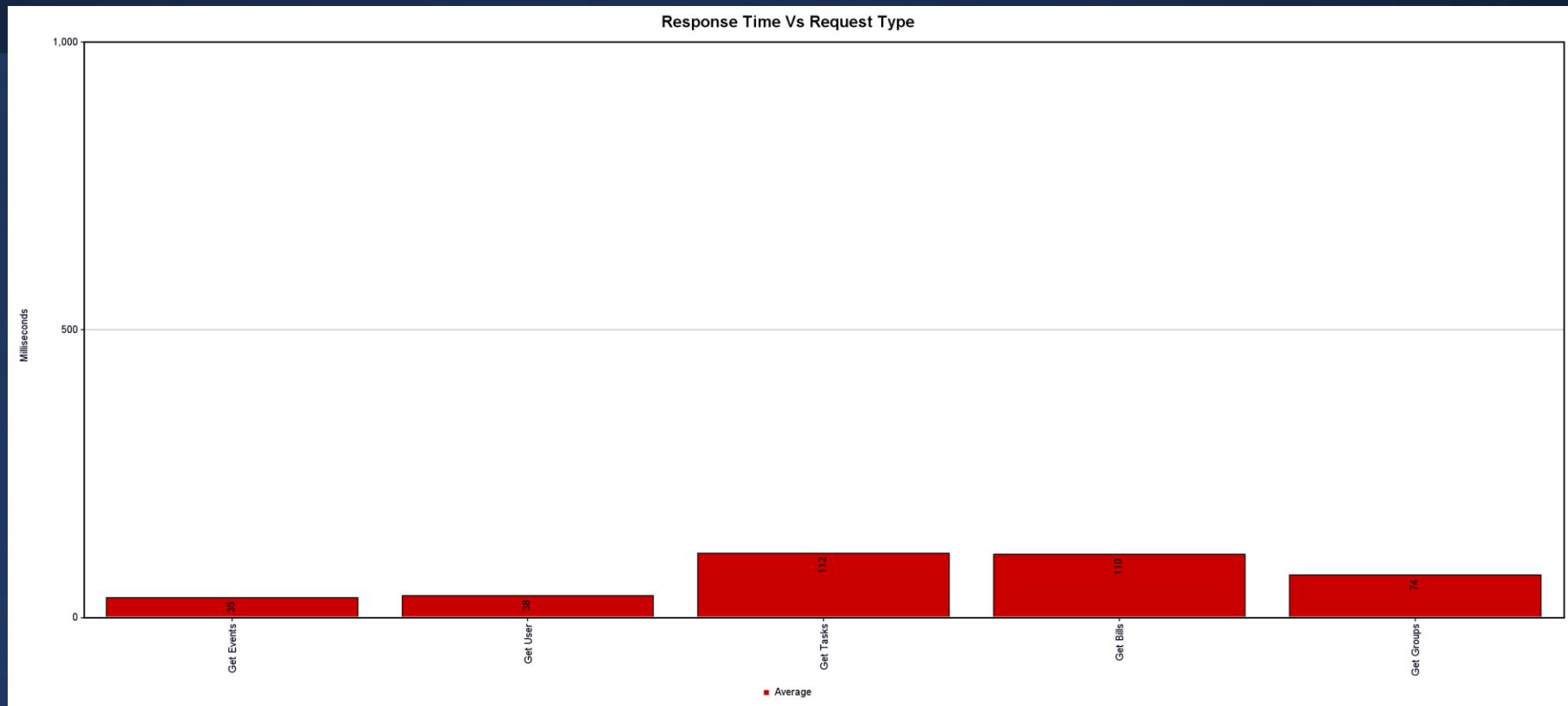
Simulate 100  
Simultaneous Users Using  
Housemates



Measure Response Time  
Of Common User Requests

# Performance Results

- Acceptance Criteria: < 500 ms
- Average Response time ~ 100 ms
- Conclusion: Housemates is sufficiently responsive





# Future Features

Image Attachments

User Defined Presets

Notifications

App Integrations (e.g. Google Calendar)

Natural Language Processing

# Conclusion

## All-in-one solution

- Expense Splitting
- Task Management
- Scheduling

## Improved Household Experience

- More Organized
- More Efficient
- Less Stress

Q&A

