Kirana - Project Report and Lessons Learned

Project Title:

Kirana - Local E-Commerce and Communication Platform

Team:

Devinity

Project Duration:

2nd August – 9th October 2025

Faculty Supervisor:

Ms. Maryam Feroze

1. Project Overview

Kirana was developed as a web-based platform aimed at empowering local shop owners and buyers by combining real-time chat and bazaar marketplace features in a single interface.

It enables vendors to create an online presence and interact with nearby customers..

The project followed a structured Software Development Life Cycle (SDLC) and Waterfall Model, ensuring controlled execution, timely delivery, and quality outcomes.

2. Objectives

- To design and develop a chat-enabled local marketplace for small vendors.
- To apply project management principles (WBS, COCOMO, Function Point, Risk Planning, etc).

- To ensure on-time delivery through proper scheduling and resource allocation.
- To conduct comprehensive testing and quality assurance before deployment.

3. Project Achievements

- **Achieved Success Criteria:** We were able to onboard 15+ stores and around 12 customers with a user satisfaction rate of 80%.
- **Successful Deployment:** Fully functional web app with chat, bazaar, and user authentication.
- **Feature Completion:** All planned deliverables were implemented within scope and schedule.
- **Effective Team Collaboration:** Weekly meetings, centralized documentation, and role-based task allocation ensured smooth coordination.
- **Testing Success:** Manual Testing and UAT achieved positive results, confirming system reliability and user satisfaction.
- **Knowledge Integration:** Applied theoretical project management tools (SDLC, WBS, CPA, COCOMO) in a real-world context.

4. Challenges Faced

Challenges	Solution
Technical Integration Issues	Encountered initial synchronization delays between Firebase and the frontend during chat and bazaar module testing.
Time Constraints	Balancing documentation, coding, and testing phases within the small academic timeline was challenging.

Scope Refinement	The original LMS idea was discontinued;
	transitioning to a new concept required reworking the business case and plan.

5. Lessons Learned

- **Importance of Planning:** Early estimation and structured scheduling help maintain progress and avoid burnout.
- **Communication Matters:** Weekly meetings, regular work updates, and shared repositories ensured alignment and minimized rework.
- **Technical Preparedness:** Familiarizing with Firebase and real-time databases early improved development speed and reliability.
- **Scope Management:** Clear boundaries prevented scope creep and kept the team focused on core objectives.
- **Testing before Deployment**: Continuous testing significantly improves outcomes
- **Dependence on AI models:** We should rely less on AI-generated content and thoroughly proofread and edit the documents produced, so we won't need to make numerous updates later.

6. Overall Outcome

Kirana achieved its goal of creating a functional, user-friendly marketplace supported by robust communication features.

It successfully demonstrated how disciplined project management, when integrated with software development practices, can ensure on-time, high-quality project delivery.

The team concluded the project with valuable technical and managerial experience applicable to future professional endeavors.