



Computer science department.

Software Engineering COMP433.

Title: Project Management and Team Evaluation Report

Group Number: 1

Student Name	Student ID
Ayman Alqayem	1220040
Abdallah Mattour	1223061
Abdallah Najar	1220864
Mohmmad Srour	1220354
Mohammad Thabit	1220142

Table of content

Contents

Table of content	2
Project Management Strategy	3
Task 1.7: Project Manager Report (Ayman Alqayem)	3
Team Contributions	4
Challenges Faced	5
Evaluation of Success	5
Task 1.8 – Group members report	6
Ayman Alqayem Report	6
Abdallah Mattour Report	7
Abdallah Najjar Report	8
Mohammad Thabit Report	9
Mohammad Srour Report	11

Project Management Strategy

The Sandwich Shop System project was managed using a hybrid software process model, combining elements of Agile and Waterfall methodologies to balance flexibility and structured deliverables. The team adopted Agile practices for iterative development, holding bi-weekly meetings (every Tuesday and Thursday, 2:00 PM–3:20 PM) to review progress, discuss requirements, and assign tasks. These meetings, involved all five team members (Ayman Alqayem, Abdallah Mattour, Abdallah Najar, Mohammad Srour, Mohammad Thabit) and occasionally customer representatives to ensure alignment with stakeholder needs. Each meeting followed a structured agenda: reviewing completed tasks, discussing challenges, and planning the next sprint. Decisions were made collaboratively through discussion and consensus, with the project manager (Ayman Alqayem) facilitating and making final calls only when consensus was not reached, ensuring fairness and team buy-in. The Waterfall model was applied for the sequential completion of project phases (e.g., requirements gathering, system design, and deployment planning), as outlined in the 10-week timeline (Task 2.3). Task assignments were based on individual strengths, with each member leading specific tasks (e.g., use case specifications, diagrams) and contributing to reviews or discussions or finalized.

Task 1.7: Project Manager Report (Ayman Alqayem)

As the project manager for the Sandwich Shop System, I led a cohesive team to deliver a comprehensive, scalable software design within a 10-

week timeline and \$15,000 budget. Below is a detailed overview of contributions, challenges, and my evaluation of the project's success.

Team Contributions

- **Ayman Alqayem** (Project Manager): Led Task 2.1 (User Requirements), Task 3.1 (Scenario Analysis for Online Order Placement), Task 3.2 (Actor Analysis), Task 3.3 (Use-Case Modelling), Task 3.5 (Activity Modelling), Task 4.3 (System Design Goals), and Task 4.2 (Sequence Diagram for Place Order). Contributed to discussions and reviews across all tasks and finalized Task 4.4 (System and Component Modelling).
- **Abdallah Mattour**: Led Task 4.1 (System Class Modelling), Task 4.2 (Sequence Diagram for Choose Payment Method), and Task 3.4 (Use Case Specification for Process Payment). Provided critical reviews for multiple tasks, ensuring technical accuracy.
- **Abdallah Najar**: Led Task 2.2 (System Requirements), Task 4.4 (System and Component Modelling), and Task 3.4 (Use Case Specification for Generate Sales Report). Finalized several tasks, enhancing deliverable quality.
- **Mohammad Thabit**: Led Task 4.5 (System and Architectural Design) and Task 3.4 (Use Case Specification for Maintain Inventory). Actively participated in discussions, contributing to robust system design.
- **Mohammad Srour**: Led Task 4.6 (System and Deployment Modelling) and Task 2.3 (Effort Cost and TimeLine Estimation), and Task 3.4 (Use Case Specification for Receive Order Notification). Finalized multiple tasks, ensuring comprehensive documentation.

Challenges Faced

- **Stakeholder Alignment:** Reconciling diverse customer preferences (e.g., multiple payment methods) required iterative discussions with customer representatives, resolved through frequent meetings.
- **Time Constraints:** The 10-week timeline posed scheduling challenges, mitigated by parallel task assignments and clear milestone tracking.
- **Technical Complexity:** Ensuring real-time inventory updates and order processing within 2 seconds demanded rigorous testing, addressed through Agile sprints and early prototyping.

Evaluation of Success

I consider the project highly successful, as we delivered a robust system design meeting all user requirements (e.g., customizable orders, real-time notifications, sales reporting) within the allocated time and budget. The hybrid Agile-Waterfall approach enabled iterative refinement while adhering to structured milestones. Collaborative decision-making fostered team synergy, and stakeholder feedback validated the system's readiness for implementation. The design's scalability to support 5,000 monthly customers and 5,000–6,000 products position the Sandwich Shop for future growth, marking a significant achievement.

Task 1.8 – Group members report

Ayman Alqayem Report

As the project manager and a key contributor, I believe the Sandwich Shop System project was a success, as we delivered a robust, scalable design meeting all stakeholder needs within the 10-week timeline and \$15,000 budget. The system's ability to handle 5,000–6,000 monthly products, real-time notifications, and comprehensive reporting reflects our thorough requirements analysis and design. I led Task 2.1 (User Requirements), Task 3.1 (Scenario Analysis for Online Order Placement), Task 3.2 (Actor Analysis), Task 3.3 (Use-Case Modelling), Task 3.5 (Activity Modelling), Task 4.3 (System Design Goals), and Task 4.2 (Sequence Diagram for Place Order), while finalizing Task 4.4 (System and Component Modelling) and contributing to discussions and reviews across all tasks. My leadership ensured effective team coordination, consensus-driven decisions, and timely milestone completion, while my technical contributions, such as the Place Order use case and sequence diagram, directly supported the system's core functionality. The collaborative environment and hybrid Agile-Waterfall approach were instrumental in overcoming challenges like requirement alignment and time constraints, resulting in a high-quality deliverable ready for implementation.

Abdallah Mattour Report

I believe our Sandwich Shop System project was highly successful, both in terms of meeting stakeholder needs and achieving measurable outcomes. We fully delivered all planned artifacts within the 10-week schedule, covering over 20 detailed deliverables, including requirements specifications, five core use case specifications, and corresponding diagrams. My main contributions include leading Task 2.2 (System Requirements), where I formulated and documented 8 comprehensive system requirements mapped from user needs; Task 3.1 (Scenario Analysis for Walk-in Order with Inventory Shortage and Cash Payment), where I created and wrote a realistic scenario addressing inventory constraints and alternative flows; Task 3.4 (Use-case Specification for Choosing a Payment Method), specifying detailed flows for cash, card, and mobile payments; Task 4.1 (System Class Modelling and Analysis), where I designed the main class diagram reflecting all system entities and their relationships; and Task 4.2 (Sequence Diagram for Choosing Payment Method), visualizing all message exchanges for payment logic. Additionally, I provided reviews and quality checks in Task 2.1 (User Requirements), Task 3.2 (Actor Analysis), Task 3.5 (Activity Modelling), Task 4.3 (System Design Goals), and Task 4.4 (System and Component Modelling), and I actively discussed critical modeling decisions in Task 3.3 (Use-Case Modelling) and Task 4.6 (System and Deployment Modelling). The project's success is reflected in our ability to model a scalable solution for up to 5,000 monthly customers and 5,000–6,000 products, guarantee real-time order validation within 2 seconds, and integrate all stakeholder requirements into functional system components.

Abdallah Najjar Report

I'm proud to say that our Sandwich Shop System project was a major success, delivering real value to stakeholders and meeting all performance goals. Over the 10-week development cycle, we completed more than 20 detailed deliverables on time, including specifications, diagrams, and core system models. My main role focused on designing and documenting key reporting features. I took the lead on Task 2.2, where I helped translate user needs into eight clear and measurable system requirements that formed the foundation of the solution. In Task 3.1, I wrote the full scenario for the "Generate Sales Report" use case, showing how a manager interacts with the system to filter, analyze, and download sales data — including realistic error handling and alternative flows. I also created the full use case specification for this feature in Task 3.4, covering the complete logic, inputs, and expected system behavior. Later in Task 4.2, I designed the related sequence diagram to represent how the report generation flow works behind the scenes, highlighting database access and response timing. In addition to these main tasks, I supported quality reviews in Task 2.1 (User Requirements) and contributed to team discussions and reviews in Tasks 3.2, 3.3, and 4.6 to help align our models with business needs. The final system we built can support 5,000+ monthly orders, generate reports within two seconds, and respond to all customer and staff roles effectively. I'm confident that my contributions helped ensure the system was not only functional, but also scalable and ready for real-world use.

Mohammad Thabit Report

I consider our Sandwich Shop System project a successful and highly rewarding experience that combined technical depth with effective teamwork. Throughout the 10-week timeline, I played a key role in shaping the system's architecture and ensuring robust modeling for critical operations. I led Task 4.5 (System and Architectural Design), where I developed the layered architecture and outlined component responsibilities, ensuring the design supports future scalability and maintainability for handling over 5,000 monthly products.

In Task 3.4, I was responsible for the full Use Case Specification for "Maintain Inventory", which detailed how chefs can update, delete, and add ingredients, including validation logic, error flows (e.g., notification failures or invalid input), and alternative flows (like bulk updates and barcode scanning). To support this, I also prepared the sequence diagram for the same use case in Task 4.2, clearly illustrating system behavior during inventory operations and low-stock alerts.

Beyond these core tasks, I actively participated in Task 2.1 (User Requirements) and Task 2.2 (System Requirements) through group discussions and reviews to help refine functionality around inventory tracking and staff notifications. I also contributed to Task 2.3 (Effort, Cost, and Timeline Estimation), aligning architecture choices with realistic development planning. In Task 3.3 (Use Case Modelling) and Task 3.5 (Activity Modelling), I provided input on system interaction design to ensure consistency across diagrams.

My focus was on ensuring that the inventory module was not only technically sound but also integrated smoothly with other components such as real-time order validation and notification systems. The clarity of documentation and the alignment with system goals reflect a solid, team-driven development process. I'm confident that my contributions helped strengthen the technical foundation of the system and ensured its readiness for real-world deployment.

Mohammad Srour Report

From my perspective, the Sandwich Shop System project was a well-executed and rewarding experience that balanced technical achievement with strong team collaboration. The final system met all stakeholder expectations and was delivered on time, with over 20 structured deliverables completed within the 10-week timeline. These included use case specifications, activity and sequence diagrams, class and deployment models, and effort estimation. I played a key role in leading multiple tasks: Task 2.3 (Effort, Cost, and Timeline Estimation), where I worked on breaking down the development into components, estimating developer workload, and calculating total project cost and schedule; Task 3.4 (Use Case Specification – Receive Order Notification), where I detailed the complete logic and interaction flow for how staff receive real-time order alerts; and Task 4.6 (System and Deployment Modelling), where I designed and documented the deployment architecture, clearly mapping system components to runtime environments.

Additionally, I prepared the full scenario description for “Receive Order Notification” (Task 3.1), the activity diagram for that use case (Task 3.6), and the sequence diagram (Task 4.2) illustrating real-time system behavior. I also contributed significantly by finalizing or reviewing critical components in Tasks 2.2, 3.3, 3.5, 4.1, 4.3, and 4.5, ensuring quality and alignment with system goals. My input was valuable in shaping discussions in Task 2.1, 3.2, and 4.4, where I helped evaluate options and clarify design decisions during team meetings. My focus on the notification and deployment features contributed directly to the system’s ability to handle 5,000+ monthly orders, support real-time messaging within 2 seconds, and integrate technical and functional requirements into a cohesive solution.

END