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HUMAN COMPUTER INTERACTION
SECTION: B

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Submitted to: Inst. Felix
Submission Date: March 7, 2025

Contents

Adventure Trip Planner App

The Double Diamond of Design to create an initial design

I chose to create a smart adventure trip planner called Adventure Trip Planner. This choice is motivated by the common issues that outdoor enthusiasts face while planning and making their way through their trips efficiently and safely. The app will be an end-to-end outdoor trip guide, helping users with:

- Finding trails based on expertise and terrain

- Having in-time weather prediction and safety alerts

- Being able to view offline maps during areas of inaccessibility

- Creating a trip checklist in order to keep necessary equipment handy

- Getting emergency assistance directly available

Utilizing the Double Diamond design process while creating this product,.

1. Double Diamond Method in Early Design

Phase 1: Discover (Divergent Thinking) - Research & Exploration

Topic of this step is the discovery of issues and user needs for adventure trip planning.

User Needs & Identified Issues:

- ✓ There is no searching feature for trails by skill level.
- ✓ There is no real-time weather forecast and safety alerts.
- ✓ There is no single-stop facility for permits, emergency numbers, and equipment checklist.
- ✓ Offline facility needed for cell-free areas.

Work Done:

- ✓ Alternative outdoors app comparison, e.g., AllTrails, Komoot, and Gaia GPS.
- ✓ Recognition of the shortcomings in existing solutions.
- ✓ Feedback gathered from outdoors people and experience.

Phase 2: Define (Convergent Thinking) - Problem Statement

Problem Statement:
"Outdoors people are burdened by disconnected information, hindering planning, navigation, and safety on hiking adventures."
Solution:
An Adventure Trip Planner providing trail suggestion, live weather, safety alerts, and offline maps for a hassle-free outdoor adventure.

Phase 3: Develop (Divergent Thinking) - Ideation & Prototyping

Concepts that include:

1. Smart Route Finder: provides routes on user preference basis-ease level, length, terrain.
2. Live Weather & Safety Alerts: alerts users of impending disasters (storms, fires).
3. Offline Map & Navigation: provides downloadable maps and provides the user with offline navigation.
4. Trip Checklist: encourages user to depart with the absolute minimum only.
5. Emergency Button: single-click dialing of local emergency services & first aid support.

Phase 4: Deliver (Convergent Thinking) - Refinement & Testing

Refinements From Testing:
- ✓ Streamlined intuitive spontaneous trip planning UI.
- ✓ Level battery life for outdoors use in hours.

Last Steps:
- ✓ Prototype usability testing established.
- ✓ Early release of schedule using Android, iOS, & web.

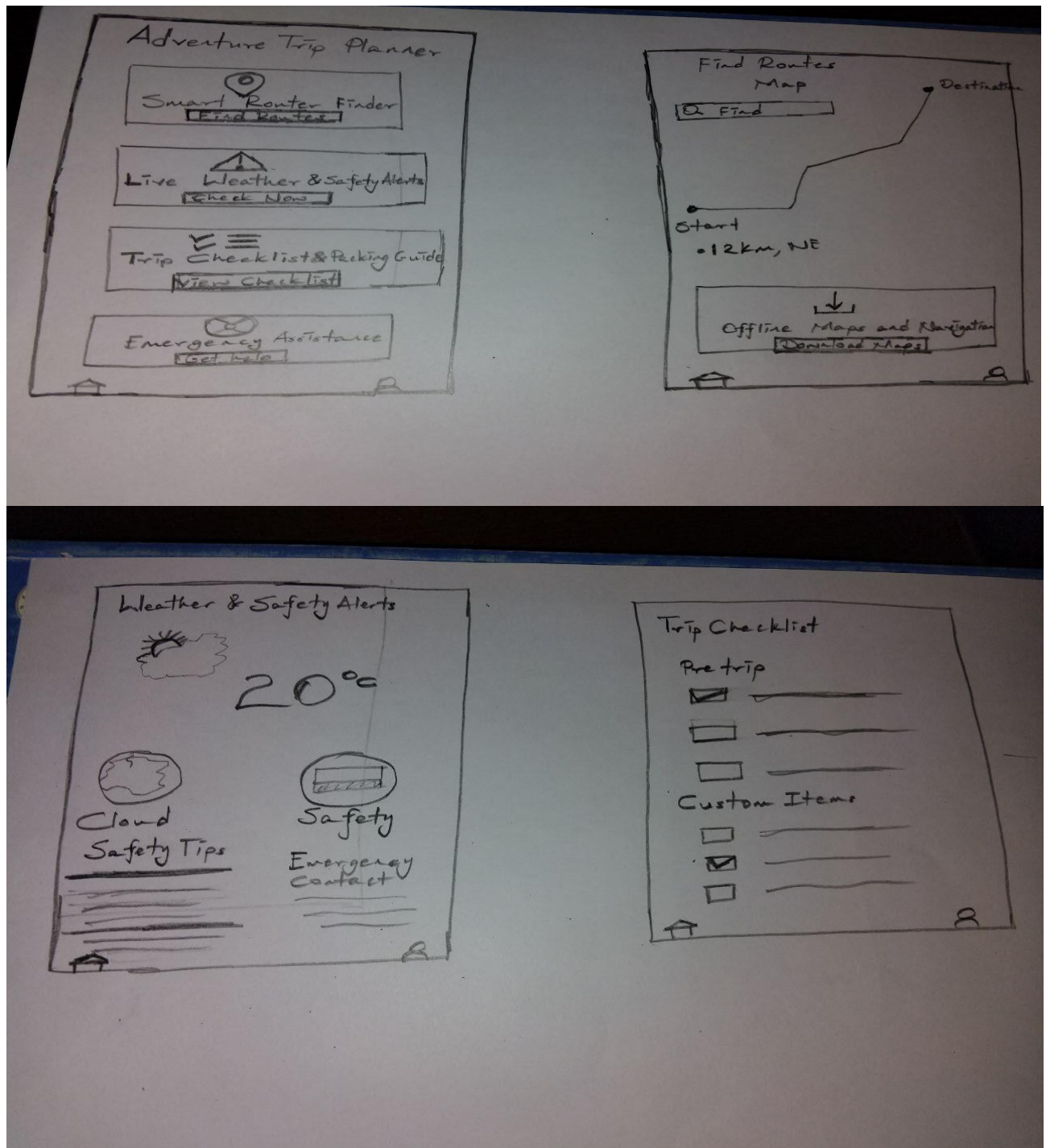## 2. Sketch of Main Functionality & General Look and Feel

Figure 1: Wireframe of the Adventure Trip Planner app

3. Reflection on the Double Diamond Process

Did it help or feel constraining?

- ✓ Helped organize research, ideation, and refinement.
- ✓ Initially felt restrictive since I wanted to jump into designing.

What was your instinct to do first?

- ✓ I initially wanted to design the UI first, but the process convinced me to establish user needs early on.

Did you base your design off of any artifacts or experiences?

Of course! I was inspired by:

- ✓ Individual outdoor activities (hiking obstacle experiences).
- ✓ Recent adventure apps (e.g., AllTrails & Komoot).
- ✓ Over-all safety concerns in remote locations.

Reference

[1] UK Design Council, *The Double Diamond Design Process*. [Online]. Available: https://www.designcouncil.org.uk.

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