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# TRAILSEEK

A yard without a fence



# INTRODUCTION

The Idea of fitness and being social at the same time and bringing people of similar interest to a single platform inspired TrailSeek.

TrailSeek Social Outdoor Application will provide positive physical, social and developmental outcomes through experiences that create new stories, skills and self-concepts for people.



# BENEFITS & FEATURES

Build emotional wellbeing and motivation towards fitness

Experience real-life challenges with adventures

Social connections

Developing confidence, team management and identity

## BENEFITS

## FEATURES

Explore Hiking Trails and Mountain Bike Routes.

Keep a Record of Outdoor Adventures

Get recommended trails and feedback

Get GPS directions

Weather information

COVID information

Find, join and create events

# TARGET USERS

ADVENTURERS



ORGANIZATIONS



CHARITABLE TRUSTS



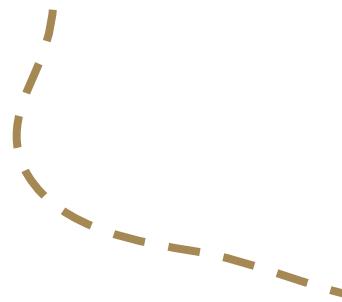
TOURISTS



AGE GROUP 22+



# USER PERSONAS



## Abbey Kennedy



Age  
35

Highest Level of Education  
Finished higher education

Industry  
IT

Organization Size  
Multi-national

### Goals

To explore new sights while doing physical activities and find new places and experiences related to nature. Be prepared for those experiences.

### Needs

Images and info of the places and trails to explore. Other outdoor activities supported

### Interests

Mental and physical health, Adventure

### Behavior

Environmentally conscious and Tech-savvy Own a car



Age  
26

Highest Level of Education  
Grad Student

Organization Size  
Full-time Student

## Mat Raul

### Goals

Mat's long term goal is to graduate and pursue a career in his field. His short term goal is to continue to grow as a person, while acclimating to his new environment.

### Needs

Mat is looking to socialise with a group of friends that share the same desire of exploring the trails around his county. He reads about it and wants to see it for himself.

### Behaviour

Dosen't own a car, so getting around is limited to public transit.

Most people he's met already have their established friend groups, so it's difficult for him to develop new friendships.

### Interests

Writing, Soccer, Technology, Kayaking, Hiking

## Lilly Watson



Age  
30

Highest Level of Education  
Less than a high school diploma

Industry  
Graphic Designer

Organization Size  
Self-employed

### Goals

Lilly's long term goal is to advance her career and enhance her already impressive resume. Her short term goal is to meet new people while also improving her photography skills

### Needs

Lilly wants to find time away from her demanding job to pursue other personal interests.

### Behavior

Regular commuter biker. No car. Interested in mountain biking but her friends don't do it

### Interests

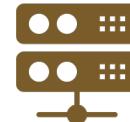
Graphic Design, Photography, Hiking, Camping, Socializing.

# KEY TECHNOLOGIES



## FRONTEND

React Native  
Expo



## BACKEND

Node JS  
Express JS  
Socket IO  
Python



## DATABASES

PostgreSQL  
MongoDB



## TESTING

Jest  
Appium



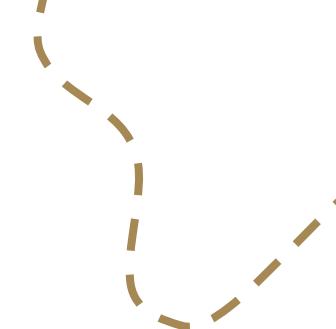
## CI/CD

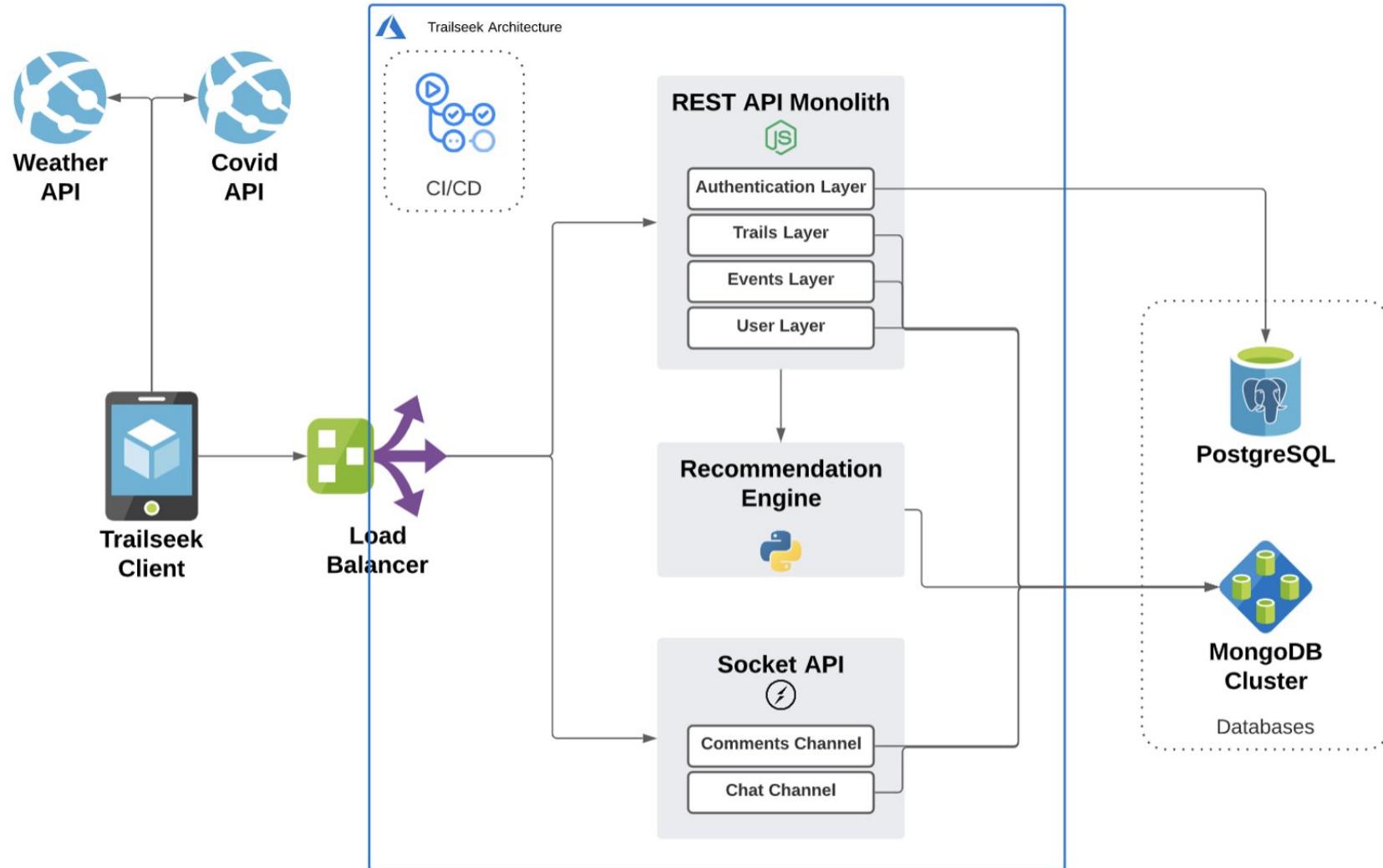
GitHub Actions



## CLOUD

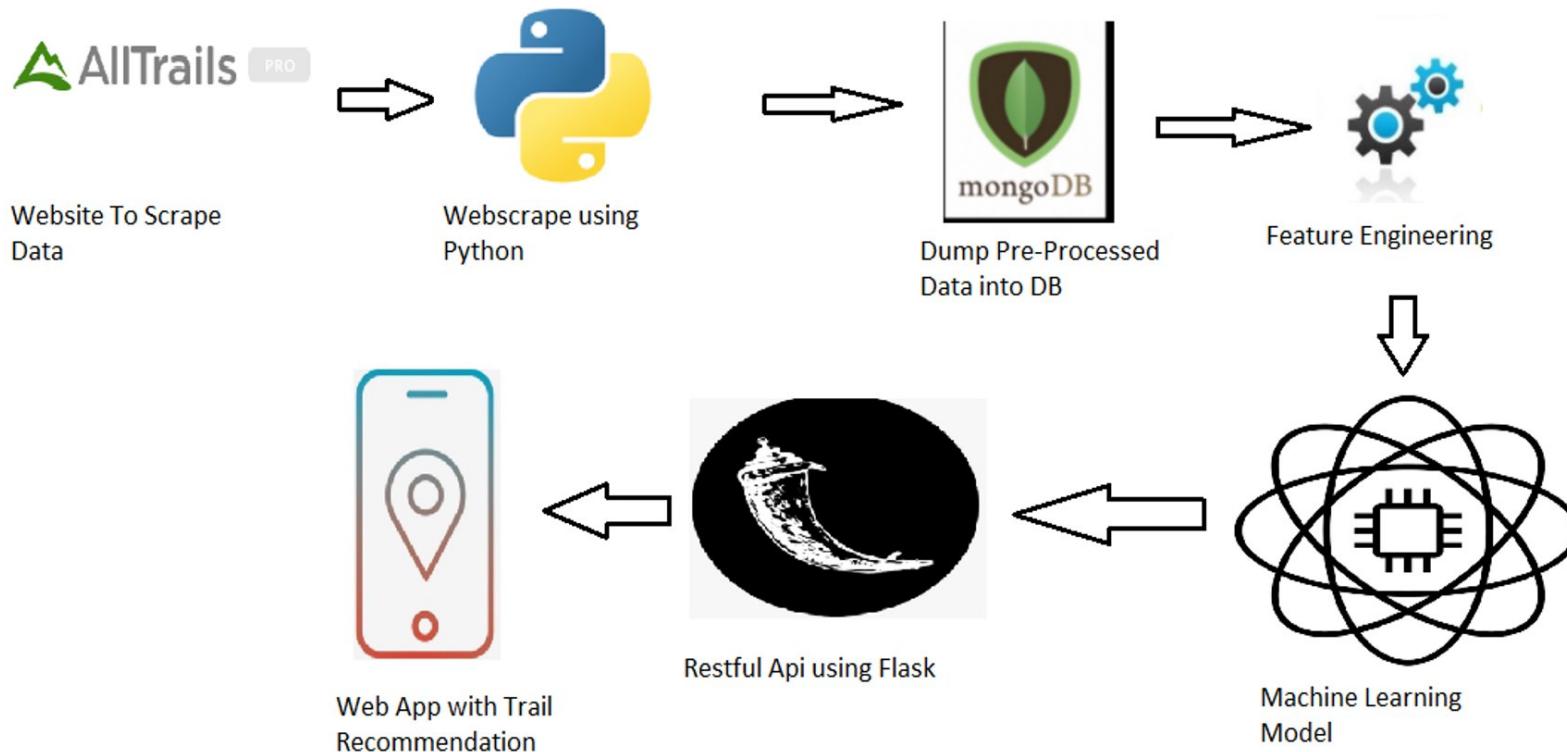
Azure







# DATA STACK



# KEY CHALLENGES



Frontend	Backend	Data	Server
<ul style="list-style-type: none"><li>• Cross-platform development</li><li>• Linking (Share)</li><li>• Redux</li><li>• Blackbox &amp; Whitebox testing</li><li>• User acceptance testing</li><li>• UI/UX</li><li>• The React-way</li></ul>	<ul style="list-style-type: none"><li>• MongoDB</li><li>• Continuous Integration and Deployment</li></ul>	<ul style="list-style-type: none"><li>• Real-time recommendations</li><li>• GPX</li></ul>	<ul style="list-style-type: none"><li>• Moving the server</li><li>• WebSocket's deployment</li></ul>

# EVALUATION

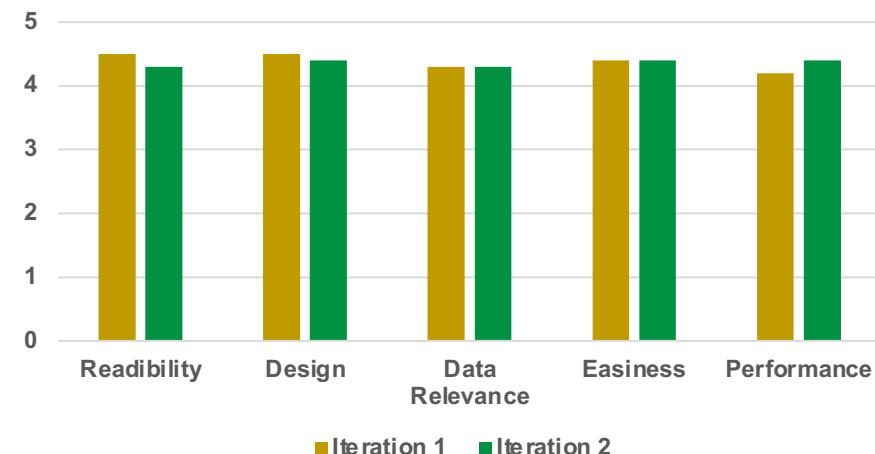
Questionnaire

Usability  
Testing

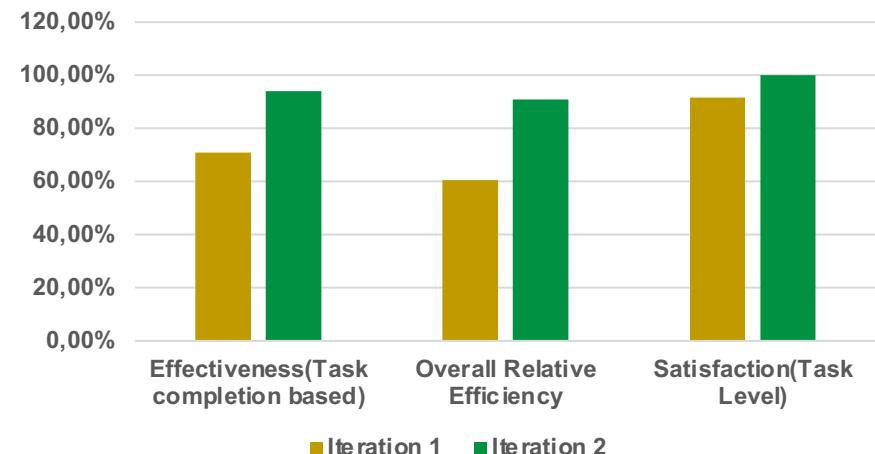


# ANALYSIS

**Questionnaire**

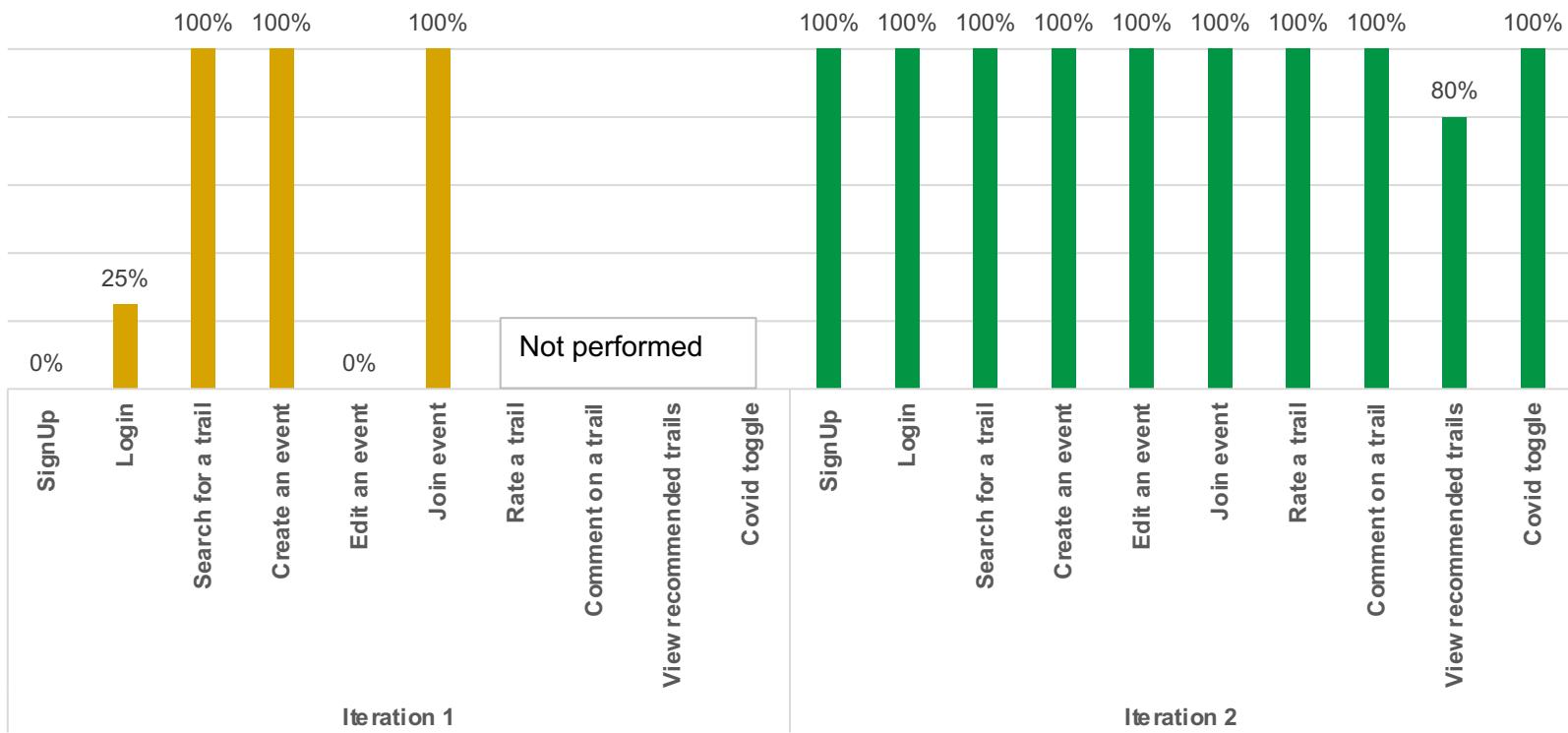


**Usability Testing**



# ANALYSIS

## Task Completion Rate



# SYSTEM REVIEW

19:25 9:25 19:25 19:25

Glendalough 'White' ★ 5.0 Route

Details Comments Events Maps

hiking nature trips walking bird wat

▲ Moderate 8.7km 3h10

Wicklow Mountains National Park

Really beautiful hike. Solid ground and boardwalks. Wear rain gear. Clouds come in fast with high wind action.

COVID CASES IN THE LAST 9 DAYS IN WICKLOW AS OF SUN (13/12) : 51 (+7)

Click for more info

Tue Wed Thu Fri

19:25 9:25 19:25 19:25

Glendalough 'White' ★ 5.0 Route

Details Comments Events Maps

Tue 15/12 Wed 16/12 Thu 17/12 Fri 18/12

8° · 3° 9° · 4° 11° · 2° 12° · 8°

Similar Trails

Glendalough 'White' Route from Visitor ★ 5.0

Bray To Greystones Cliff Trail

9:21 20:19 9:22

Cronin's Yard

Google Navigate

A walk in nature

Carrauntoohil Mountain Via Devil's Ladder Trail • Killarney National Park

DEC Saturday 19 09:00-12:00 PM 2 people max

About Exploring!!!!

Chat Share

Participants (2)

Puja V PU Puja

20:19 20:24

My Events

Upcoming Past

Hosted Events

DEC 15 Lake View 10 hour(s) 0 minutes • 1 person going • 2 max

DEC 17 Cycling 2 hour(s) 0 minutes • 1 person going • 2 max

DEC 19 A walk in nature 3 hour(s) 0 minutes • 2 people going • 2 max

Explore My Events Profile

20:24 20:24

Hey, Puja V

Search

For you Near You Best Rated Easy

Carrigeenamronety Loop Kildorrery

No rating No comments No events

Explore My Events Profile

# FUTURE WORK



## FRONTEND

User Tracking  
Notifications  
Exercise Summary



## BACKEND

Mongo Server



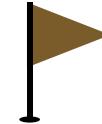
## TESTING

More blackbox &  
whitebox testing



## DATA

No. of trails  
Location-based  
recommendations



# CONCLUSION

**Cross Platform app development**

**API Usage**

**Functionality development**

**React Native**

**Machine Learning**

**Expo and React Native Libraries**

! DEMO

