Project Plan Document – QuakeAlert

Table of Contents

1.Scope

Included:

- Earthquake data collection via AFAD/USGS APIs
- Push notification system using Expo
- Simple user interface for displaying alerts and recent quakes
- Notification preferences panel

Not Included:

- Authentication or user accounts
- Prediction based alerts

2.Project Organization

Role	Team Member	Responsibilities
Project Manager	Talha	Documentation lead, coordination, UI setup
Frontend Lead	Altar	Expo setup, UI implementation
Backend/API Lead	Yakup	Earthquake data integration and filtering
QA & Frontend	Samet	Testing, performance checks, and deployment support

3.Project Objectives

- Ensure timely and location-specific earthquake notifications
- Complete feature set delivery before the final deadline
- Maintain modular code for scalability and testing

4.Key Phases and Timeline

Phase	Start Date	End Date
Requirement Gathering	13 June	15 June
Architecture & Design	18 June	19 June
Development Phase	20 June	27 June
Testing & Refinement	28 June	30 June
Final Submission	1 July	1 July

5.Resource Planning

- Expo CLI for app development
- AFAD/USGS API for real-time data
- GitHub for code collaboration
- Google Firebase for storage and analytics

6. Risk Management

Risk: API Downtime

Mitigation Strategy: Add fallback API or mock data

Risk: Notification delivery failure

Mitigation Strategy: Early testing with Expo push token system

Risk: Timeline delays

Mitigation Strategy: Use buffer days in development and testing phases

7.Communication Plan

- Weekly online meetings for progress tracking
- GitHub issues & commits for collaboration and traceability
- WhatsApp group for instant updates

8.Change Management Plan

- Weekly reviews to assess scope changes
- Changes documented on GitHub issues

9.Budget Plan

No monetary cost; using only free tools (Expo, GitHub, APIs)

10. Acceptance Criteria & Tests

Criterion: Notification delivered < 10 seconds

Test Description: Simulate earthquake and measure time to alert

Criterion: Settings can toggle notification ON/OFF

Test Description: Change settings and verify behaviour

Criterion: Earthquake list shown accurately and updated

Test Description: Pull sample data and compare with displayed results

11. Task Matrix

Task   Responsible Member

Task	Responsible Member
Communication, budget, and change plan	Altar
Project scope and objective writing	Talha
Timeline and phase planning	Samet
Risk and resource planning	Yakup
Final review and formatting	Altar