# **CSC154 Software Development**

# **Project Overview Template**

-------------------------------------------------------------------------------------------------------------------------------------

**Project Name: OmniStock**

**Team Number: 7**

**Project Manager: Brandon Tatum**

**Mentor: Sandeep Ginna**

**Team Members:** **Esteban Spadea  
 Bethany Hill  
 Serina Rodriguez  
 Dillon Hollis**

-------------------------------------------------------------------------------------------------------------------

## **Project Objective**

## The goal of this project is to develop a **barcode-based inventory tracking system** that allows users to **scan grocery items** and store them in a database. The system will track inventory levels and notify users when items are running low.

1. **Project Scope**

* **Included Features:**
* *Barcode scanning* – Users can scan grocery items to input them into the system.
* *Inventory database* – A structured database to store item details.
* *Low-stock alerts* – Automatic notifications when an item reaches a low threshold.
* *Basic reporting system* – Displays recent scans, usage trends, and stock levels.
* *User-friendly interface* – Simple UI for scanning and managing inventory.
* **Excluded Features:**
* Full mobile app development (will focus on desktop/web version first).
* Automated online grocery ordering (future enhancement potential).

## **Team Collaboration and Documentation Tools**

* **Jira** – Used for task management, sprint tracking, and issue tracking. Tasks will be assigned and updated based on sprint progress.
* **GitHub** – Version control and repository for project files and source code. All changes in code will be committed and reviewed via pull requests.
* **Microsoft Teams** – Weekly meetings, communication, and collaboration. Weekly meetings every **Wednesday at 7 PM** for progress updates.

## **Project Management Plan and Methodologies**

* **Agile & Scrum** – The team will use an iterative development approach.
* **Sprint-Based Work** – Tasks will be broken into four sprints aligned with course deadlines.
* **Role-Based Task Assignments** – PM leads coordination, members handle specific tasks.
* **Version Control via GitHub** – Ensuring proper documentation and structured commits.

To ensure effective project management, our team will adopt an Agile and Scrum methodology, allowing us to work iteratively while adjusting to new challenges. We will divide tasks into four sprints that align with our course deadlines, ensuring that each phase of development is well-structured and manageable. The Project Manager (PM) will oversee coordination, assign tasks, and track progress, while team members will focus on their designated responsibilities to maintain efficiency.

For task management and transparency, we will use Jira, where all tasks will be logged and updated daily. This will provide clear visibility into ongoing work and upcoming priorities. Sprint planning meetings will be held every Wednesday, ensuring that the team stays aligned on goals, blockers are addressed, and progress is reviewed.

In terms of version control, all project-related documentation and code will be maintained in GitHub. Team members will follow a structured workflow, using feature branches and submitting pull requests for review before merging changes into the main branch. This will help maintain code quality and prevent conflicts. By consistently tracking tasks, holding regular sprint reviews, and maintaining proper documentation, our team will ensure a smooth and organized development process.

1. **Project Timeline**

* Sprint 1 – Project Selection and Development Plan (02/10/2025 – 03/02/2025)
* Finalize project selection.
* Create project management plan.
* Complete and submit project overview documents.
* Sprint 2 – Project Requirements Specification (03/03/2025 – 03/16/2025)
* Define user stories and functional requirements.
* Complete first draft of requirements documentation.
* Sprint 3 – Project High-Level Design (03/24/2025 – 04/06/2025)
* Develop system architecture.
* Finalize database design and UI wireframes.
* Sprint 4 – Project Presentation and Evaluation (04/07/2025 – 05/04/2025)
* Finalize project documentation.
* Complete project presentation.
* Conduct peer evaluations.

1. **Project Deliverables**

* Project Overview Document
* Project Software Requirements Specification – Version 1
* Project Software Requirements Specification – Version 2
* Project Weekly Status Reports
* Project Presentation
* Project Self and Peer Evaluations