

Sri Lanka Institute of Information Technology

Visual Analytics and User Experience Design (IT4031)

2025, Semester 2

Assignment 01 (User Flows & Personas)

GROUP ID: 2025_A1_G29



Group Members:

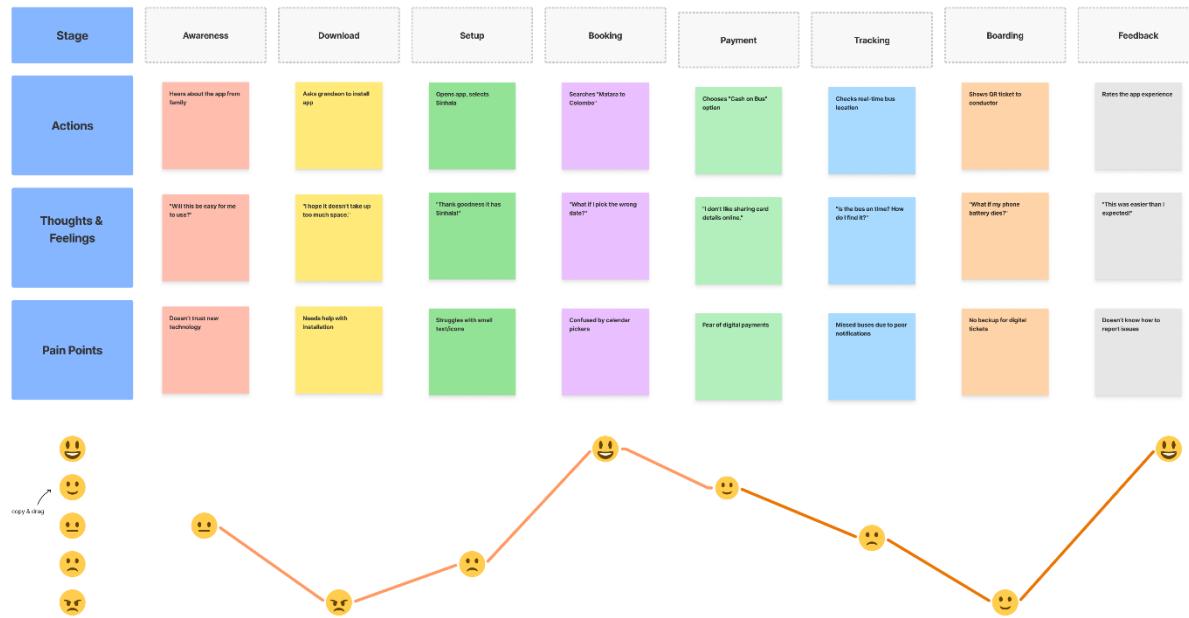
1. IT21279898 - Kulasekara M.P.G.G
2. IT21473525 - Abeywikrama W.N.V
3. IT21306518 – Jayasinghe J.I.B
4. It21224652 – Manathunga M.A.O.S

User Flows / Journey Map

User flows and journey maps illustrate how users interact with the **Bus Self-Care Application** from start to finish.

- **User Flows:** Step-by-step visual guides showing how users navigate the app to complete specific tasks such as searching routes, tracking buses in real-time, booking tickets, and enabling accessibility features. These flows ensure a logical, efficient path for completing key actions.
- **Journey Maps:** Broader visual narratives that map out the **entire user experience**, including emotions, touchpoints, and potential pain points throughout their interaction with the app. These help identify opportunities to improve usability and satisfaction

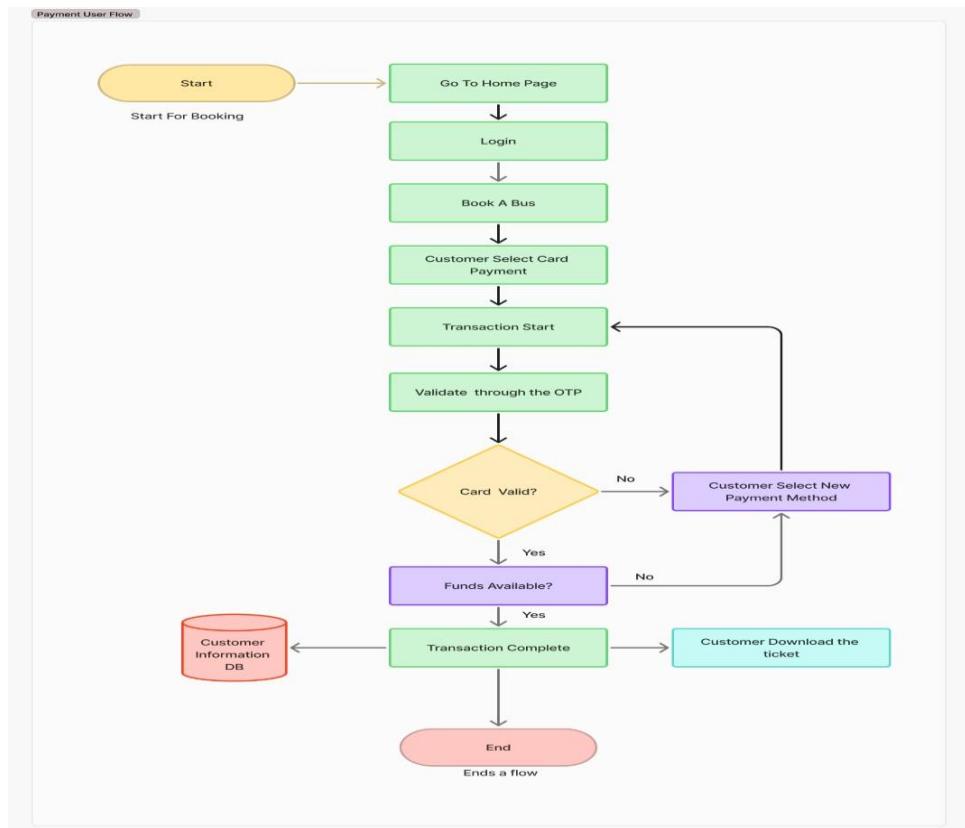
Journey Map



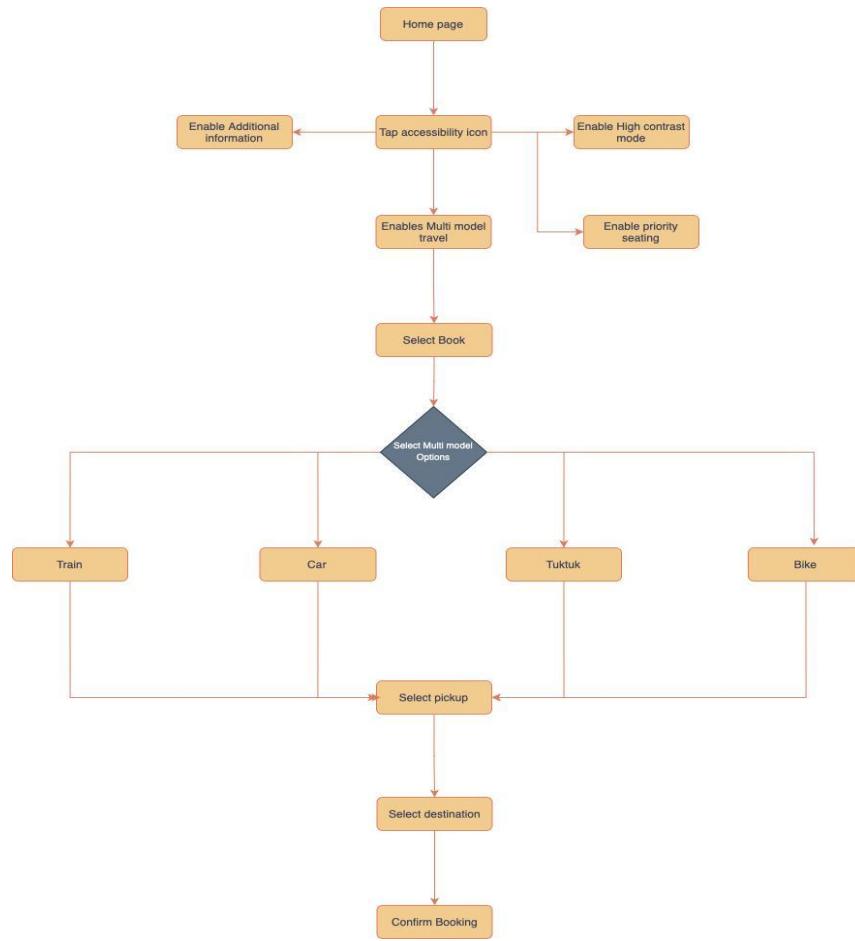
	Download and Installing the App	Launching and Getting Up the App	Booking the App Interface	Searching and Selecting Bus Details	Booking the Bus	After Booking	Trip completed
Storyboard							
User actions	<ul style="list-style-type: none"> User searches for a bus travel app in the Apple Store or Google Play User installs the app and confirms by seeing the logo on their phone User downloads and installs the app on their phone 	<ul style="list-style-type: none"> User opens the app for the first time User grants location permission when prompted User signs up through email or social media User signs up through a digital wallet account 	<ul style="list-style-type: none"> User browses the homepage for available routes User looks at the "Find a Bus" section User selects a route through a search bar User looks at the route details and time of travel 	<ul style="list-style-type: none"> User reviews available buses, timings and fare options User selects a bus and adds it to their cart User selects a seat through a digital wallet account 	<ul style="list-style-type: none"> User receives a booking confirmation and a digital ticket User receives a receipt User receives info about the payment process User receives payment details and a confirmation transaction User receives booking confirmation and a digital ticket 	<ul style="list-style-type: none"> User receives a receipt User receives info about the payment process User receives payment details and a confirmation transaction User receives booking confirmation and a digital ticket 	<ul style="list-style-type: none"> User sees a 5-star rating under "My Bookings" User receives notifications for trip reminders or digital alerts User receives a notification of their last booking confirmation User receives a thumbs up after the trip
User thoughts/Feelings	<ul style="list-style-type: none"> "This app seems really useful." "This app looks popular, maybe it'll be better than the others." 	<ul style="list-style-type: none"> "I don't know if I want to make an account yet, but I have to." "The interface looks nice but..." 	<ul style="list-style-type: none"> "I'm not sure where to go from here!" "I'll have to do this the next day!" "I'm today, found it! I can't believe..." 	<ul style="list-style-type: none"> "Note: There are several buses available for my travel date" "I'm glad I can filter by time and price!" "I like how it's clean and organized!" 	<ul style="list-style-type: none"> "Please let me know when the bus arrives tomorrow." "I'm glad the payment was successful!" "That was an easy and quick process, thanks to your website!" 	<ul style="list-style-type: none"> "Good thing I got the ticket confirmation right away!" "This real-time tracking is really helpful!" 	<ul style="list-style-type: none"> "I think I'll use this app again next time I travel." "The driving experience was very good and safe!"
Experience							
Pain points	<ul style="list-style-type: none"> App size is large and takes time to download. Shouldn't be so much to download and install. Install on both android and ios devices. 	<ul style="list-style-type: none"> Forgot sign-in button exceeding the app. Onboarding should be a few steps or a stepless without any steps. Provides better learning opportunity when trying to learn something new. Customer support after booking, even though ticket written to user. 	<ul style="list-style-type: none"> Interface feels cluttered or unattractive. May resemble the "Find Bus" we had to results. Bus route selection needs to be more user friendly. They would prefer a great visual rendering making navigation effortless. 	<ul style="list-style-type: none"> Route search takes long or doesn't show accurate. Unrelated marketing popups log in, terms and conditions, etc. Navigation between routes is inconsistent. Inaccurate or outdated bus data 	<ul style="list-style-type: none"> Payment gateway fail on card entry. Unrelated payment solutions. Incorrect or missing information on their connection. No clear confirmation after booking, lower user usage of service. 	<ul style="list-style-type: none"> Incorrect or problematic booking details. Incorrect or problematic booking details. Incorrect or problematic booking details. 	<ul style="list-style-type: none"> "I think I'll use a big additional fee after cancelling a booking." "No easy way to cancel or modify the booking."
Ideas	<ul style="list-style-type: none"> Offer more app users and bus route information for customers instead. Add a "Rated by X users" badge, official partner info, or government/Operator endorsements 	<ul style="list-style-type: none"> Allow guest mode or explore option before requiring sign-up. Provide a short, optional onboarding with demo option and tooltips during usage. Ask for permissions consentually when the user triggers a related action. 	<ul style="list-style-type: none"> Simple on-boarding screen, clear instructions and progressive disclosure of advanced features. Add a quick access help button or chatbot for first-time users. 	<ul style="list-style-type: none"> Add icons for time, arrival/departure time, connection, and service type. Use cards or a comparison view layout with visual indicators. Integrate with real-time APIs from verified transport authorities or operators. 	<ul style="list-style-type: none"> Integrate with popular local wallets, cards, UPI, Paytm. Display an on-screen success message and email/SMS confirmation with ticket. 	<ul style="list-style-type: none"> Send SMS notifications before bus departure and on arrival. Integrate GPS tracking from bus operator side and use visual map-based tracking. This booklet Help to home screen and provide offline access and quick download option 	<ul style="list-style-type: none"> Add "Change" and "Cancel" buttons to booking logic with clearly drawn refund rules.

User Flows

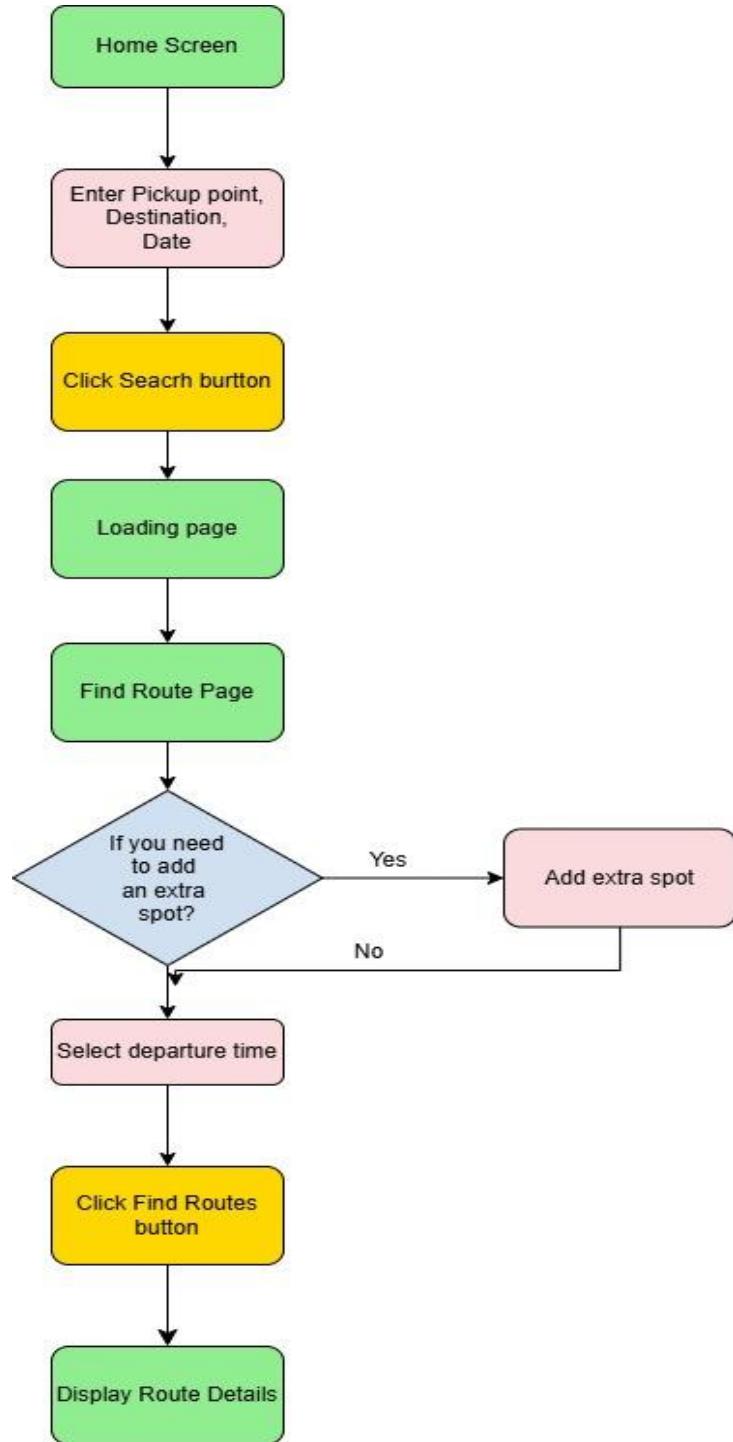
Payment Confirmation



Multi model travel user flow diagram



User Flow for Searching Bus Routes



Personas

Personas are fictional representations of our key user segments, created based on research and survey data. They help us understand the **goals, behaviors, pain points, and needs** of different types of users who will interact with the Bus Self-Care Application.

By developing personas such as **Working Adults, University Student, Occasional Traveler, and Senior Citizen**, we ensure our design decisions are tailored to real user expectations. These personas guide the creation of user flows, accessibility features, and overall user experience strategies—making the app more inclusive, efficient, and user-friendly.

Senior Citizen



Mr. Somapala Perera

ABOUT

Mr. Somapala Perera is a retired government clerk living in Matara, Sri Lanka. He spent over 35 years serving the public sector and now enjoys a peaceful life, spending time with his grandchildren and traveling to Colombo for medical checkups. Though he's not tech-savvy, his children gifted him a smartphone so he can stay connected and be more independent. He mostly uses his phone to make calls, use WhatsApp, and watch the news on YouTube. He's eager to use apps that make life easier, especially when it comes to traveling.

GOALS

- Avoid long waits at the station or overcrowded buses
- Access a simple ticketing system without needing help
- Get real-time alerts on delays or cancellations

PAIN POINTS

- Feels overwhelmed by modern apps with too many buttons
- Can't understand English instructions or unfamiliar icons
- Often misses buses due to last-minute changes in schedule

NEEDS

- A Sinhala-language interface with large fonts
- A simple seat booking system for long-distance travel
- Step-by-step voice instructions or visual cues

AGE	68
JOB TITLE	Retired Clerk
STATUS	Married
LOCATION	Matara, Sri Lanka
DIGITAL LITERACY	Low

Tags: Empathetic, Family-oriented, Honest, Cautious

University Student



Supul Wijesekara

ABOUT

Supul Wijesekara is a 22 year old undergraduate student living in Colombo but frequently traveling back to his hometown during weekends and holidays. He relies heavily on public buses due to tight college schedules, making sure to book seats for food delivery, ride-hailing, and messaging. Time is critical for Supul, delays and overcrowding buses often affect his study and exam schedules. He looks for accurate real-time tracking ability to reserve seats on long-distance buses, and a fast, secure payment process. Supul values speed, reliability, and mobile first convenience. He prefers apps with modern interfaces, night mode, and quick booking options. Push notifications for delays or ticket confirmations are essential for him to stay updated. As someone who often juggles studies and part-time work, he expects the app to work seamlessly on mobile data and offer features like saved routes and digital tickets.

GOALS

- Travel frequently between university and hometown for weekends or holidays,
- Reserve seats for long-distance buses in advance.
- Get real-time updates on delays, arrivals, or platform changes

PAIN POINTS

- Dislikes apps with too many steps or pop-ups and annoyed when app lags or crashes on mobile data
- Finds it hard to trust apps without proper ticket confirmation or refund process
- Disrupted plans due to lack of real-time updates or last-minute changes

NEEDS

- A modern, responsive interface optimized for smartphones
- Integration with mobile payment methods
- Notifications for trip changes or upcoming departures
- Integration with mobile payment methods

AGE	22
JOB TITLE	University Student
LOCATION	Colombo
DIGITAL LITERACY	High

Tags: Tech-Savvy, Budget-conscious, Efficient, Independent

Occasional Traveler



"Travelling is an escape – but I don't want stress before the journey."

AGE 41
JOB TITLE Freelance Photographer
LOCATION Negombo
DIGITAL LITERACY High

Spontaneous **Independent**
Tech-Savvy **Visual Thinker**

Ruwan Fernando

ABOUT

Ruwan Fernando is a 41-year-old freelance photographer from Negombo who travels by bus a few times a month for client shoots, family visits, or short vacations. He's tech-savvy but values convenience and speed. Ruwan often books last-minute tickets, so he needs quick access to route and seat availability. Although he uses apps like PickMe and Google Maps regularly, he avoids apps that are slow or cluttered. He's open to trying new travel apps as long as they help him get things done without too many steps.

GOALS

- Quickly find available buses when traveling suddenly
- Easily compare prices and bus types
- Book and pay without hassle, especially on mobile

PAIN POINTS

- Hates unnecessary steps or multiple logins
- Gets annoyed by outdated route info
- Doesn't trust apps with too many ads or poor reviews

NEEDS

- Fast-loading app with real-time data
- Visual seat maps and price comparisons
- Integration with payment apps like Frimi or mobile wallets
- Optional travel reminders and route alerts

Working Adults



"As a teacher, I believe learning never stops"

AGE 56
JOB TITLE School Teacher
LOCATION Monaragala
DIGITAL LITERACY Moderate

CARING **EMPATHETIC**
CURIOUS **TRADITIONAL**

Nirmala Perera

ABOUT

Nirmala Perera is a 56-year-old school teacher from a rural area who uses public buses only occasionally for family visits or official duties. She owns a smartphone and uses basic apps like WhatsApp but finds most travel apps confusing. Nirmala prefers simple interfaces, local language support, and clear instructions. Poor internet in her area adds to the challenge of using digital services. She values punctuality, safety, and the ability to know bus timings in advance. Booking tickets online feels overwhelming, especially with too many payment steps. She is open to trying new apps if they are easy to use and trustworthy. For her, convenience and clarity matter most.

GOALS

- Travel occasionally for family events or official duties
- Know if the bus is delayed or canceled in advance
- Book bus tickets with minimal hassle

PAIN POINTS

- Finds bus apps overly complicated
- Confused by too many steps in booking and payment
- Poor internet in rural areas affects access

NEEDS

- A simple, intuitive interface
- Ability to check seat availability before traveling to town
- Offline or low-data mode for rural connectivity
- Prefers voice-based help and large text

