Application Selected: Google Maps

Design Thinking Steps & Insights:

1. Empathize:

User Needs: Correct navigation, real-time traffic information, location discovery, offline use.

Pain Points:

Battery drain due to constant use of GPS.

Inability to easily find public toilets or water points.
Restricted offline functionality for remote locations

3. Ideate:

Brainstorm possible solutions:

Low-power mode with less frequent update.

Community-sourced points of interest (POIs).

Improved offline maps with rich amenities.

2. Define:

Problem Statement: Users require a more power-efficient navigation tool with improved offline functionality and superior discovery of necessary services.

5. Test:

User Testing Feedback:

Power-saving mode saves battery life but loses real-time accuracy.

Crowdsourced data is useful but requires moderation.

Offline maps are good but consume large storage space.

4. Prototype:

Make mockups:

Power-saving switch.

Crowdsourced POI submission.

Offline map download with layered data options (e.g., hospitals, ATMs).

Areas for Improvement:

Battery Efficiency: Implement adaptive refresh rates depending on speed or urgency.

Offline Features: Make modular downloads to conserve space and enhance accessibility.

Service Discovery: Leverage machine learning to suggest fundamental services dynamically.

User Contribution: Provide a gamified scheme for authenticating crowdsourced data.

Current State	Desired State	Gaps
High battery usage during navigation	Energy-efficient navigation with adjustable refresh rates	No adaptive power-saving features
Limited offline functionality	Comprehensive offline maps with amenities	Sparse offline POI data; no layered downloads
Basic place discovery	Rich discovery of essential services (e.g.,	Lack of detailed service categories and
Standardized POI listings	Dynamic, community-driven POIs	No user-driven submission system with verification