Test Case: Design and Thinking

Part 1: Understanding the Problem and Empathy (30 minutes)
Task 1: Problem Identification (15 minutes)
Scenario: Improving the campus library experience.
Instructions: Identify the main problems users face when using the library.

Problem 1 : limited seat availability
   Explanation: In our college there is limited seats available.It lead This can lead to frustration and decreased productivity as students waste time searching for a place to study.
Problem 2: limited quiet areas
   Explaination: In our college there is limited areas where students can seat quiet and read.there is not space available in library.
Problem 3: books are limited and old books
    Explaination: we face a problem in our college library there available books is not our stream type . there is book available with old content which is not important.

Task 2: Empathy Map (15 minutes)
Scenario: Create an empathy map for a typical library user (e.g., a student preparing for exams).
Instructions: Fill in the empathy map with the following sections:

 For problem 1:
1. Increase seating capacity
2. Do seat reservation systems
3. We can design quiet areas

For problem 2:
1. We can give silent study areas
2. Use noise-cancellation devices
3. Create strict regulation for silence

For problem 3:
1. Update library collection
2. Give online books
3. Student suggestions system

Part 2: Defining the Challenge and Ideation (40 minutes)
Task 3: Problem Statement (10 minutes)
Instructions: Based on the problems identified in Part 1, write a clear and concise problem statement.

Problem statement: In Campus student have to find quiet areas and do search about seats , find more resources to enhance availability of books in library . find a way to change add all streams, subject books in library.

Task 4: Ideation (30 minutes)
Instructions: Generate at least five potential solutions to the problem stated.

1. Develop an app that shows real-time availability of seats in the library, allowing students to find and reserve spots quickly.
2. Create more designated quiet study areas and enforce strict noise policies to ensure a conducive study environment.
3. Increase the library's digital collection, providing more online access to textbooks and reference materials to reduce dependency on physical copies.
4. Implement an online booking system for study rooms, allowing students to reserve spaces in advance for group or individual study sessions.
5. Offer noise-cancellation headphones for rent at the library, helping students .
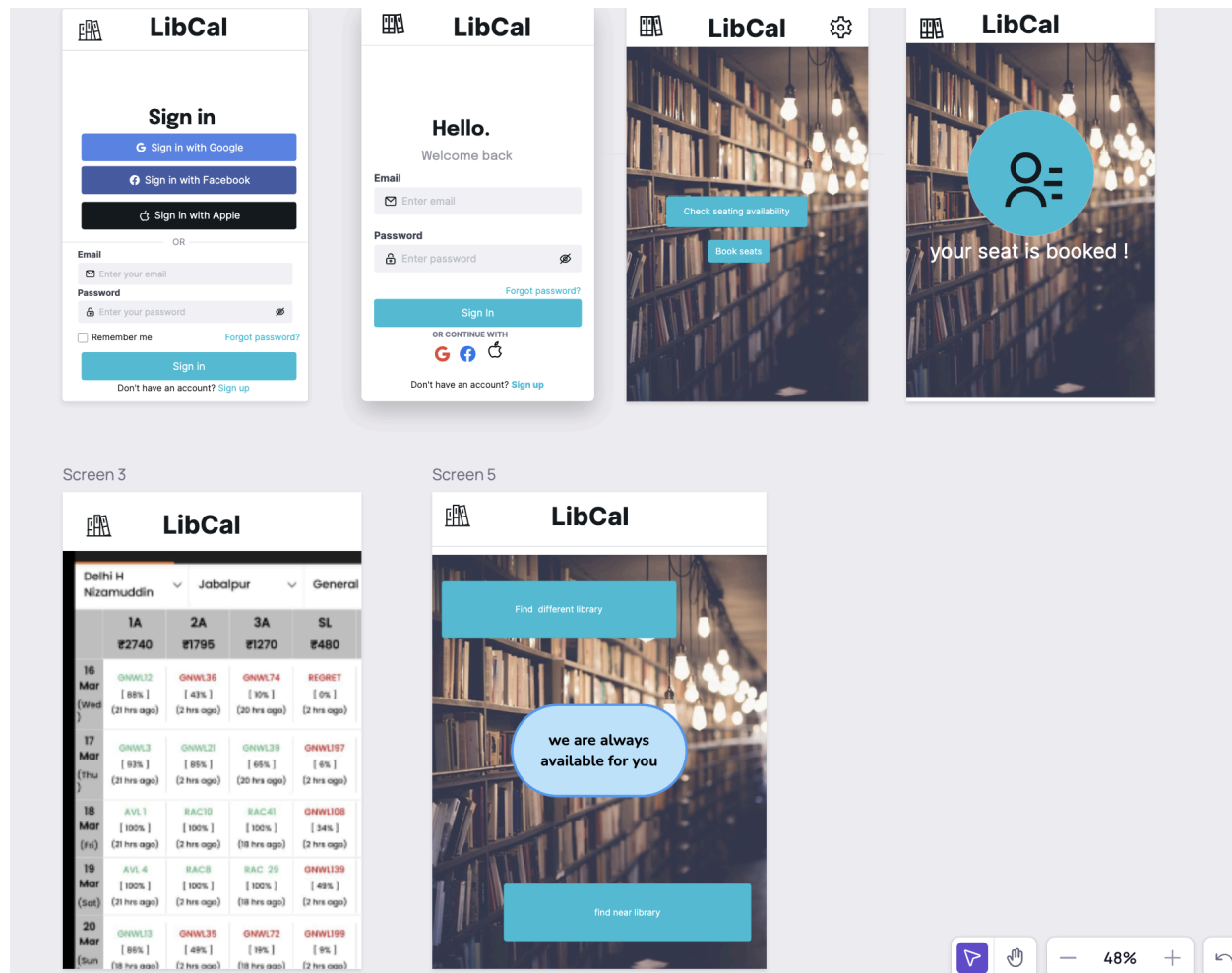
Part 3: Prototyping and Testing (50 minutes)
Task 5: Low-Fidelity Prototype (30 minutes)
Scenario: Select one of the ideas from your ideation session to develop further.
Instructions: Create a low-fidelity prototype.

1. Seating availability app

Task 6: User Feedback Plan (20 minutes)
Instructions: Develop a plan for how you will test your prototype with real users.
Target Users: who used a library.
Feedback Questions:

1. Why people use this only seat booking app??
2. What features did you find most useful?
3. If seat is not available but i want to go library how i can do this???
4. Can i find different library name if one library have not available seats??

- Describe the method you will use to collect feedback (e.g.,

interviews, surveys, observations).

1. Ask one one question to people who used the library more??

2. Give google forms and ask my friends ??