

Ratatouille

food app

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Overview

Many dorm students struggle with limited time and experience to cook for themselves, resulting in unhealthy eating habits and unbalanced diets.



Overview

Introducing "Ratatouille",
an app where users input the available ingredients,
and it then generates recipes using these ingredients,
providing options for filtering based on preferences.



Backlog

- Kiro Zikry (UI)
- Mario & Michael (Computer Vision, and ML)
- Kiro Fouty (Database, and user profile management)
- Mark & Moaz (Documentation, reports and diagrams)



Backlog



▼ Milestone 1 6 Mar – 7 Mar (12 issues)

0 0 0

Complete sprint



SCRUM-1 Design a Use Case	DONE ▼	MM
SCRUM-2 Choose Function Requirement	DONE ▼	KF
SCRUM-3 Study flutter	DONE ▼	KZ
SCRUM-16 M1: Presentation Slides	DONE ▼	KF
SCRUM-15 M1: Design specification document	DONE ▼	MR
SCRUM-8 M1: overview	DONE ▼	KF
SCRUM-14 M1: Requirements specification document	DONE ▼	KZ
SCRUM-9 M1: backlog	DONE ▼	KF
SCRUM-12 M1: Identified risks	DONE ▼	KF
SCRUM-13 M1: Identified features	DONE ▼	KF
SCRUM-10 M1: UML diagram	DONE ▼	MK
SCRUM-11 M1: Use case diagram	DONE ▼	MK

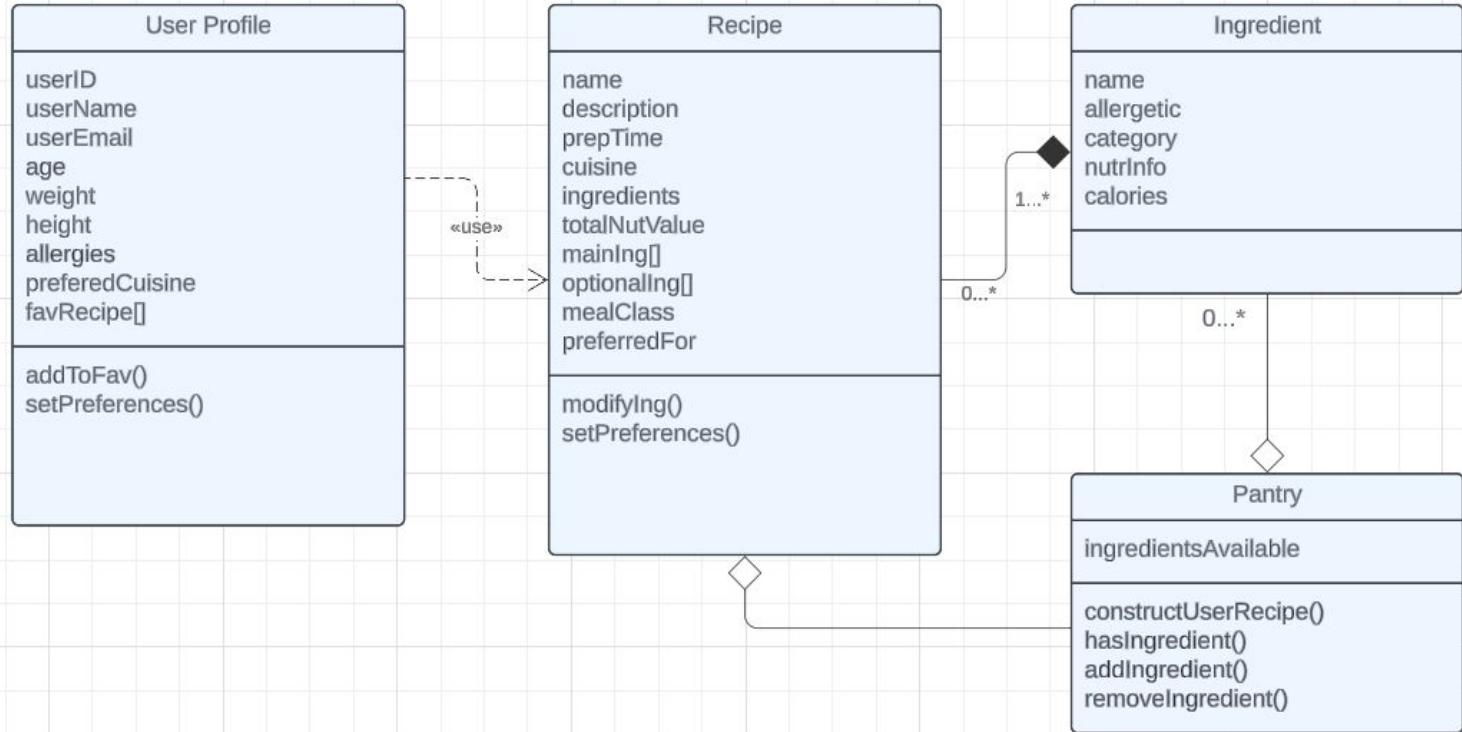
Backlog

▼ Backlog (17 issues)

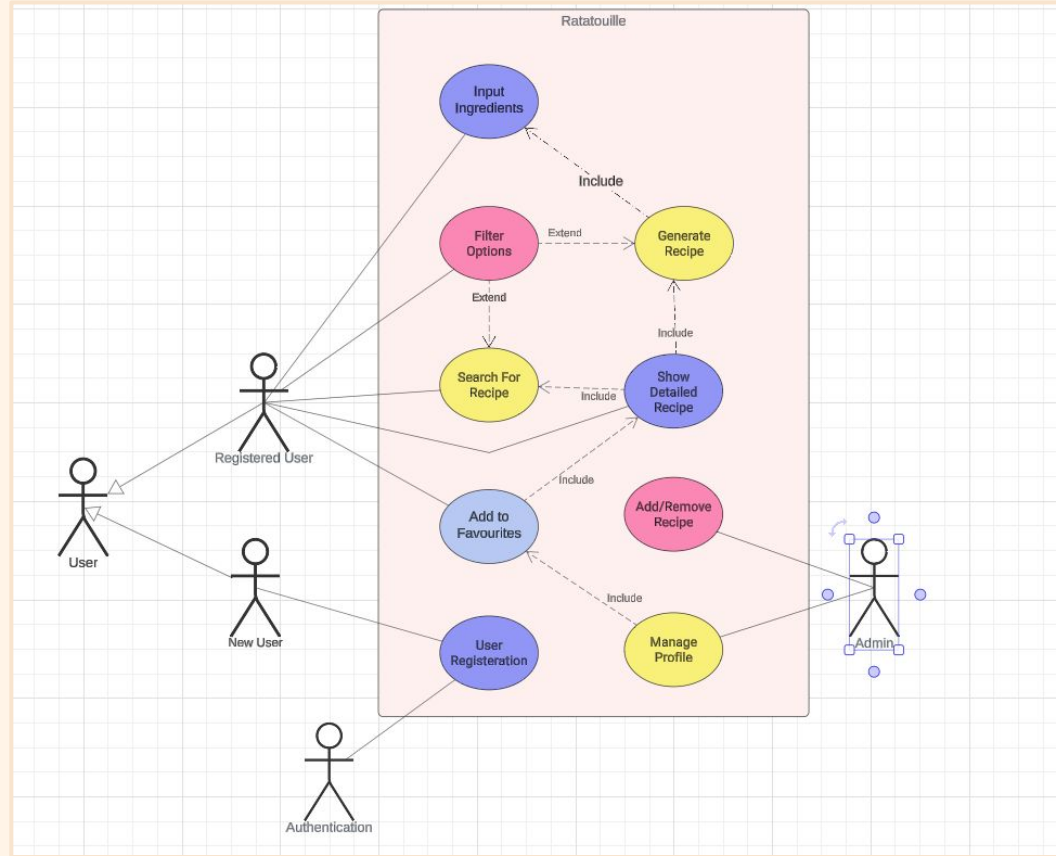
000Create sprint

SCRUM-4 UI	TO DO ▼	- KZ
SCRUM-5 Computer Vision, and ML (part A)	TO DO ▼	- MR
SCRUM-6 Database, and user profile management	TO DO ▼	- KP
SCRUM-7 Documentation, reports, and diagrams (part A)	TO DO ▼	- MK
SCRUM-17 Computer Vision, and ML (part B)	TO DO ▼	- MM
SCRUM-18 Documentation, reports, and diagrams (part B)	TO DO ▼	- MH
SCRUM-19 Recipe Generator	TO DO ▼	-
SCRUM-20 Cuisine Filtering	TO DO ▼	-
SCRUM-21 Meal History	TO DO ▼	-
SCRUM-22 Favourite Meals List	TO DO ▼	-
SCRUM-23 Personalised Meals and Portions	TO DO ▼	-
SCRUM-24 Ingredients Scanner & Auto-Select	TO DO ▼	-
SCRUM-25 Allergen Filtering	TO DO ▼	-
SCRUM-26 Calories Calculator	TO DO ▼	-
SCRUM-27 Integrated Timer	TO DO ▼	-
SCRUM-28 Integrated Measuring Units Converter	TO DO ▼	-
SCRUM-29 General Health and Wellness Tips Banner	TO DO ▼	-

UML diagram



Use Case diagram



Identified Risks

Developers POV:

- Security (User Profiles and the Database)
- Compatibility and Device Limitations (internet, and camera quality)

Users POV:

- Nutritional Information Inaccuracy
- Misinterpretation and Liability
 - User Experience risks



Identified Features

- Recipe Generator
- Cuisine Filtering
- Favourite Meals List
- Personalised Meals and Portions (depends on user's profile: weight, age, and height)
- Ingredients Scanner & Auto-Select



Identified Features

- Allergen Filtering
- Calories Calculator
- Integrated Timer
- Integrated Measuring Units Converter
- General Health and Wellness Tips Banner



Requirements Specification Document

- **Purpose:** Enable dorm students to cook healthier meals by generating recipes based on available ingredients.
- **Functional Requirements:** (User Registration, Ingredient Input, Recipe Generation, Filtering Options, Recipe Details, Save and Favorite Recipes, Search Functionality)
- **Non-functional Requirements:**
(**Performance:** responsive and capable; **Usability:** intuitive, user-friendly;
Security: data; **Scalability:** growing user base; **Compatibility:** various devices)
- **Constraints and Assumptions:** (**Constraints:** Limited development timeline;
Assumptions: Users have internet connectivity.)
- **Acceptance Criteria:** User and Functional Acceptance criteria defined.
- **Dependencies:** (APIs and Libraries, database online service Development Tools)



Design Specification Document



Problem:

Dorm students struggle with time and experience, leading to unhealthy eating habits.

Solution:

"Ratatouille" - An app where users input ingredients for personalized, healthy recipes.

Features:

- Ingredient Input
- Recipe Generation
- Filtering Options
- Nutritional Information
- User Profiles



Design Specification Document



Tech Stack:

- Frontend: Flutter or react.js
- Backend: Node.js, MongoDB
- Algorithm: ML for ingredients recognition(by image)

Development Plan:

Frontend & Backend Setup
Recipe Database & Algorithm
User Profiles & Additional Features
Testing & Bug Fixes
Final Demo & Launch



Conclusion

"Ratatouille" aims to empower dorm students to make healthier and more informed cooking choices, ultimately improving their overall well-being.

By addressing the challenges of limited time and cooking experience, we strive to promote a culture of self-sufficiency, and balanced living among dorm communities.





Thanks

Do you have any questions?

