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# Food Logix

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[https://github.com/E-E-Inc/FYP\\_Frontend](https://github.com/E-E-Inc/FYP_Frontend)

[https://github.com/E-E-Inc/FYP\\_Python](https://github.com/E-E-Inc/FYP_Python)

## Introduction

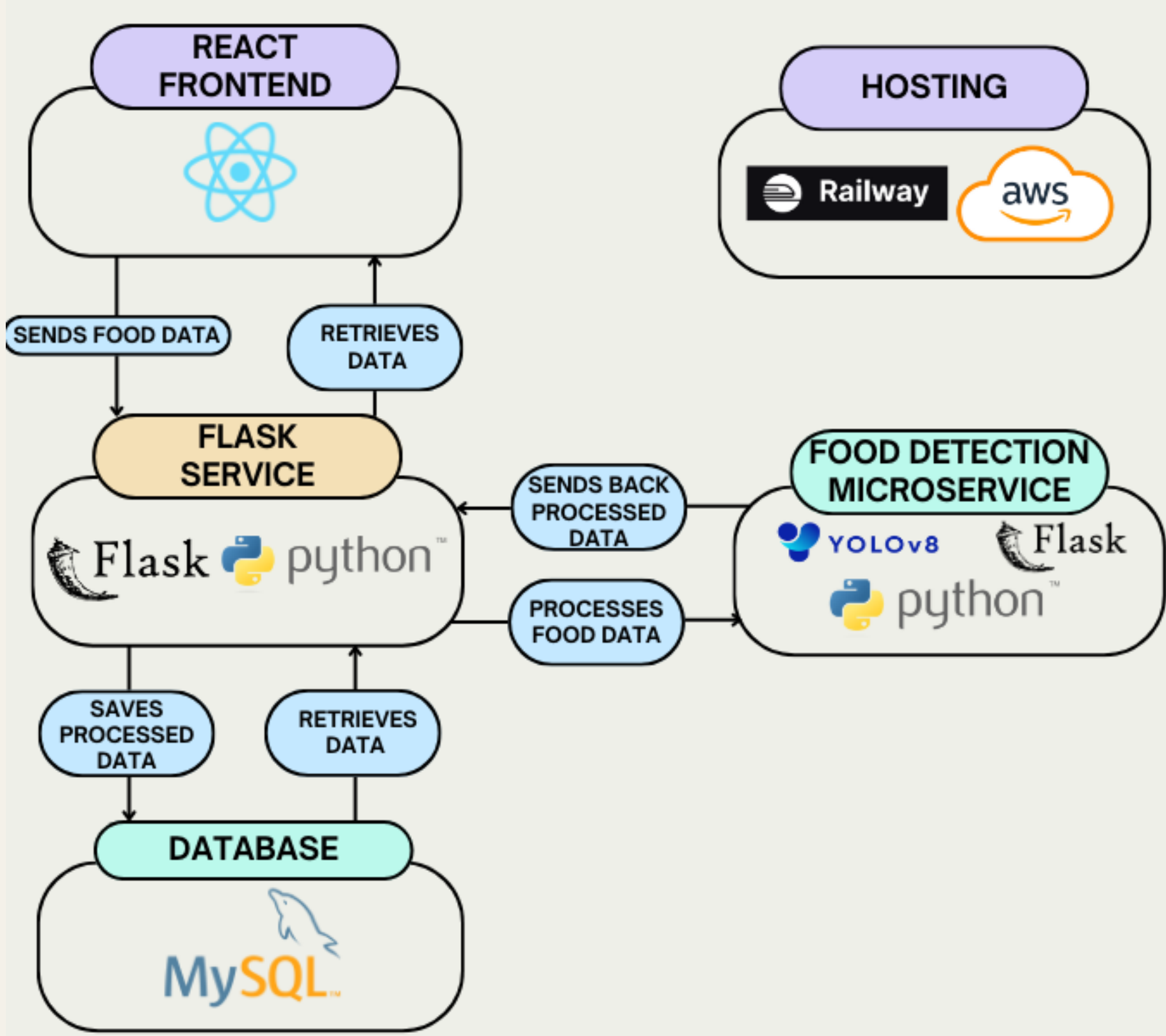
Food Logix is a food-tracking app that utilizes machine learning models for food identification. The project aims to provide a user-friendly calorie-tracking solution utilizing machine learning and image recognition technologies.

### Key Features include:

- Effortless food tracking
- Accurate calorie calculation
- Real-time meal tracking
- User-friendly interface
- Calorie dashboard

## System Architecture

### SYSTEM ARCHITECTURE

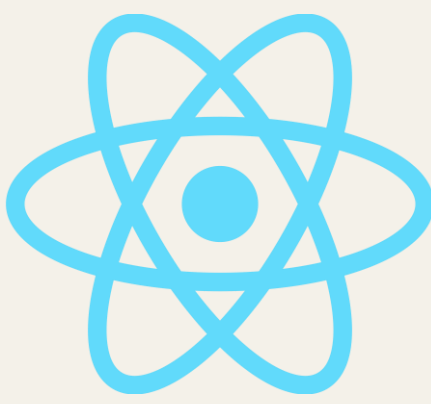


## Objectives

The success of the project was determined by the completion of the following objectives

- Food identification that utilizes machine learning
- Calorie calculation based on portion size
- Real time meal tracking
- Display nutritional information in a dashboard

## Technologies used



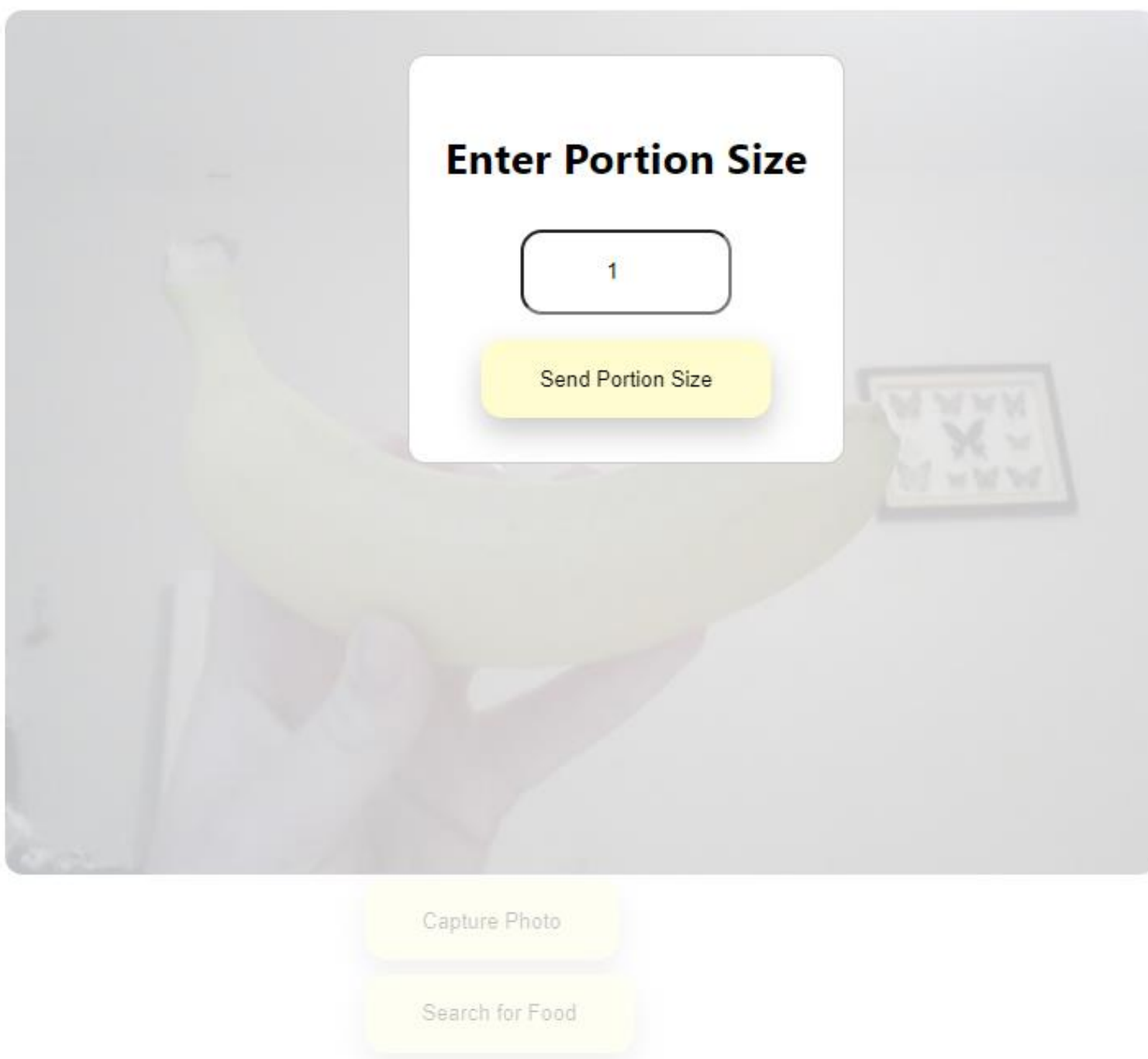
## Methodology

- The project follows an agile methodology
- Used Jira
- User stories were developed and analyzed
- Sprints were used with tasks from the backlog worked on during each sprint

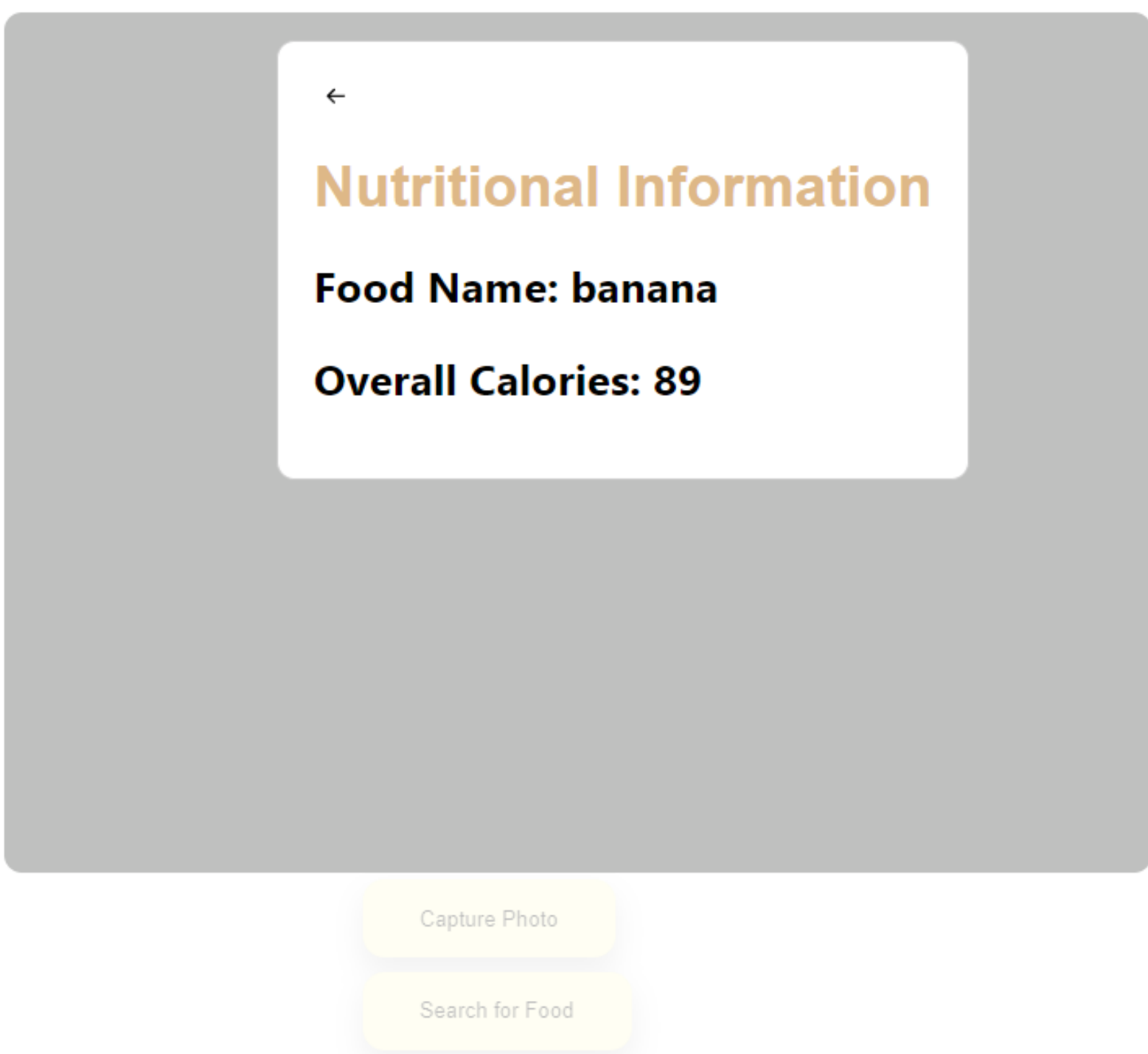
## Results

- Login and sign-up functionality have been implemented.
- Users can capture pictures or manually enter food items.
- Food is identified using YOLOv8

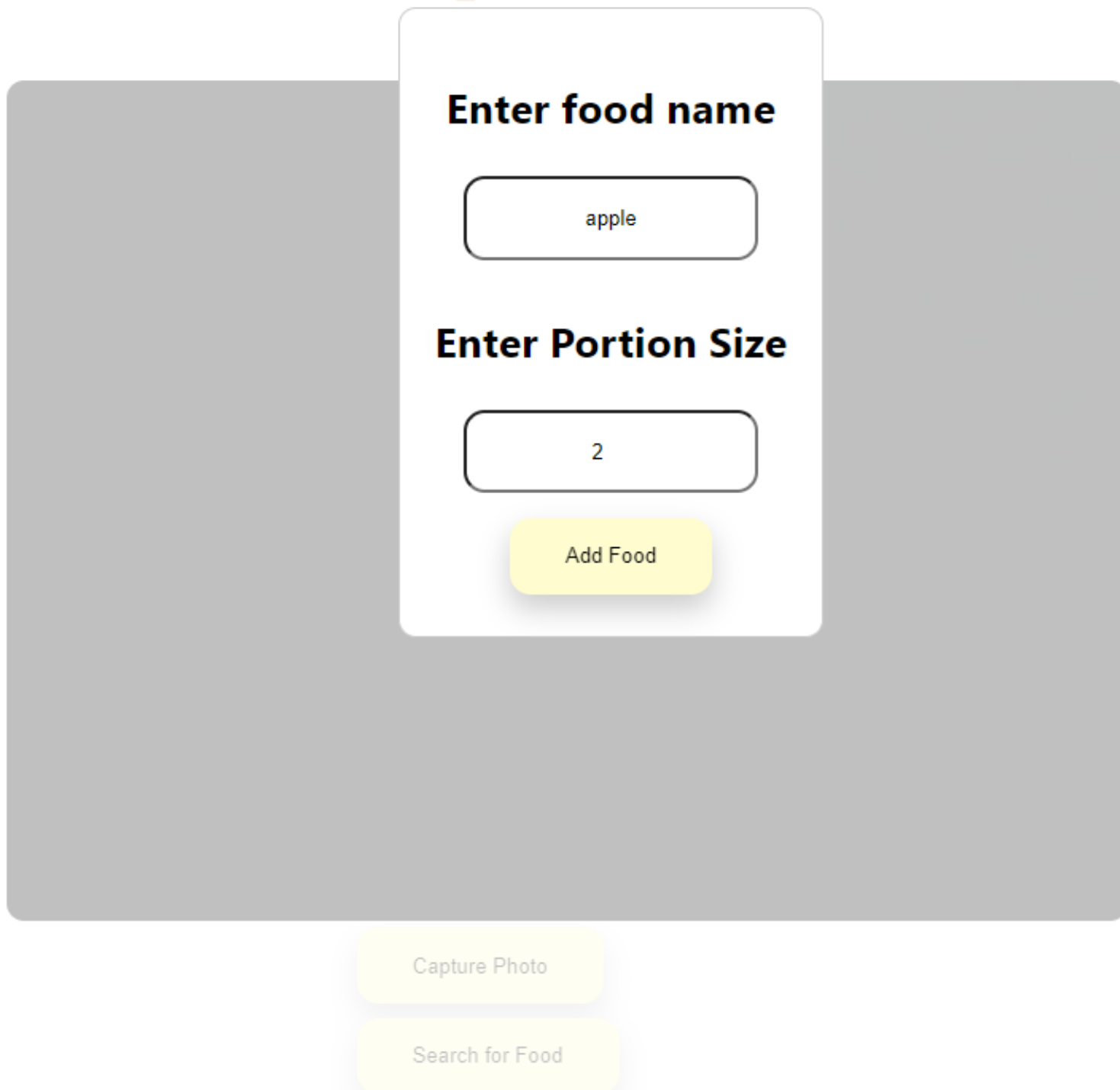
## Whats on your plate?



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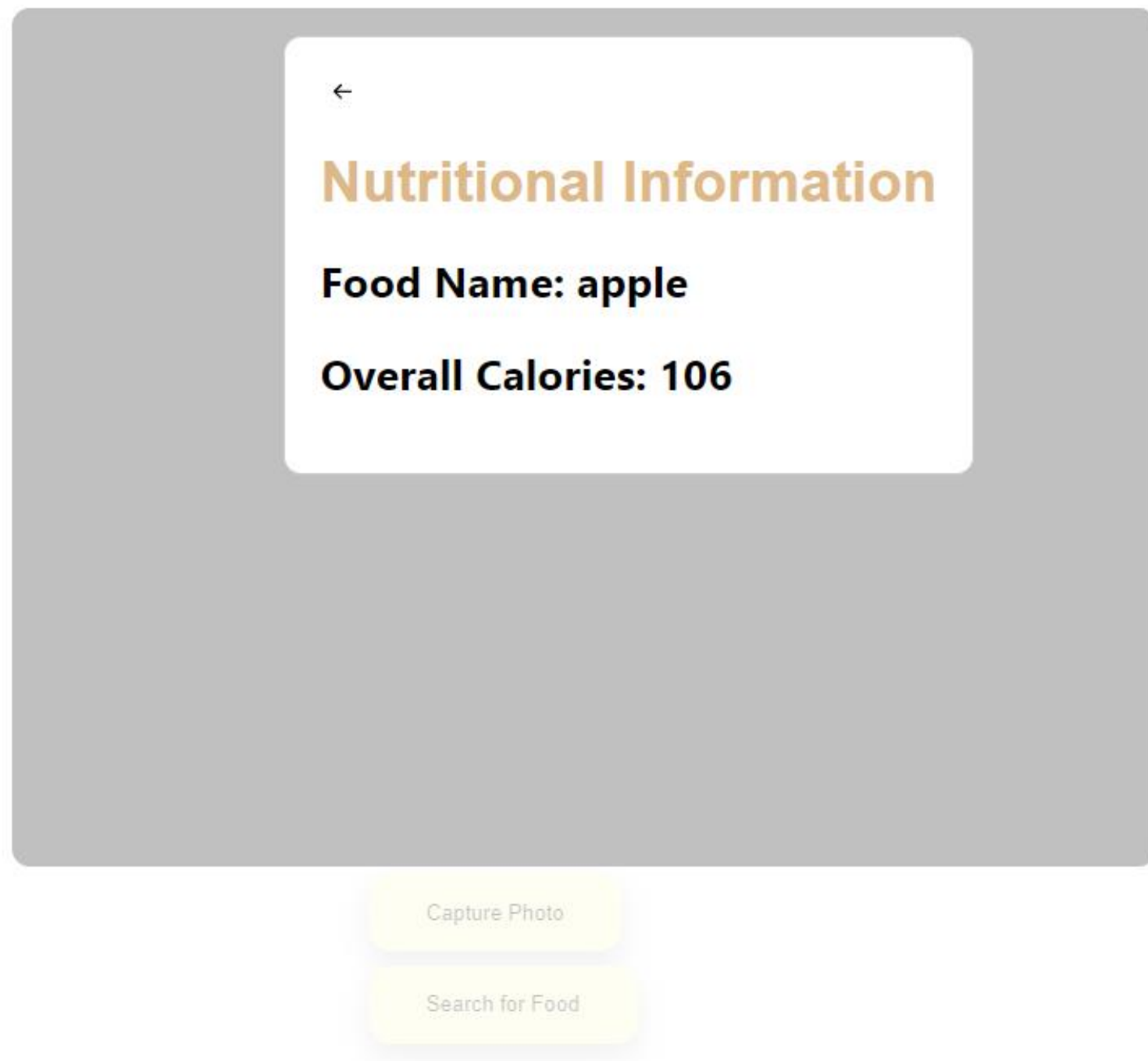


## Whats on your plate?



- The dashboard displays food information for a particular date
- The recommended calories compared to calories consumed are visualized in a bar chart

## Whats on your plate?

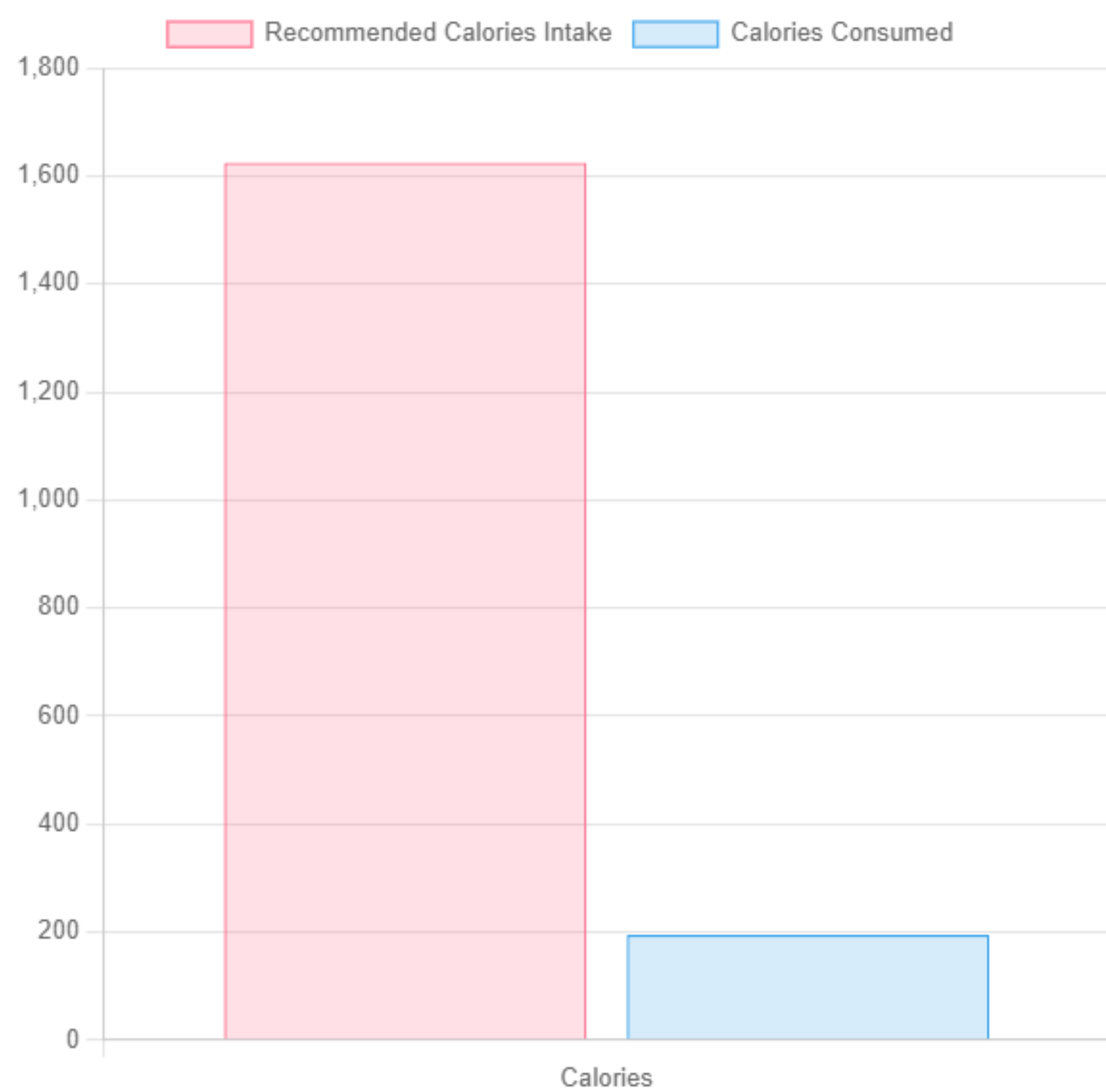


## Dashboard

Date: 21/04/2024

Food Item	portion size	Calories	More
banana	1	89	ⓘ
apple	2	106	ⓘ

Total Calories: 195  
Recommended Calories Requires: 1624.83



## Future Work

- Enhanced food recognition
- Integration with wearable devices
- Improved user experience
- Multimodal Input support

## Conclusion

Food Logix is a calorie tracker app that displays nutritional information and uses machine learning for a better user experience. It has demonstrated success, but there are some limitations. The app is poised for expansion and improvement.

## References

- <https://flask.palletsprojects.com/en/3.0.x/>
- <https://docs.ultralytics.com/tasks/detect/>
- <https://react.dev/>