Consolidated Project Plan: Kirana App

Project Title: Kirana: Local E-Commerce and Communication Platform
Project Manager: Muhammad Arib
Team: Devinity
Date: September 10, 2025

1. Project Overview

The Kirana App project aims to develop a mobile-first web application that addresses a clear gap in the Karachi market. It combines a privacy-first messaging service with a hyper-local marketplace for small, informal businesses. By offering features tailored to local needs—such as an Urdu interface, enhanced privacy controls, and a simple onboarding process for vendors—the project provides a trusted digital ecosystem. This initiative empowers local commerce and provides a secure alternative to mainstream communication apps, with a core promise of keeping user data within Pakistan.

2. Project Objectives & Success Criteria

Objectives:

- To design, develop, and deliver a functional Minimum Viable Product (MVP) of the Kirana App within 10-weeks of a university semester.
- To integrate a privacy-focused chat service with a user-friendly local marketplace.
- To create a simple and effective onboarding process for local, informal businesses.
- To validate the app's core concept through User Acceptance Testing (UAT).

Success Criteria:

- The functional prototype, demonstrating all in-scope features, is deployed by the project end date.
- The application passes UAT with a target group of at least 20 users and sellers without critical errors.
- The final project achieves a user satisfaction rating of 65% or higher in feedback surveys.
- All project documentation is completed and submitted as per course requirements.

3. Scope Statement

In-Scope Features (MVP):

- **General:** A responsive, mobile-first web app with Urdu and English language support.
- **User Management:** Secure user registration via phone/email and profile management.
- **Chat Features:** Private messaging with individual controls for read receipts, online

status, and typing indicators; an extended 30-minute message edit window.
- **Bazaar Features:** Simple seller profile creation and onboarding, location-based seller discovery, and a user review system.

Out-of-Scope Features:

- Native mobile applications (iOS/Android).
- Integrated online payment gateways.
- In-app delivery or logistics services.
- Advanced administrative or analytics dashboards.

4. Project Estimations (Based on FPA)

- **Total Unadjusted Function Points (UFP):** 120
- **Technology Stack:** Next.js 15 (TypeScript) for Frontend; Firebase for Backend (Auth, Firestore, Messaging).
- **Estimated Custom Code (KLOC):** ~3.3 KLOC
- **Realistic Project Size (inc. libraries and location api integrations):** 5 KLOC
- **Estimated Effort:** 13 Person-Months

5. Work Breakdown Structure (WBS) & Schedule

The project is structured into five key phases over a 10-week timeline.

Phase	Start Date	End Date	Duration	Key Deliverables
1. Planning & Requirements	Aug 2, 2025	Aug 18, 2025	~2 Weeks	Project Charter, Scope Docs, SRS
2. Design & Prototyping	Aug 19, 2025	Aug 28, 2025	~1.5 Weeks	UI/UX Designs, Clickable Prototype, System Architecture
3. Development	Aug 29, 2025	Sep 25, 2025	4 Weeks	Functional MVP with core features
4. Testing & Deployment	Sep 26, 2025	Oct 5, 2025	~1.5 Weeks	Test Reports, Deployed

				Staging Server
5. Project Closure	Oct 6, 2025	Oct 10, 2025	1 Week	Final Report & Presentation

Major Milestones:

- **Requirements Sign-Off:** August 18, 2025
- **Design & Prototype Approval:** August 28, 2025
- **Development Complete (MVP):** September 25, 2025
- **UAT Begins:** September 30, 2025
- **Final Project Submission:** October 10, 2025

6. Project Team & Responsibilities

Role	Name(s)	Primary Responsibilities
Project Manager	Muhammad Arib	Overall planning, execution, monitoring, and reporting.
Business Analyst	Haider	Requirements gathering, documentation (SRS), and analysis.
Design Team (UI/UX)	Arib, Riyan, Haider	Wireframing, mockups, and prototyping in Figma.
Development Team	Arib, Haris, Riyan	Frontend (Next.js) and Backend (Firebase) development.
QA/Testing Team	Haris, Moin, Haider	Integration testing, UAT coordination, and bug tracking.
Marketing/Engagement	Moin, Riyan, Haider	User/seller recruitment for UAT and feedback collection.
Faculty Lead	Ms. Maryam	Project Sponsor, Change Control Board, final evaluation.

7. Risk Management

Risk	Likelihood	Impact	Mitigation Strategy
Scope Creep	Medium	High	Adhere to the defined Scope Change Control Process.
User Adoption	High	High	Focus on a seamless onboarding experience. Market the unique selling points: privacy, local data, and multi-language support.
Seller Engagement	Medium	Medium	Simplify the seller onboarding process to be as frictionless as possible. Provide simple guides (in English and Urdu) and offer direct support to the initial test group.
Technical Challenges	Medium	High	Leverage the high-productivity Next.js/Firebase stack to minimize backend complexity. Maintain clear communication within the dev team to resolve integration issues quickly.

8. Tools and Communication Plan

- **Weekly Team Meetings:** Wednesdays via Google Meet to discuss progress, roadblocks, and next steps.

- **Weekly Stakeholder Updates:** A concise progress report will be submitted to the Faculty Lead every week in class.

- **Tech Stack:**
  - **Programing Language:** Type Script
  - **Frontend Framework:** Next JS 15 (App Router)
  - **Backend:** Firebase

- **Primary Tools:**
  - **Task Management:** Notion
  - **Documentation:** Google Docs
  - **Version Control:** GitHub

- **Design:** Figma
- **Team Communication:** WhatsApp