

Experiment – 8 Creating a Project in JIRA Food Management System Software Engineering

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1. Introduction

The Food Management System (FMS) is designed to streamline food distribution, tracking, and waste management in a structured and efficient manner. This system ensures that food inventory is well-managed, minimizes wastage, and optimizes resource allocation.

2. Objectives

- To develop an efficient food management and tracking system.
- To integrate real-time food inventory monitoring.
- To optimize food distribution and reduce wastage.
- To provide an analytics dashboard for data insights.

3. Features

- User Management: Role-based access control for admin, vendors, and customers.
- Inventory Tracking: Real-time monitoring of food stock and expiration dates.
- Order Management: Streamlined ordering process for vendors and users.
- Waste Management: Data-driven insights to minimize wastage.
- Reports & Analytics: Visualization of trends and statistics.
- Mobile & Web Support: Cross-platform accessibility.

4. Technology Stack

• Frontend: HTML, CSS, JavaScript

Backend: PHP

• Database: MySQL

• Project Management: JIRA, GitHub

5. Project Plan in JIRA - Food Management System

1. Project Configuration

• Project Name: Food Management System (FMS)

• Project Type: Scrum

• **Sprint Duration:** 2 weeks per sprint

• Board Type: Scrum Board

2. Sprint Breakdown

Sprint	Name	Start	End	Key Features
		Date	Date	
SCRUM-	User	Feb 1	Feb	User registration,
1	Management		14	authentication, role
				management
SCRUM-	Food Donation	Feb 1	Feb	Donor registration,
2	Management		14	donation tracking,
				approval workflow
SCRUM-	Food Request	Feb	Feb	Request food, claim
3	and Claiming	10	24	tracking, notifications
SCRUM-	Notifications and	Feb	Mar 1	Email/SMS alerts for
4	Alerts	15		requests, approvals
SCRUM-	Admin	Feb	Mar 1	Analytics, reports, user
6	Dashboard	15		activity logs
SCRUM-	Location and	Mar 1	Mar	Map-based donation
7	Mapping		14	tracking, location services
SCRUM-	Testing and	Mar	Mar	System testing, bug fixes,
8	Deployment	10	24	deployment setup
SCRUM-	Maintenance and	Mar	Apr	Ongoing support,
9	Support	20	10	improvements,
				monitoring

3. JIRA Workflow

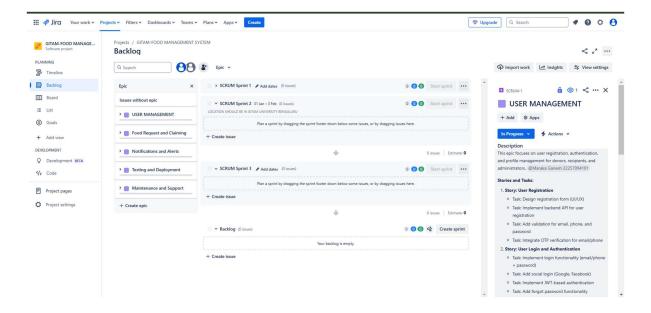
1. Backlog: Collect all tasks and features.

2. **To Do:** Move sprint tasks before starting work.

3. In Progress: Active development phase.

4. Code Review: Peer review and validation.

- 5. **Testing:** QA testing for bugs and performance.
- 6. Done: Completed and deployed features.

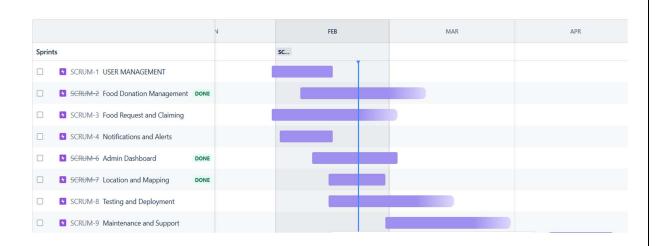


4. JIRA Task Structure for Each Sprint

Each sprint will have epics, user stories, and tasks:

Example: SCRUM-1 (User Management)

- Epic: User Authentication System
 - User Story 1: As a user, I should be able to register an account.
 - User Story 2: As an admin, I should be able to manage user roles.
 - Task 1: Develop authentication API.
 - o **Task 2:** Implement JWT-based authorization.



5. Reporting & Monitoring

- Sprint Burndown Chart: Track task completion over sprint duration.
- Velocity Chart: Monitor team performance.
- Release Management: Deploy stable features iteratively.

6. CONCLUSION

The Food Management System is a comprehensive solution that enhances food resource tracking and minimizes waste. Using JIRA for project planning ensures a structured approach, timely deliverables, and efficient collaboration. The proposed sprints and workflows will help in systematic development and deployment of the system.