USER EXPIENCE DESIGN

Final Exam (Individual Assignment)

GOALS

Assess your knowledge on UI design techniques and UX skills

BACKGROUND

We have looked at a variety of types of UI, including web and mobile. We are going to prototype an application and apply UI patterns to our design solution.

APPLICATION GOALS:

1) The vision for this application is that it will be deployed as **a mobile application**.
2) **Project:** The bike-sharing app is designed to provide a convenient, eco-friendly, and cost-effective transportation solution for urban areas. By leveraging technology, the app aims to make bike rentals accessible and user-friendly, encouraging more people to choose biking over other modes of transport.

Design Challenges:

➢ **Trip Management**
- Start and end trips by scanning QR Code and unlocking the bike at any station.
- Real-time trip tracking and duration display.
- Notifications for trip start, end, and overage fees.

➢ **Route Planning**
- Real-time Route Suggestions: Provide different routes based on current traffic conditions.
- Estimated Time: Display estimated travel time for each route.
- Tourist Routes: Suggest scenic routes with popular tourist sites.
- Eco-friendly Routes: Highlight routes with bike lanes and green spaces.

➢ **Station Information**
- Display nearby bike stations.
- Show availability of bikes and docks at each station.
- Integration with public transport: Highlight stations near subway stations or bus stops.

➢ **Cost Management**
- Display trip cost and overage fees.
- Offer subscription plans and discounts for frequent users.
- Payment integration with various methods (credit card, mobile payment, etc.).

Your design solution should address three specific design challenges. You are granted the flexibility to select the specific design challenges that align with your project's objectives. Kindly outline and highlight these three chosen design challenges within your project paper.

Innovation?

➢ After research on several vehicle sharing applications, what user problems do you find out? How are you going to solve these problems? What will be your innovative solution?

Optional features:

➢ **User Profile and History**
- User registration and profile management.
- Trip history and statistics (distance traveled, calories burned, etc.).
- Reward system for frequent users (e.g., points, badges).

➢ **Safety and Support**
- In-app safety tips and guidelines.
- Emergency contact feature.
- 24/7 customer support chat.

➢ **Tourist Features**
- Sightseeing Recommendations: Suggest popular tourist attractions along the route.
- Audio Guides: Provide audio descriptions of tourist sites.
- Event Notifications: Inform users about local events and festivals.

➢ **Social Features**
- Share trips and achievements on social media.
- Community events and group rides.
- User reviews and ratings for routes and bikes.

➢ **Fitness Tracking**
- Real-time Monitoring: Track distance traveled, speed, and duration of each ride.

- Calories Burned: Calculate and display the number of calories burned during each trip.
- Heart Rate Monitoring: Integrate with wearable devices to monitor heart rate and other vital stats.
- Sync with Health Apps: Integrate with popular health and fitness apps (e.g., Apple Health, Google Fit) for comprehensive health tracking.

REQUIREMENTS

Requirements:

UX Strategy - Determine the UX strategy of your project. What are the UX objectives you want to reach? Please provide a short description of your application as well. (10 Marks)

Prototyping- Prototype your design solution in Adobe XD. All the pages should include data you feel is appropriate from the rest of the application. Please make all the pages interactive. If you use advanced interaction, you will get bonus points. You need to follow the accessibility guidelines. **(60 Marks)**

- ➢ **Sketch** - Sketching is a fundamental part of the design process. You can visualize your ideas on paper. I require detailed design solutions in the sketch part. Please make your sketch clean, easy to follow. Please add notes and explanations to your design. (10 marks)
- ➢ **Wireframe** - low-fidelity wireframe of your design. Please choose the important design ideas that you want to highlight. It will represent your design solutions. (10 marks)

- ➢ **Interactive Prototypes** - high fidelity prototypes include content and images. It looks real and final. Semi functional Included functionality is just enough to demonstrate a working prototype that can be used to collect feedback from users. (25 marks)

- ➢ **Complete all the design challenges –** Please explain how you solve these user problems and complete these chosen design challenges. (15 marks)

Design Analysis – Please show how you apply usability heuristics and UI patterns in your design. Please provide screenshots and explain it. (20 Marks)

Accessibility – Please indicate how your design solution follows accessibility guidelines.

You can provide screenshots to prove your points. (10 Marks)

Electronic submission:
1. Adobe XD File: All the pages - All the pages should be interactive 2. A PDF Document

Please upload **a PDF document** and **Adobe XD document** directly to the dropbox. The adobe XD file should include **all the pages in Mobile Version. Please do not zip your file.** PDF document should include all the required sections: UX Strategy, Prototypes, Design Analysis and Accessibility. You can take screenshots of your prototype and embed them into your document.

- Please apply UI patterns to your design.
- Your design solution should follow accessibility guidelines.
- Please note that you need to **complete three design challenges**.
- You need to provide a minimum of 4 prototypes (screens) in Adobe XD excluding any login pages.

EVALUATION CRITERIA

EVALUATION GRID

Item	Grade
UX Strategy	/10
Sketches	/10
Wireframes	/10
Interactive Prototypes	/25
Complete the design challenges	/15
Design Analysis	/20
Accessibility	/10
Subtotal	/ 100
Penalties (if applicable)	
Total	/ 100