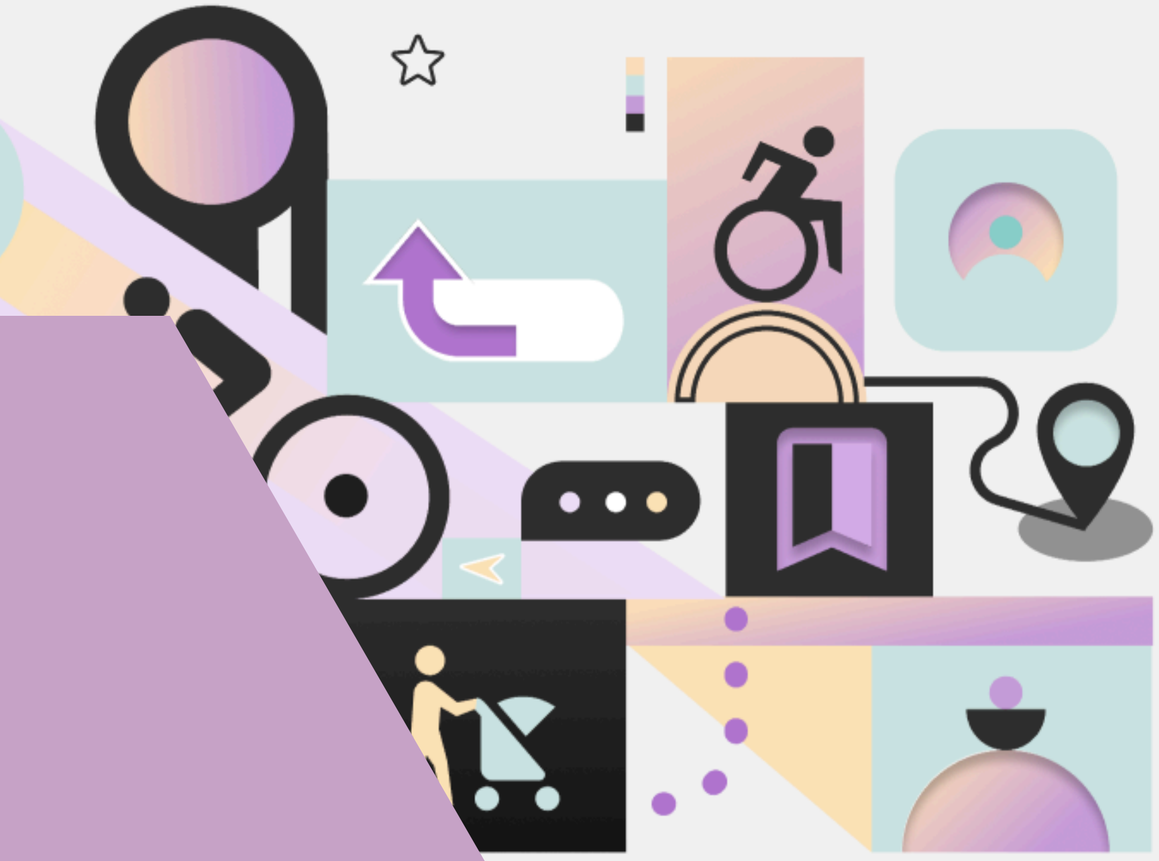
AccessMap



FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

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High priority

Functional requirementes

Precision Navigation

➡The navigation engine should provide step-by-step guidance tailored to wheelchairs, strollers, and small mobility aids, avoiding stairs, narrow sidewalks, and high curbs.

🎯 The system correctly avoids obstacles in at least 95% of test routes.

Obstacle Reporting

➡The app must allow users to add reports about obstacles or inaccessible areas irectly to the map. These reports will enhance the accuracy of accessibility data

🎯 User-submitted obstacle reports appear on the map and are visible to other users within 10 seconds of submission.

Medium priority

Functional requirementes

📅 Space for Events and Workshops

➡Users can browse accessible events, workshops, and mapping initiatives related to urban mobility improvements, filtered by accessibility preferences (e.g., wheelchair-friendly venues).

🎯 Searching for events with specific accessibility filters returns relevant results in less than 3 seconds.

💬 Community Forum Integration

➡A forum section allows users to join communities and share information about accessible routes or urban mobility tips, but without individual ratings or opinions on routes themselves.

🎯 Users can view community posts and create new discussion topics within 5 seconds of action.

Low priority

Functional requirementes

Limited Offline Access

➡Users can download a limited area map for offline navigation in case of a weak internet connection.

🎯 Offline maps for a pre-downloaded city block are available.

★ Personalized Shortcuts

➡Users can save favorite destinations or commonly used routes like “Home”, or “Office” for quick access.

🎯 Selecting a saved shortcut loads the route in under 2 seconds.

Non-Functional requirementes

🦽 High-Quality Accessibility Data

➡The app must integrate a highly detailed database of accessible routes, including information on curb heights, ramps, and obstacle-free pathways.

🎯 For each selected city, at least 85% of pedestrian walkways and key public areas are mapped with accurate accessibility data.

📈 Moderate Scalability for Users

➡The system should maintain performance and responsiveness with up to 10,000 concurrent users in supported cities.

🎯 Load tests show no significant performance degradation with 10,000 simultaneous users.

✨Visual Customization Options

➡Users can choose between different color schemes or contrast modes to better suit their preferences and accessibility needs.

🎯 Switching themes or contrast modes applies changes instantly, with no noticeable lag.

Functional requirements

Requirement	Priority
Precision Navigation	HIGH
Obstacle Reporting	HIGH
Filtered Search for Events	MEDIUM
Community Forum Integration	MEDIUM
Personalized Shortcuts	LOW
Limited Offline Access	LOW

Non-Functional requirements

Requirement	Priority
High-Quality Accessibility Data	HIGH
User-Friendly Interface	MEDIUM
Visual Customization Options	LOW