IT4031 VAUED Assignment 01 - 2025

Background

You work for a user research startup called "Smart Transit" that specializes in improving urban mobility solutions. Your team has been chosen by the Sri Lanka Transport Board to design an advanced mobile app for booking and tracking bus journeys. This initiative aims to improve real-time tracking, ticket booking, and accessibility for bus travelers, making public transport more reliable and user-friendly.

Your team is tasked with developing an innovative Bus Self-Care Application that should allow users to:

- Search for bus routes by entering origin, destination, and travel date.
- View real-time bus tracking with estimated arrival times.
- Book seats for long-distance or premium routes.
- Choose from multiple payment methods (credit card, debit card, mobile wallets).
- Receive updates about delays, route diversions, and cancellations.
- Download digital bus tickets (QR code or PDF format).
- Plan multi-modal travel (bus + train integration).
- Provide accessibility features (e.g., priority seating).

  Note: You may introduce additional functionalities to the application as appropriate.

Your team has decided to perform the following tasks to start the first iteration of the product:

- Conduct a comprehensive analysis to identify the user base of bus travelers.
- Understand the problems and needs of the users when they’re using a bus booking application or platform.
- Analyze the current user journeys and identify pain points and opportunities for improvement.
- Compare with other apps in the market or countries.
- Ideate some solutions with the group.
- Decide on solution from the ideas that the group created.
- Create a prototype to test with the user base identified.
- Test and validate the design and solution with real users.
- Gather data from the feedback from the users.
- Provide an analysis or report.

Tasks

1. Create a survey with questions capturing data related to the demographics, needs, and pain points of the users who are currently using the online bus booking systems.
2. Understand the problems, needs, and pain points of the users.
3. Create user flows or journey maps that you think the user will use to navigate through the new application.
4. Create a high-fidelity design and make a prototype using the tool Figma. (You are not allowed to use existing free templates available on the internet)
5. Test the prototype with the intended user group (sample size = 10 users).
6. The test should include:
    - An observation of how the users roamed or navigated freely through the application (including screen recordings and user flows of how the users browsed.)
    - An observation on how they performed different tasks when you asked the user to perform them during the test. (Task-based analysis)
7. To test the prototype and capture analytics data, you can use the tool Useberry.

    Tip: The "Useberry" free plan only allows you to create one project. To run two tests, you can use two accounts created from your group members' emails.
8. Present your data as a story, identifying the context and the audience, and presenting your data using the right visualizations.
9. You are required to present a solution the team came up with using a high-fidelity prototype. **(You are not allowed to use existing template available on the internet)**

Presentation

You are required to present the following:

● A summary of the audience you selected for testing (age, demographics, gender) (Do not include all the personas; choose only a few to prove your points.)

● Survey results are presented visually using the right visualizations and in brief. You are not required to present all the survey questions on the slides. (Qualitative data analysis)

● Metrics from the tools that were collected should be summarized and represented in a meaningful manner (quantitative data analysis).

● Your analysis and what you have derived from the data.

● Remember to present your solution as a pitch to the Sri Lanka Transport Board management. This pitch should be short and informative.

● Time: 10 min

Assessment Criteria

The project will be assessed on the following criteria:

1. Implementation: Evaluate the extent to which Useberry or any other tool has been successfully integrated to accurately capture data from users.

2. Survey preparation and completeness.

3. Usage of data analytics concepts and visualization techniques during the presentation.

4. Improvement identification and solution strategy.

5. Usage of user experience concepts for the suggested improvement and usage of prototyping tools like Figma for refined design.

Deliverables

Please include all these in a single zip file.

- Survey questions with the answers. (Not required for the slides.)
- Personas. (Not required for the slides.)
- Userflows or journey maps. (Not required for the slides.)
- Designs
- Result reports of Useberry **(include the username and password for later assessment audit usage)**
- Presentation slides (Need to upload to courseweb link.)
- Figma link (“View Only” link)

Note:

- The team size could be a maximum of 5, not less than 4.
- Marks will be allocated for each component. Higher marks are allocated for data capture and analysis; therefore, divide work wisely among your team members so that you can promote your site and get traffic to capture a lot of analytics data.