

## Task 1

### Application: Google Maps

#### ❖ Design Thinking Steps

- 1) **Scope:** Enhancing offline navigation, improving accessibility, and providing real-time updates.
- 2) **Empathize:** Understand user needs by observing how people navigate, search for locations, or explore areas of interest.
- 3) **Define:** Pinpoint challenges like inaccurate location data, slow updates, or a lack of real-time information.
- 4) **Ideate:** Brainstorm potential solutions—such as integrating augmented reality for navigation, offering more personalized suggestions, or improving offline functionality.
- 5) **Prototype:** Develop features like augmented reality navigation or offline maps as prototypes.
- 6) **Test:** Gather user feedback on the prototype, identify issues, and iterate to refine the solutions.
- 7) **Implementation:** Deploy the tested solution, monitor its real-world performance, and refine it based on user feedback.

## Gap Analysis

Let's figure out how we can improve the following situations.

| FEATURE                | EXISTING SITUATION                  | TARGET SITUATION                              | GAPS                                    | FIX NEEDED  |
|------------------------|-------------------------------------|---|---|---|
| OFFLINE NAVIGATION     | Limited offline map downloads       | Full offline navigation, including directions | Insufficient offline functionality      | While Google Maps allows downloading maps, enhancing offline turn-by-turn navigation could be beneficial for users in remote areas. |
| ACCESSIBILITY FEATURES | Basic support for accessible routes | Comprehensive accessibility options           | Lack of detailed and inclusive features | Including more detailed options for people with disabilities, like accessible parking or step-free routes.                          |
| WEARABLE FEATURES      | Basic navigation on wearables       | Rich interaction on smartwatches              | Limited functionality on wearables      | Improving the user experience when using smartwatches for navigation.   |
| REAL-TIME UPDATES      | Moderate accuracy and frequency     | High accuracy and instant updates             | Delayed or unreliable updates           | Faster and more reliable live traffic and incident updates.   |

|                   |                       |                           |                               |   |
|-------------------|-----------------------|---------------------------|-------------------------------|---|
| REAL-TIME UPDATES | frequency             | updates                   | Delayed or unreliable updates | incident updates                          |
|                   | Moderate accuracy and | High accuracy and instant |                               | faster and more reliable live traffic and |
| WEARABLE FEATURES | wearables             | smartwatches              | wearables                     | smartwatches for navigation               |
|                   | Basic navigation on   | Rich interaction on       | Limited functionality on      | Improving the user experience when using  |