Theory Assignment Report

Only for course Teacher						
		Needs Improvement	Developing	Sufficient	Above Average	Total Mark
Allocate mark & Percentage		25%	50%	75%	100%	25
Understanding/Analysis	7					
Implementation	8					
Report Writing	10					
					Total obtained mark	
Comments						

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Course Code: SE-231 Course Name: System Analysis & Design Project

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Tourism And Travel Planner

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Introduction

The Tourism and Travel Planner Management System is a comprehensive digital solution designed to streamline the planning, organization, and management of travel and tourism services. This system aims to enhance the overall travel experience by offering an efficient platform for both travelers and service providers, including travel agencies, tour operators, and travelers.Tourism management is the oversight of all activities related to the tourism and hospitality industries. It's a multidisciplinary field that prepares people with the interest, experience, and training for management positions in the food, accommodations, and tourism industry.

Objective

The main purpose of the "Tours and travels management system" is to provide a convenient way for a customer to book a vehicle or whole package for tour purposes. The objective of the project is to develop a system that automates the processes and activities of a travel agency. By integrating various functionalities such as itinerary planning, destination recommendations, transportation and accommodation bookings, and customer support, the system optimizes travel experiences for users. Additionally, it offers a centralized platform for managing customer preferences, travel history, and payment transactions. With features like real-time availability checks, minimizes errors, and improves customer satisfaction.

Key Features

User Registration and Login: The system facilitates a straightforward registration process for users, ensuring secure access through robust authentication mechanisms. Password recovery options further enhance user convenience.

Profile Management: Traveler, accommodation provider, admin, tour operator and visitor can easily create and update their profiles, allowing for personalized experiences.

Take Tour package: There will be some ready made tour package for traveler provided by tour Operator .User can select any kind of package from the given package.

Create Tour Plan: Here the user can create tour plan for himself. they can include location, transport Local guide, accommodation . they can take all the facilities and make a complete package for himself.

Billing and Payment: The system automates the billing process also the tour operator generating accurate bills based on services and their requirements utilized. Multiple payment options are provided, after the payment the system will issue a bill.

Upgrade Facilities: Here Tour operator can update all the facilities in the system and also can include or remove local guides. Besides accommodation provider can update accommodation list and transport list

Notification System: After confirm the system will notify to traveler about their tour and also notify the local guide about the tour plan.

Helpline Support: A dedicated 24/7 helpline feature offers customers immediate assistance, complemented by access to FAQs and resolutions for common issues, further enhancing the overall customer support experience. Also the system will provide contact option of the agency.

Tourism and Travel Planner

The scenario:

Travel Planner is a smart tourism and travel planner who assists with an online application to sell their package and give necessary information to travelers. The Tour Operator creates & Managing Tour Packages, collaborates with Local Services Handling Bookings & Reservations. Accommodation Providers provide direct flights and a cozy hotel or resort. Local Guide Providing Real-Time Assistance and Customizing their Experiences. Travelers Use the app to plan trips, book flights & hotels, create itineraries, track expenses, and receive travel updates. Visitors can view all the services but not purchase them. for any purchase they need to log in then they will be considered as travelers. Admin will overview all the stakeholders' work also monitor the monthly income and customer feedback. Overall, this application plays an important role in facilitating efficient operations, providing personalized experiences for travelers, and enabling data-driven decision-making for the stakeholders in the smart Travelers planer application.

Feasibility Study

1. Technical Feasibility:

a. Hardware Compatibility: The system should be compatible with existing hardware infrastructure. A review of current systems and potential upgrades will be conducted.
b. Software Compatibility: Ensure that the system integrates seamlessly with other software used by travel agencies. Compatibility with operating systems, databases, and third-party services will be evaluated.
c. Technical Expertise: Assess the availability of skilled personnel or the need for training to operate and maintain the system.

2. Operational Feasibility:

a. User Acceptance: Gather feedback from potential users, including travel agencies and customers, to ensure the system aligns with their needs and expectations.
b. Impact on Current Operations: Analyze how the implementation of the system will affect current travel operations. Mitigation strategies for potential disruptions will be identified.

3. Economic Feasibility:

a. Cost-Benefit Analysis: Conduct a thorough analysis of the costs associated with developing, implementing, and maintaining the system against the expected benefits such as increased efficiency, improved customer satisfaction, and potential revenue growth.
b. Return on Investment (ROI): Calculate the projected ROI over a specified period, considering both tangible and intangible benefits.

List of stakeholders

The key stakeholders involved in this Tour and Traveler System are:

1. **Visitor** : They can view the system interface and know about tour facilities.
2. **Travelers** : The user can take all facilities, contract with tour operators and local guides.
3. **Tour Operators** : They cooperate with travelers, Manage tour plans and also provide a better service.
4. **Accommodation Providers** : The accommodation provider give all facilities about their hotel and transportation.
5. **Local Guide** : Local guide will provide active support to travelers for better experience.
6. **Admin** : Admin can view all the facilities in the system to make the system easy and user friendly

User Profile

User Profile-01: Tour Operator

User class	Note of characteristics	Requirements implied
Type of user	Tour Operator	Interface, performance, portability, security
Age range	25 – 50	Interface, quality, operational
Frequency of use	Many times in a day	Performance, reliability, resource, operational, quality
Mandatory	No	
Computer Experience	No	
Education	HSC	Documentation, interface
Goal	Manage tour plan	Performance, resource, operational, acceptance, maintainability, safety, quality, security
Language skill	Bangla, English	Interface, documentation
Number of users	10 - 15	Performance, acceptance, maintainability, reliability, operational, safety, quality
Training	Yes	documentation
Other system use	No	
Way of working	To get official support	Portability, safety, security, quality

User Profile-02: Travelers

User class	Note of characteristics	Requirements implied
Type of user	Travelers	Interface, performance, portability, security
Age range	18 – 75	Interface, quality, operational
Frequency of use	Many times in a day	Performance, reliability, resource, operational, quality
Mandatory	No	
Computer Experience	No	
Education	Not required	
Goal	To complete tour booking	Performance, resource, operational, acceptance, maintainability, safety, quality, security
Language skill	Bangla, English	Interface, documentation
Number of users	Many	Performance, acceptance, maintainability, reliability, operational, safety, quality
Training	No	documentation
Other system use	No	
Way of working	To get official support	Portability, safety, security, quality

User Profile-03: Visitors

User class	Note of characteristics	Requirements implied
Type of user	Visitors	Interface, performance, portability, security
Age range	10 - 75	Interface, quality, operational
Frequency of use	When he/she want	Performance, reliability, resource, operational, quality
Mandatory	Yes	Documentation, quality, security, safety
Computer Experience	No	
Education	Not required	
Goal	To Visit the system & view the facility	Performance, resource, operational, acceptance, maintainability, safety, quality, security
Language skill	Bangla, English	Interface, documentation
Number of users	Many	Performance, acceptance, maintainability, reliability, operational, safety, quality
Training	No	
Other system use	No	
Way of working	To get official support	Portability, safety, security, quality

User Profile-04: Accommodation Providers:

User class	Note of characteristics	Requirements implied
Type of user	Accommodation Providers	Interface, performance, portability, security
Age range	25 - 60	Interface, quality, operational
Frequency of use	Many times, in a day	Performance, reliability, resource, operational, quality
Mandatory	Yes	Documentation, quality, security, safety
Computer Experience	No	
Education	HSC	Documentation, interface
Goal	To complete room and transport Booking	Performance, resource, operational, acceptance, maintainability, safety, quality, security
Language skill	Bangla, English	Interface, documentation
Number of users	Many	Performance, acceptance, maintainability, reliability, operational, safety, quality
Training	Yes	documentation
Other system use	No	
Way of working	To get official support	Portability, safety, security, quality

User Profile-05: Local Guide

User class	Note of characteristics	Requirements implied
Type of user	Local Guide	Interface, performance, portability, security
Age range	20 – 60	Interface, quality, operational
Frequency of use	Many time in a week	Performance, reliability, resource, operational, quality
Mandatory	No	
Computer Experience	No	
Education	HSC	Documentation, interface
Goal	To provide tour guide	Performance, resource, operational, acceptance, maintainability, safety, quality, security
Language skill	Bangla, English	Interface, documentation
Number of users	Many	Performance, acceptance, maintainability, reliability, operational, safety, quality
Training	Yes	documentation
Other system use	No	
Way of working	To get official support	Portability, safety, security, quality

User Profile-06: Admin

User class	Note of characteristics	Requirements implied
Type of user	Admin	Interface, performance, portability, security
Age range	30 – 65	Interface, quality, operational
Frequency of use	Many times, in a week	Performance, reliability, resource, operational, quality
Mandatory	Yes	Documentation, quality, security, safety
Computer Experience	Yes	Documentation, acceptance, resource
Education	HSC	Documentation, interface
Goal	Make the system easy and user friendly	Performance, resource, operational, acceptance, maintainability, safety, quality, security
Language skill	Bangla, English	Interface, documentation
Number of users	One	Performance, acceptance, maintainability, reliability, operational, safety, quality
Training	Yes	documentation
Other system use	No	
Way of working	Full support from the system	Portability, safety, security, quality

Scope

1. List of Travel Packages & Select Travel Package

a. Objective: Provide users with a comprehensive list of travel packages and enable them to select a preferred package.

b. Functionality:

Display categorized and filterable travel packages (e.g., destination, accommodation, budgets). Provide detailed descriptions including traveler information and their requirements . Users can browse and select their preferred travel package for booking.

2. Provide Traveler Details

a. Objective: Collect essential information about travelers for booking and travel logistics.

b. Functionality:

Allow users to input traveler details such as name, age, ID proof, and special requirements. Store information securely and associate it with the selected package. Support multiple traveler profiles for group bookings.

3. Confirm Trip

a. Objective: Finalize the selected travel package and initiate booking.

b. Functionality:

Display a summary of the selected package and traveler details.

Confirm user intent and lock the package selection. Send confirmation details via email/SMS and generate a booking reference.

4. View Destination Details & Select Destination

a. Objective: Enable users to explore potential destinations before selecting one.

b. Functionality:

Showcase rich media and information about various destinations (e.g., attractions, weather, cultural highlights). Users can compare destinations and select the most appealing one. User selected destination to suitable travel packages.

5. View Accommodation Details & Select Accommodation

a. Objective: Allow travelers to choose accommodation options based on preferences.

b. Functionality:

Display available hotels based on destination and travel dates. Provide information such as Hotel type, pricing and user ratings. Users can select and reserve their preferred accommodation option.

6. View Transport Details & Select Transport

a. Objective: Allow transport choices for the journey to and within the destination.

b. Functionality:

Present options like flights, trains, buses, or car rentals. Allow users to filter by transport type, cost, travel time or comfort level. Enable selection and integration of transport options into the final itinerary.

7. View Local Guide List & Select Local Guide

a. Objective: Help travelers enhance their experience by choosing local guides.

b. Functionality:

Display a list of local guides for each destination. Include guide profiles, languages spoken, specialties, and ratings. Allow users to select and book a guide in advance or on-demand.

ELICITATION TECHNIQUE

Elicitation techniques are a set of methods and approaches used to gather information, requirements, or feedback from individuals, stakeholders, or experts in order to better understand a specific topic, problem, or domain. These techniques are commonly employed in software development.

Which elicitation technique we implemented for collecting requirements in this case?

1. **Focus Group**
2. **Observation**
3. **Survey**

1. **Focus Group:** In this scenario, there are some different groups like teams of Shopkeepers and Salespersons. We used several focus group sessions with them to collect their requirements.
2. **Observation**: Observing how travel agents or tourists currently operate can reveal hidden needs and areas for improvement. This can be time-consuming but valuable. Potentially used, especially if trying to automate existing processes.
3. **Survey:** We implemented a survey for customers. Where we can collect a lot of possible requirements which they need for the system.

SRS Documentation:

FR0001	Sign up
Description	Here users can complete their registration
Stakeholder	Visitor,Travelers, Tour Operators,Accommodation Providers, Local Guide, Admin

FR0002	Sign in
Description	Here user can log in to the website
Stakeholder	Travelers, Tour Operators, Accommodation Providers, Local Guide, Admin

FR0003	List of travel package
Description	User can see the updated tour package
Stakeholder	Visitor, Travelers, Tour Operators, Accommodation Providers, Local Guide, Admin

FR0004	Select travel package
Description	User will select a package for tour
Stakeholder	Travelers, Tour Operator, Admin

FR0005	Give traveler details
Description	Here user will provide their details like phone number address pickup point etc
Stakeholder	Travelers, Tour Operator, Admin

FR0006	Category of travelers
Description	User will input which category of traveler will travel like couple , single, family, friends,others.
Stakeholder	Travelers, Tour Operator, Admin

FR0007	Input Number of adult travelers
Description	User will input how many adult people will travel
Stakeholder	Travelers, Tour Operator, Admin

FR0008	Input Number of child travelers
Description	User will input how many child(0-3 years) will travel
Stakeholder	Travelers, Tour Operator, Admin

FR0009	Confirm trip
Description	User will confirm the trip
Stakeholder	Travelers, Tour Operator, Admin

FR0010	Things to do
Description	User will find the location where he or she can visit
Stakeholder	Visitor, Travelers, Tour Operator, Admin

FR0011	Create tour package
Description	Here user will create customize tour package
Stakeholder	Travelers, Tour Operator, Admin

FR0012	View Tour Destination list
Description	User can see the tour location
Stakeholder	Travelers, Tour Operator, Admin

FR0013	View destination details
Description	User can see the details about tour destination to visit the location
Stakeholder	Travelers, Tour Operator, Admin

FR0014	Select Location
Description	Here user can select location to visit
Stakeholder	Travelers, Tour Operator, Admin

FR0015	Make Cancel Booking
Description	Here user can cancel their selection
Stakeholder	Travelers, Tour Operator, Admin

FR0016	View accommodation category
Description	Here users can view the accommodation category like hotel, resort, house etc.
Stakeholder	Travelers, Tour Operator, Admin

FR0017	View accommodation details
Description	User can show the details of accommodation
Stakeholder	Travelers, Tour Operator, Admin

FR0018	Select accommodation
Description	Here user can select hotel or resort
Stakeholder	Travelers, Tour Operator, Admin

FR0019	Select transport category
Description	Here user can view transport category
Stakeholder	Travelers, Tour Operator, Admin

FR0020	View transport details
Description	Here users can see transport details
Stakeholder	Travelers, Tour Operator, Admin

FR0021	Select transport
Description	Here user can select transport
Stakeholder	Travelers, Tour Operator, Admin

FR0022	View local guide List
Description	Here user can see the list of local guide
Stakeholder	Travelers,Tour operator, Admin

FR0023	View total cost and details
Description	User can view total cost including service charge and vat
Stakeholder	Travelers,Tour operator, Admin

FR0024	Make payment
Description	Here user will take attempt to make payment
Stakeholder	Travelers, Admin

FR0025	Select payment method
Description	User will select a payment method to complete the payment
Stakeholder	Travelers, Admin

FR0026	Get notifications of Trip
Description	Travelers and Local guides get notification all about the tour like date, pick up point, etc.
Stakeholder	Local guide, Tour operator, Travelers, Admin

FR0027	Issue Bill
Description	Here user gets a copy of the bill
Stakeholder	Travelers, Tour operator, Admin

FR0028	View local guide profile
Description	Here the user can see the local guide profile and also whether he is available or not.
Stakeholder	Travelers, Tour Operator, Admin

FR0029	Select local guide
Description	Here user can select local guide
Stakeholder	Travelers, Tour Operator, Admin

FR0030	Forgot password
Description	Here user can reset the password
Stakeholder	Travelers, Tour Operators, Accommodation Providers, Local Guide, Admin

FR0031	Get OTP
Description	Here users get OTP to reset their password
Stakeholder	Travelers, Tour Operators, Accommodation Providers, Local Guide, Admin

FR0032	Resend OTP
Description	If a user misses OTP, then he/she can get a new OTP here.
Stakeholder	Travelers, Tour Operators, Accommodation Providers, Local Guide, Admin

FR0033	Update package details
Description	Here users can update their package details.
Stakeholder	Tour Operators, Admin

FR0034	Update local guide list
Description	Here user can update local guide list
Stakeholder	Tour Operators, Admin

FR0035	Update location List
Description	Here users can add new location also can remove previous location
Stakeholder	Tour Operators, Admin

FR0036	Update profile
Description	Here users can update their profile.
Stakeholder	Travelers, Tour Operators, Accommodation Providers, Admin

FR0037	Update accommodation
Description	Here user can update accommodation here include transport and hotel both
Stakeholder	Accommodation Providers, Admin

FR0038	See travel report
Description	Users can see their travel report, which provides how many people can take a package from this site in a day by graph.
Stakeholder	Tour Operators, Admin

FR0039	About us
Description	Here users can see the details about the Travel planner agency and also get the contact number from here.
Stakeholder	Visitor, Travelers, Tour Operators, Accommodation Providers, Local Guide, Admin

FR0040	Verify user
Description	When a user use sign up or sign in they must need to verify to the system by using OTP code
Stakeholder	Tour operator, Local guide, Accommodation Provider, Visitor, Travelers, Admin

FR0041	FAQ
Description	Here the traveler can frequently asked questions and get answer using AI
Stakeholder	Visitor, Travelers, Tour Operator, Local guide, Accommodation Provider Admin

FR0042	View video vlog
Description	Here users can get regular updates on new travels of another user.
Stakeholder	Visitor, Travelers, Tour Operators, Accommodation Providers, Local Guide, Admin

FR0043	Upload video vlog
Description	Here users can share their experience about the tour
Stakeholder	Travelers, Tour Operator, Admin

FR0044	Share travel package
Description	Here users can share the travel package with their family and friends.
Stakeholder	Visitor, Travelers

FR0045	Add voucher
Description	Here users can collect voucher
Stakeholder	Travelers, Tour Operator, Admin

FR0046	Show Home page
Description	Here users can see the home page and all facilities
Stakeholder	Visitor, Travelers, Tour Operator, Local guide, Accommodation Provider, Admin

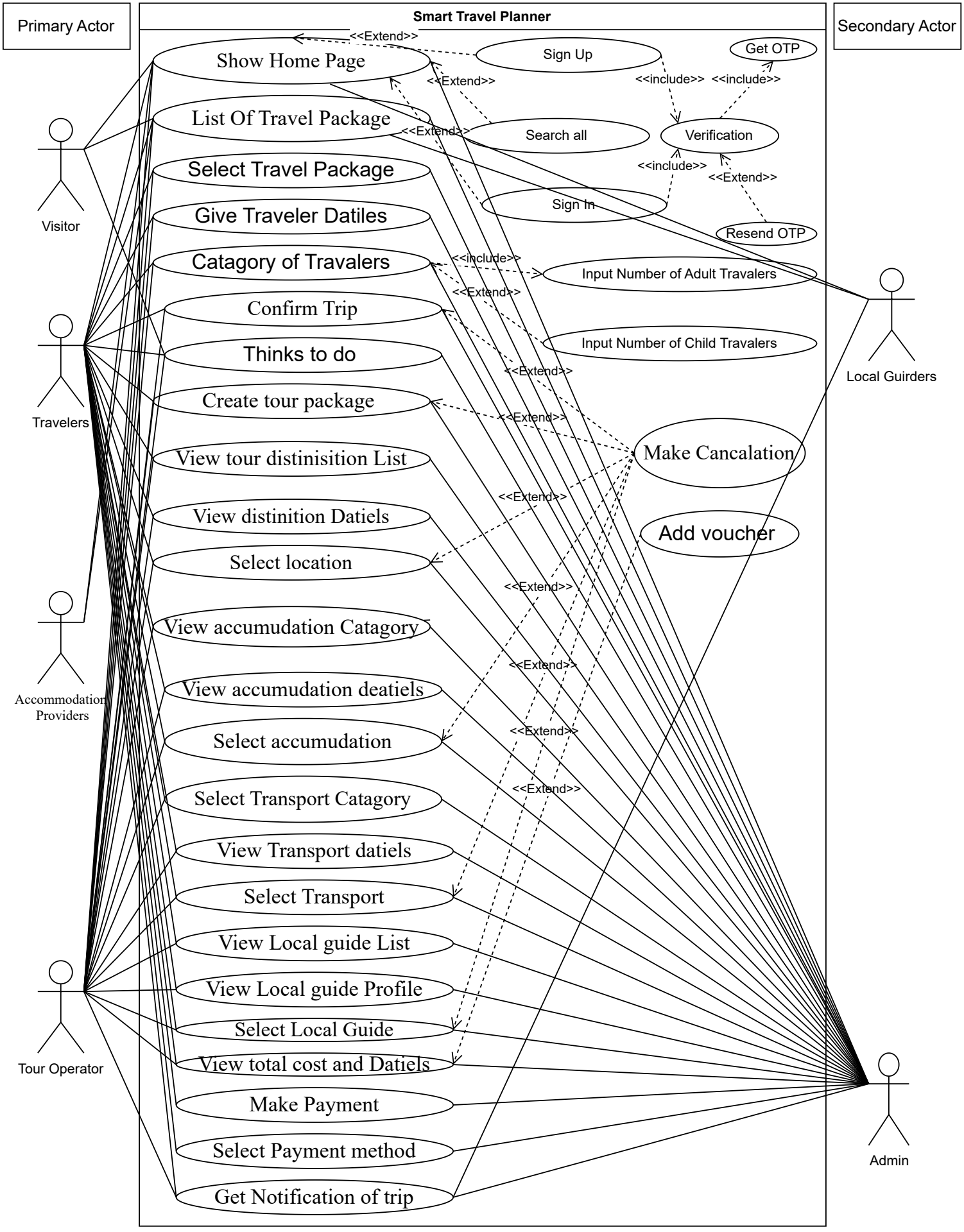
FR0047	Get voucher
Description	Here users can collect voucher
Stakeholder	Visitor, Travelers, Tour Operator, Admin

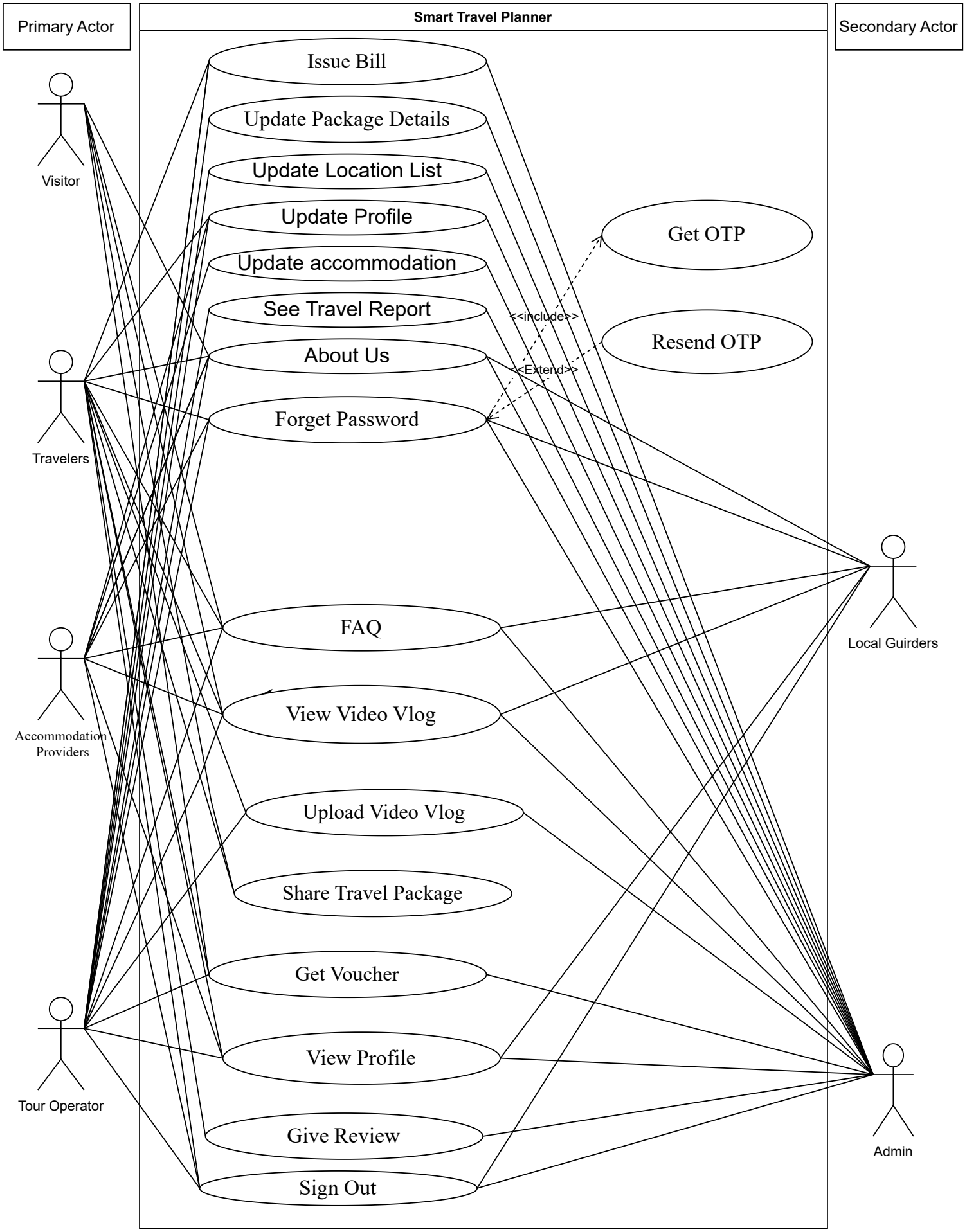
FR0048	Search All
Description	Here user can search their all requirement
Stakeholder	Visitor, Tour Operator, Travelers, Admin

FR0049	View profile
Description	Here user can view their profile
Stakeholder	Travelers, Tour Operators, Accommodation Providers, Local Guide, Admin

FR0050	Give Review
Description	Here users can provide their valuable opinion about tour.
Stakeholder	Travelers

FR0051	Sign Out
Description	Here, the user can leave the website
Stakeholder	Travelers, Tour Operators, Accommodation Providers, Local Guide, Admin


Primary Actor
Smart Travel Planner
Secondary Actor
Visitor
Travelers
Accommodation Providers
Tour Operator
Local Guirders
Admin
Show Home Page
List Of Travel Package
Select Travel Package
Give Traveler Datiles
Catagory of Travalers
Confirm Trip
Thinks to do
Create tour package
View tour distinisition List
View distinition Datiels
Select location
View accumudation Catagory
View accumudation deatiels
Select accumudation
Select Transport Catagory
View Transport datiels
Select Transport
View Local guide List
View Local guide Profile
Select Local Guide
View total cost and Datiels
Make Payment
Select Payment method
Get Notification of trip
Sign Up
Get OTP
Search all
Verification
Sign In
Resend OTP
Input Number of Adult Travalers
Input Number of Child Travalers
Make Cancalation
Add voucher
<<Extend>>
<<include>>


Primary Actor
Smart Travel Planner
Secondary Actor
Visitor
Travelers
Accommodation Providers
Tour Operator
Local Guirders
Admin
Issue Bill
Update Package Details
Update Location List
Update Profile
Update accommodation
See Travel Report
About Us
Forget Password
FAQ
View Video Vlog
Upload Video Vlog
Share Travel Package
Get Voucher
View Profile
Give Review
Sign Out
Get OTP
Resend OTP
<<include>>
<<Extend>>

Case Description 01: List travel package

<table>
<tr><td>Use Case</td><td>List travel package</td></tr>
<tr><td>Goal</td><td>To allow users to view the List of ready made travel packages .</td></tr>
<tr><td>Precondition</td><td>1. Required internet connection
2. Users must visit the homepage.</td></tr>
<tr><td>Success End Condition</td><td>Users can successfully view the list of ready made travel packages .</td></tr>
<tr><td>Failed End Condition</td><td>Notification: “Travel packages are not available”.</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Visitor, Travelers, Tour operator
Admin</td></tr>
<tr><td>Trigger</td><td>The user initiates the request to the “Travel package List” option.</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>Visit Dashboard</td></tr>
<tr><td>2.</td><td>The system displays the information in a structured manner.</td></tr>
<tr><td>3.</td><td>Press “Travel Package List”</td></tr>
<tr><td>4.</td><td>The system retrieves details, including about destination, pricing, reviews, and photos.</td></tr>
<tr><td>5.</td><td>Travel package loaded successfully</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td>
<table>
<tr><td>1.1</td><td>If User are offline</td></tr>
<tr><td></td><td>1.1.a. “Please your internet connection”</td></tr>
<tr><td>2.1</td><td>If the travel package are not available</td></tr>
<tr><td></td><td>2.1.a. Notification: “Travel Packages are Unavailable.”</td></tr>
<tr><td>3.1</td><td>If the travel package are not available</td></tr>
<tr><td></td><td>3.1.a. Notification: “Travel Packages are Unavailable.</td></tr>
<tr><td>5.1</td><td>If server doesn't work</td></tr>
<tr><td></td><td>5.1.a. Notification: “Try Again Later”</td></tr>
</table>
</td></tr>
<tr><td>Quality Requirements</td><td>The list of travel packages should be loaded within 1.5 seconds. also the system displays the information in a structured manner.</td></tr>
</table>

Case Description 02: Select travel package

<table>
<tr><td>Use Case</td><td>Select travel package</td></tr>
<tr><td>Goal</td><td>Users choose the travel package by using this system. .</td></tr>
<tr><td>Precondition</td><td>1. Required internet connection
2. Travel packages must be available in the system.
3. The Users must have logged in to the system .Required</td></tr>
<tr><td>Success End Condition</td><td>Notification: “ Successfully select a travel package.”</td></tr>
<tr><td>Failed End Condition</td><td>Notification: “ Failed to select Tour package”</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operator
Admin</td></tr>
<tr><td>Trigger</td><td>The user initiates the request to the select “Select Travel package” option.</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>User request to select travel package.</td></tr>
<tr><td>2.</td><td>The system will display details to get confirmation for the selected travel package.</td></tr>
<tr><td>3.</td><td>Users will confirm the selection.</td></tr>
<tr><td>4.</td><td>The system retrieves details, including about destination, pricing, reviews, and photos.</td></tr>
<tr><td>5.</td><td>System will be notify that “Package selected successfully”</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td>
<table>
<tr><td>1.1</td><td>If user is offline</td></tr>
<tr><td></td><td>1.1.a. “ No internet Connection”</td></tr>
<tr><td>3.1</td><td>If the selected travel package are not available</td></tr>
<tr><td></td><td>3.1.a.Notification: “The travel package are Unavailable”</td></tr>
<tr><td>2.1</td><td>Server is down</td></tr>
<tr><td></td><td>2.1.a. “Try Again Later”</td></tr>
<tr><td>3.1</td><td>If user will reject the selection travel package</td></tr>
<tr><td></td><td>3.1.a. Notification: “Failed to select travel package”</td></tr>
</table>
</td></tr>
<tr><td>Quality Requirements</td><td>The user will be complete selection process within 30 sec</td></tr>
</table>

Case Description 03 : Give traveler details

<table>
<tr><td>Use Case</td><td>Give traveler details</td></tr>
<tr><td>Goal</td><td>Users provide their details into the system.</td></tr>
<tr><td>Precondition</td><td>1. The Users must have logged in to the system .
2. Required internet connection</td></tr>
<tr><td>Success End Condition</td><td>Notification: “Traveler details successfully submitted .”</td></tr>
<tr><td>Failed End Condition</td><td>Notification: “Submission failed. Please fill up all required info.”</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operator
Admin</td></tr>
<tr><td>Trigger</td><td>The traveler initiates a request to the “Traveler details” option.</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>Go to traveler details.</td></tr>
<tr><td>2.</td><td>The system provide a sheet for traveler information</td></tr>
<tr><td>3.</td><td>Users filled all required information.</td></tr>
<tr><td>4.</td><td>Users press the “Submit” button.</td></tr>
<tr><td>5.</td><td>Notify “User information submitted successfully”.</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td>
<table>
<tr><td>1.1</td><td>If the system doesn’t respond.</td></tr>
<tr><td></td><td>1.1.a. “Wait a moment”</td></tr>
<tr><td>2.1</td><td>If system doesn't work</td></tr>
<tr><td></td><td>2.1.a. “Please check your internet connection”</td></tr>
<tr><td>4.1</td><td>If any required information are missing</td></tr>
<tr><td></td><td>4.1.a. Notification: “Please fill up all required information”</td></tr>
<tr><td>5.1</td><td>If session timeout</td></tr>
<tr><td></td><td>5.1.a. “ Session Timeout” please try again.</td></tr>
<tr><td>5.2</td><td>If User information submitted not successfully.</td></tr>
<tr><td></td><td>5.2.a. Get Notification:"Traveler details submitted failed"</td></tr>
</table>
</td></tr>
<tr><td>Quality Requirements</td><td>Users will get 15 mins to fill up their information and submission .</td></tr>
</table>

Case Description 04: Confirm Trip

<table>
<tr><td>Use Case</td><td>Confirm Trip</td></tr>
<tr><td>Goal</td><td>Ensure that travelers confirm their trip.</td></tr>
<tr><td>Precondition</td><td>1. The user must have logged in to the system .
2. Required internet connection
2. Travelers must provide their acceptable and requirements information .</td></tr>
<tr><td>Success End Condition</td><td>Notification: "Trip confirmed successfully”. Booking details have been sent to your phone.</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Trip confirmation failed. Please check your details and try again.”</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operator
Admin.</td></tr>
<tr><td>Trigger</td><td>The User initiates the request to the “Confirm Trip” Option .</td></tr>
<tr><td>Description /
Main Success
preScenario</td><td>
<table>
<tr><td>1.</td><td>User request to the “Confirm trip”.</td></tr>
<tr><td>2.</td><td>The system will Provide a sheet for review all given information</td></tr>
<tr><td>3.</td><td>User can request for update information</td></tr>
<tr><td>4.</td><td>Press the “Submit” button.</td></tr>
<tr><td>5.</td><td>Notify “Submitted Successfully”</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td><table>
<tr><td>2.1</td><td>If the system doesn’t respond.</td></tr>
<tr><td></td><td>2.1.a. Notification: “Wait a moment”</td></tr>
<tr><td>3.1</td><td>If user want to update any information</td></tr>
<tr><td></td><td>3.1.a. System provide a sheet for traveler required information</td></tr>
<tr><td>4.1</td><td>If system doesn't work</td></tr>
<tr><td></td><td>3.1.a. “Something went wrong, Try again later”</td></tr>
<tr><td>5.1</td><td>If User information submitted successfully.</td></tr>
<tr><td></td><td>5.1.a. Get Notification:"The trip confirmed successfully"</td></tr>
<tr><td></td><td>5.1.b. Get mail: “Trip Confirm Successful”</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>Users will get 20 min to confirm trip submission and should be loaded within 3 seconds.</td></tr>
</table>

Case Description 05:View destination details

<table>
<tr><td>Use Case</td><td>View destination details</td></tr>
<tr><td>Goal</td><td>Allow user to access detailed information about destinations including weather ,view point ,tour price ,image ,review ,travel requirement of the location.</td></tr>
<tr><td>Precondition</td><td>1.The user must have the app installed and logged in to the system .
2.The destination must be in the destination list.
3.Needed Internet connectivity .
4.The user must plan a tour.</td></tr>
<tr><td>Success End Condition</td><td>The user successfully views the details of destination</td></tr>
<tr><td>Failed End Condition</td><td>Notification: “Failed to load Destination details.”</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operator
Admin</td></tr>
<tr><td>Trigger</td><td>The user initiates the request to the “Destination Details” option.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table>
<tr><td>1.</td><td>Go to Destination Details.</td></tr>
<tr><td>2.</td><td>The system retrieves relevant details</td></tr>
<tr><td>3.</td><td>The system displays the information in a structured manner.</td></tr>
<tr><td>4.</td><td>The user can explore images, read reviews, and check travel requirements.</td></tr>
<tr><td>5</td><td>Destination details loaded successfully</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>If the user is offline</td></tr>
<tr><td></td><td>1.1.a.“Check Internet connection”</td></tr>
<tr><td>2.1</td><td>If the system don't get any data of the destination</td></tr>
<tr><td></td><td>2.1.a.Notification: “Data not found”</td></tr>
<tr><td>4.1</td><td>If any user can not access, explore images,read reviews, and check travel requirements.</td></tr>
<tr><td></td><td>4.1.a.Notification: “Failed to load Destination details”</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>The traveler can view the destination 24/7 if destinations are available and destination details should be loaded within 1.5 seconds. also the system displays the information in a structured manner.</td></tr>
</table>

Case Description 06:Select Location

<table>
<tr><td>Use Case</td><td>Select Location</td></tr>
<tr><td>Goal</td><td>Travelers choose and confirm a location for their trip .</td></tr>
<tr><td>Precondition</td><td>1.The user must have the app installed and logged in to the system
2.The user must plan a tour.
3.The user must go to Destination List or Destination Details
4.Require Internet connection</td></tr>
<tr><td>Success End Condition</td><td>Notification: “ Successfully selected location.”</td></tr>
<tr><td>Failed End Condition</td><td>Notification: “Failed to select location.”</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operator
Admin</td></tr>
<tr><td>Trigger</td><td>The user initiates the request to the “Select Location” option.</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>Go to Select Location</td></tr>
<tr><td>2.</td><td>The system will display to get confirmation for select location</td></tr>
<tr><td>3.</td><td>The user will review and make confirmation</td></tr>
<tr><td>4.</td><td>system will notify that “ Successfully selected location.”</td></tr>
<tr><td>5.</td><td>The system will go to next page called “list of accommodation” option</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>If the user is in offline</td></tr>
<tr><td></td><td>1.1.a. Notification:“Please check your internet connection.”</td></tr>
<tr><td>1.2</td><td>If the selected Location is fully booked</td></tr>
<tr><td></td><td>1.2.a. “Choose another Location!”</td></tr>
<tr><td>3.1</td><td>if user will reject the selection</td></tr>
<tr><td></td><td>3.1.a. Notification: “Failed to select location.”</td></tr>
<tr><td>4.1</td><td>If there is any complexity to load next page</td></tr>
<tr><td></td><td>4.1.a. “Wait a few minute and try again”</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>The process will be complete within 30 sec.</td></tr>
</table>

Case Description 07:View accommodation details

<table>
<tr><td>Use Case</td><td>View accommodation details</td></tr>
<tr><td>Goal</td><td>Allow users to view detailed information about available accommodations.</td></tr>
<tr><td>Precondition</td><td>1.The user must have got installed and logged in to the system .
2.The user must have complete “View accommodation category” options.
3. A destination must be selected.
4.Required internet connection</td></tr>
<tr><td>Success End Condition</td><td>Notification: “Successfully views detailed information of accommodation.”</td></tr>
<tr><td>Failed End Condition</td><td>Notification: “Failed to view accommodation details.”</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operator
Admin</td></tr>
<tr><td>Trigger</td><td>The user initiates the request to the “Accommodation Details” option.</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>Go to Accommodation Details</td></tr>
<tr><td>2.</td><td>The system retrieves details, including room types, pricing, amenities, guest reviews, and photos.</td></tr>
<tr><td>3.</td><td>The system displays the information in a structured manner.</td></tr>
<tr><td>4.</td><td>The user can check availability.</td></tr>
<tr><td>5.</td><td>Accommodation details loaded successfully</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>If system doesn't work</td></tr>
<tr><td></td><td>1.1.a. “Something is wrong, Try again”</td></tr>
<tr><td>3.1</td><td>If the accommodation details does not loaded</td></tr>
<tr><td></td><td>3.1..a. “loading failed, Try again”</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>Accommodation details should load within 1.5 seconds.Information should be well-organized and easy to compare.</td></tr>
</table>

Case Description 08:Select accommodation

<table>
<tr><td>Use Case</td><td>Select accommodation</td></tr>
<tr><td>Goal</td><td>Allow travelers to view the detailed accommodation information .</td></tr>
<tr><td>Precondition</td><td>1.The user must have the app installed and logged in to the system
2.User must stay in the page named “ accommodation details.”
3.Accommodation details must be available in the system
4.required internet connection</td></tr>
<tr><td>Success End Condition</td><td>Notification: “ Successfully selected accommodation.”</td></tr>
<tr><td>Failed End Condition</td><td>Notification: “Failed to Select accommodation.”</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operator,
Admin</td></tr>
<tr><td>Trigger</td><td>The user initiates the request to the “Select Accommodation” option.</td></tr>
<tr><td>Description /
Main Success
Scenario</td><td>
<table>
<tr><td>1.</td><td>Go to the Select Accommodation.</td></tr>
<tr><td>2.</td><td>The system will display to get confirmation for select accommodation</td></tr>
<tr><td>3.</td><td>The user will review and make confirmation</td></tr>
<tr><td>4.</td><td>system will notify that ,
Notification: “ Successfully selected accommodation.”</td></tr>
<tr><td>5..</td><td>System will go to next page named view transport category</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td>
<table>
<tr><td>1.1</td><td>If user is offline</td></tr>
<tr><td></td><td>1.1.a. “ Check Network Connection”</td></tr>
<tr><td>1.2</td><td>If the selected accommodation is fully booked</td></tr>
<tr><td></td><td>1.2.a Massage:“Choose another accommodation”</td></tr>
<tr><td>2.1</td><td>If server is down</td></tr>
<tr><td></td><td>2.1.a. Notification: “Try again”</td></tr>
<tr><td>3.1</td><td>If user will reject the selection</td></tr>
<tr><td></td><td>3.1.a. Notification: “Failed to Select accommodation.”</td></tr>
<tr><td>5.1</td><td>If next page is not loaded</td></tr>
<tr><td></td><td>5.1.a. next page loaded failed</td></tr>
</table>
</td></tr>
<tr><td>Quality Requirements</td><td>The user will complete the accommodation process within 30 seconds.</td></tr>
</table>

Case Description 09:View transport details

<table>
<tr><td>Use Case</td><td>View transport details</td></tr>
<tr><td>Goal</td><td>Allow users to access detailed transport information including transport type, time, location and availability.</td></tr>
<tr><td>Precondition</td><td>1. The user must have logged into the system
2. Users must select the view transport category .
3. Transport details must be available in the system.
4. Required internet connection.</td></tr>
<tr><td>Success End Condition</td><td>Notification: "Transport details retrieved successfully."</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Failed to retrieve transport details. Please try again later."</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operator
Admin</td></tr>
<tr><td>Trigger</td><td>The user initiates a request to view “Transport details” options.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table>
<tr><td>1.</td><td>The user select “Transport details” option</td></tr>
<tr><td>2.</td><td>The system retrieves and displays transport details.</td></tr>
<tr><td>3.</td><td>The user searches for specific transport based on location and date.</td></tr>
<tr><td>4.</td><td>System provides their selected or searching transport details.</td></tr>
<tr><td>5.</td><td>The user can view additional details.</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td>
<table>
<tr><td>1.1</td><td>Server doesn’t work</td></tr>
<tr><td></td><td>1.1.a. “Try again”</td></tr>
<tr><td>2.1</td><td>If there is no transport available:</td></tr>
<tr><td></td><td>2.1.a. Notification: “ No transport is available at the moment” .</td></tr>
<tr><td>3.1</td><td>If searching information not found:</td></tr>
<tr><td></td><td>3.1.a. Notification: “Data not found”</td></tr>
<tr><td>4.1</td><td>System error:</td></tr>
<tr><td></td><td>4.1.a. “Try again later”</td></tr>
<tr><td>5.1</td><td>If there is no network connection:</td></tr>
<tr><td></td><td>5.1.a “ Please check your connection”</td></tr>
</table>
</td></tr>
<tr><td>Quality Requirements</td><td>The system should be accessible 24/7 and transport details should be loaded in 2 seconds. The interface should be user friendly.</td></tr>
</table>

Case Description 10:Select transport

<table>
<tr><td>Use Case</td><td>Select transport</td></tr>
<tr><td>Goal</td><td>To allow users to choose the transport for their trip.</td></tr>
<tr><td>Precondition</td><td>1. The user must have logged into the system .
2. The user must select the transport category and destination.
3. Transport must be available in the system.</td></tr>
<tr><td>Success End Condition</td><td>Notification: “Transport selected successfully.”</td></tr>
<tr><td>Failed End Condition</td><td>Notification: “Failed to select transport. Please try again later.”</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operator
Admin.</td></tr>
<tr><td>Trigger</td><td>The users choose the “Select Transport” option for booking.</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>Click the “Select Transport” option.</td></tr>
<tr><td>2.</td><td>The system displays to get confirmation to select.</td></tr>
<tr><td>3.</td><td>User will confirm the selection</td></tr>
<tr><td>4.</td><td>System will notify that “ Successfully selected Transport.”</td></tr>
<tr><td>5.</td><td>The system will go to the next page called “Local Guide List”</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td>
<table>
<tr><td>1.1</td><td>If the selected guide is not available or fully booked:</td></tr>
<tr><td></td><td>1.1.a. Notification: “Guide is not available.”</td></tr>
<tr><td>2.1</td><td>If there is a system error:</td></tr>
<tr><td></td><td>2.1.a. “Try again later.”</td></tr>
<tr><td>3.1</td><td>If user cancel selection:</td></tr>
<tr><td></td><td>3.1.a.Notification: “Cancel the selection”</td></tr>
</table>
</td></tr>
<tr><td>Quality Requirements</td><td>The process will complete in 15 seconds.</td></tr>
</table>

Case Description11:.View local guide list

<table>
<tr><td>Use Case</td><td>View local guide list</td></tr>
<tr><td>Goal</td><td>To allow users to view a list of available local guides.</td></tr>
<tr><td>Precondition</td><td>1. The user must have logged into the system .
2. Required internet connection.
3. The user must have a tour plan.
4. The user must search for a local guide .</td></tr>
<tr><td>Success End Condition</td><td>Notification: "Successfully views list of local guides."</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Failed to view the local guide list. Please try again later."</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operator
Local guide, Admin</td></tr>
<tr><td>Trigger</td><td>The user initiates the request to the “Guide List” option.</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>Click the “View guide list” option from the dashboard .</td></tr>
<tr><td>2.</td><td>The system displays the guide list, including their profile picture, names, rating and experience.</td></tr>
<tr><td>3.</td><td>Users click on a guide profile to view more details.</td></tr>
<tr><td>4.</td><td>System provides the selected guide profile.</td></tr>
<tr><td>5.</td><td>Users can confirm the booking guide if they want.</td></tr>
</table>
</td></tr>
</table>

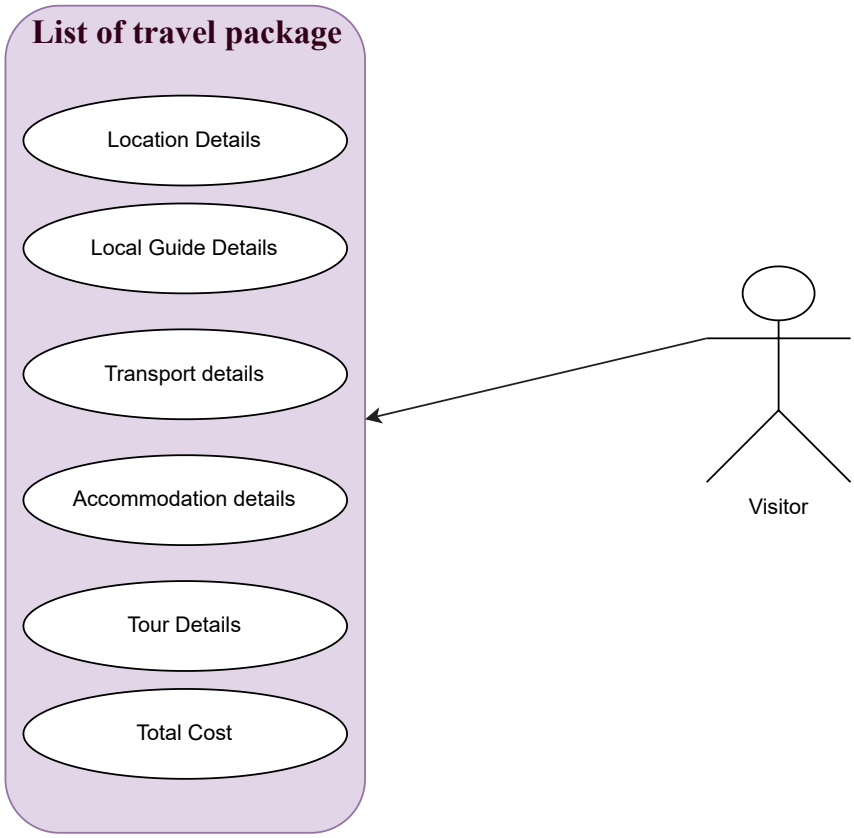
<table>
<tr><td>Alternative Flows</td><td>
<table>
<tr><td>1.1</td><td>If the server doesn’t work:</td></tr>
<tr><td></td><td>1.1.a.“Data is not found”</td></tr>
<tr><td>2.1</td><td>If there are no guides available or fully booked:</td></tr>
<tr><td></td><td>2.1.a Notification: “No local guides available at this moment.”</td></tr>
<tr><td>3.1</td><td>If there is a system error:</td></tr>
<tr><td></td><td>3.1.a. “Please try again later.”</td></tr>
<tr><td>4.1</td><td>If the user loses internet connection:</td></tr>
<tr><td></td><td>4.1.a. “No internet connection. Please check your network.”</td></tr>
</table>
</td></tr>
<tr><td>Quality Requirements</td><td>The system should be accessible 24/7 and transport details should be loaded in 2 seconds. The interface should be user friendly with search options.</td></tr>
</table>

Case Description12: Select Local Guide

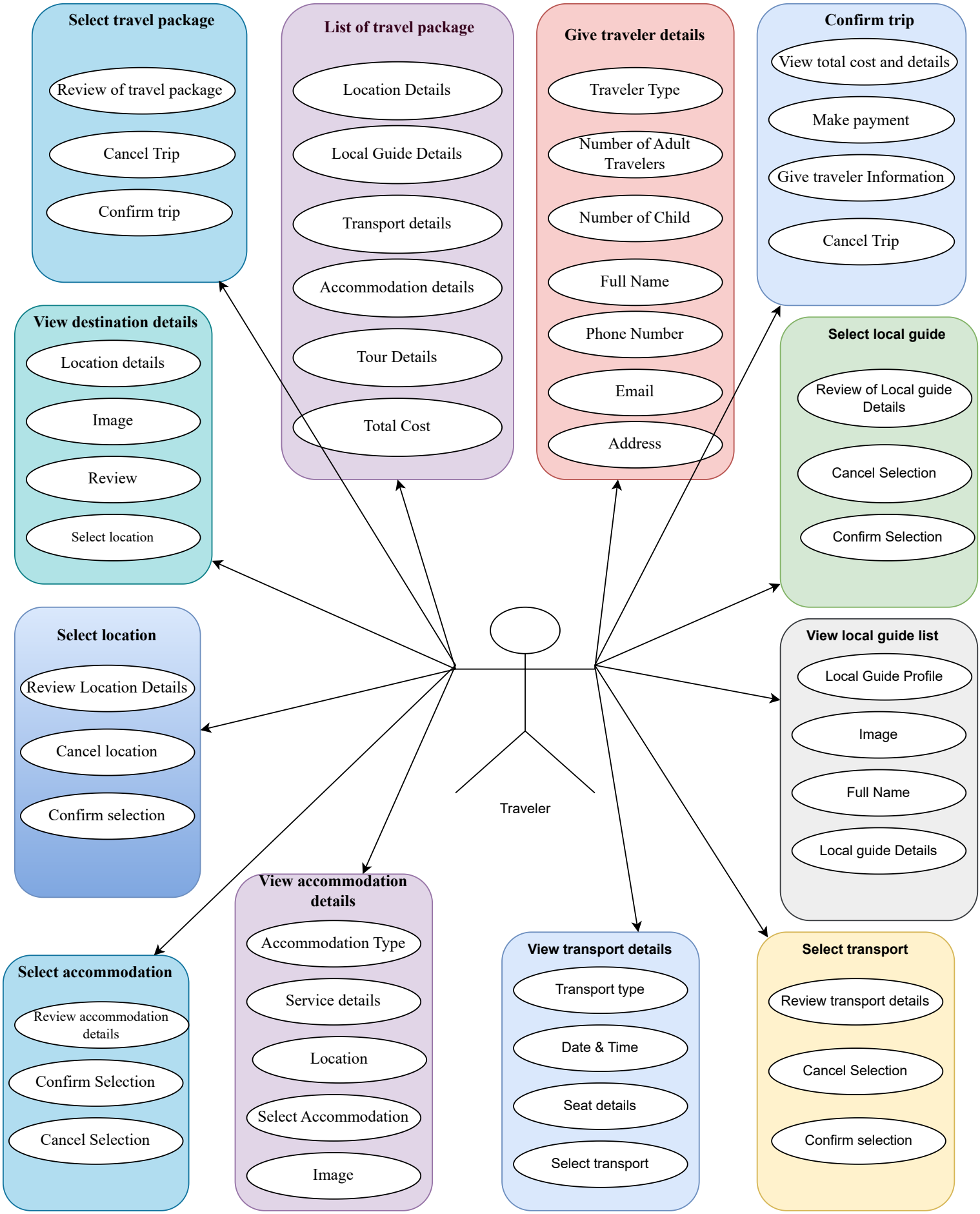
<table>
<tr><td>Use Case</td><td>Select Local Guide</td></tr>
<tr><td>Goal</td><td>To allow users to select their chosen local guide .</td></tr>
<tr><td>Precondition</td><td>1. The user must be logged into the system.
2. The system displays the updated list of available local guides.
3. The user must plan a tour.</td></tr>
<tr><td>Success End Condition</td><td>Notification: “Local guide selected successfully.”</td></tr>
<tr><td>Failed End Condition</td><td>Notification: “Failed to select a local guide.”</td></tr>
<tr><td>Primary Actors
Secondary Actors</td><td>Travelers, Tour operators.
Local guide, Admin</td></tr>
<tr><td>Trigger</td><td>The user initiates the process to the “Select Guide” option.</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>Click the “Select Guide” option to select a local guide.</td></tr>
<tr><td>2.</td><td>The system updates the guide availability and generates a booking confirmation.</td></tr>
<tr><td>3.</td><td>The user clicks the “Confirm Selection” option.</td></tr>
<tr><td>4.</td><td>The user receives a confirmation message.</td></tr>
<tr><td>5.</td><td>the system will go to the next page called “total cost and details” as bill.</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>If the selected guide is not available or fully booked:</td></tr>
<tr><td></td><td>1.1.a. Notification: “Guide is not available.”</td></tr>
<tr><td>2.1</td><td>Server doesn’t work:</td></tr>
<tr><td></td><td>2.1.a. “Try again”</td></tr>
<tr><td>3.1</td><td>If user cancel selection:</td></tr>
<tr><td></td><td>3.1.a.Notification: “Cancel the selection”</td></tr>
<tr><td>4.1</td><td>If confirmation message not received:</td></tr>
<tr><td></td><td>4.1.a. Notification: “Incorrect information”</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>The process will complete in 15 seconds.</td></tr>
</table>

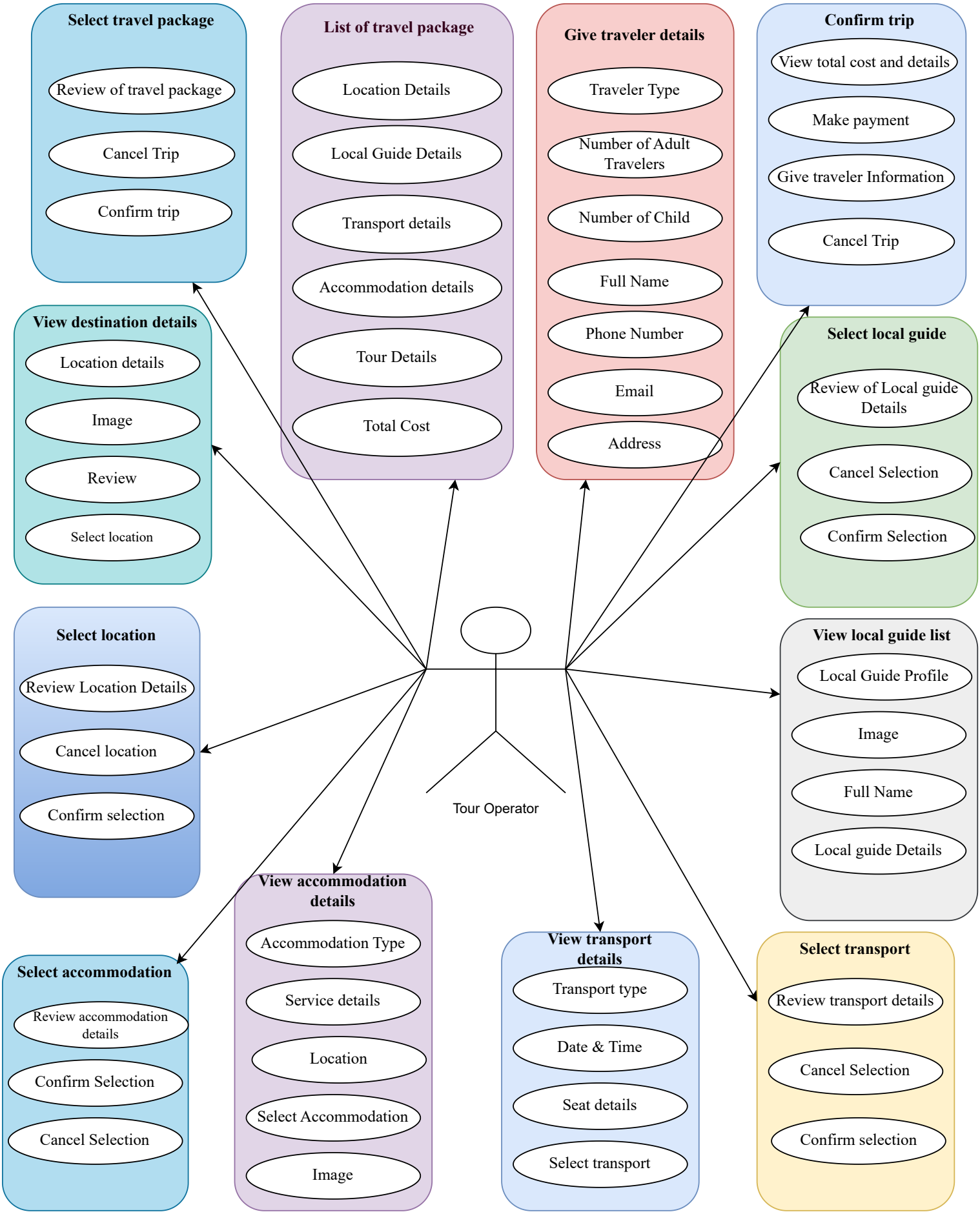
Block Diagram For :Visitor



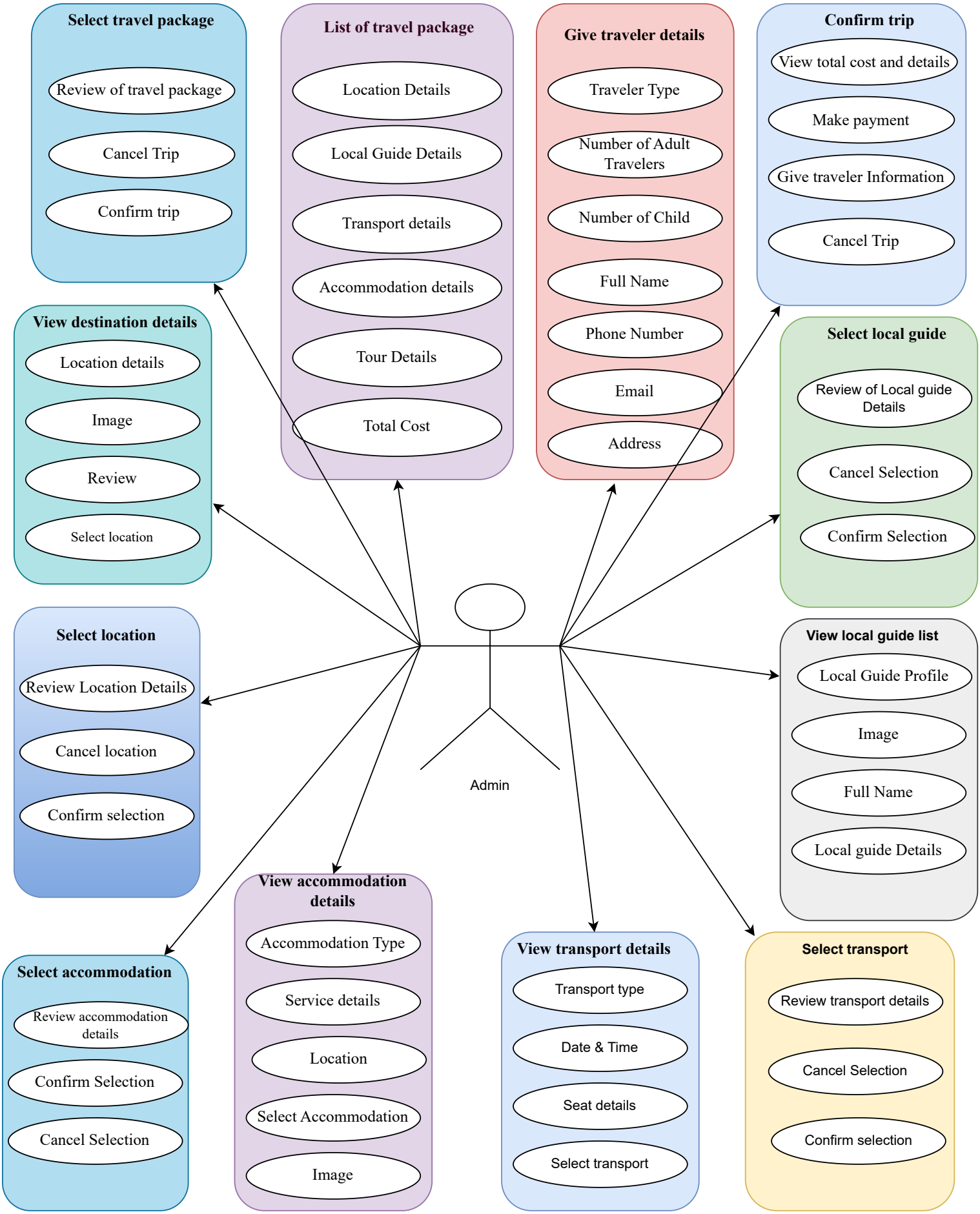
Block Diagram For :Traveler



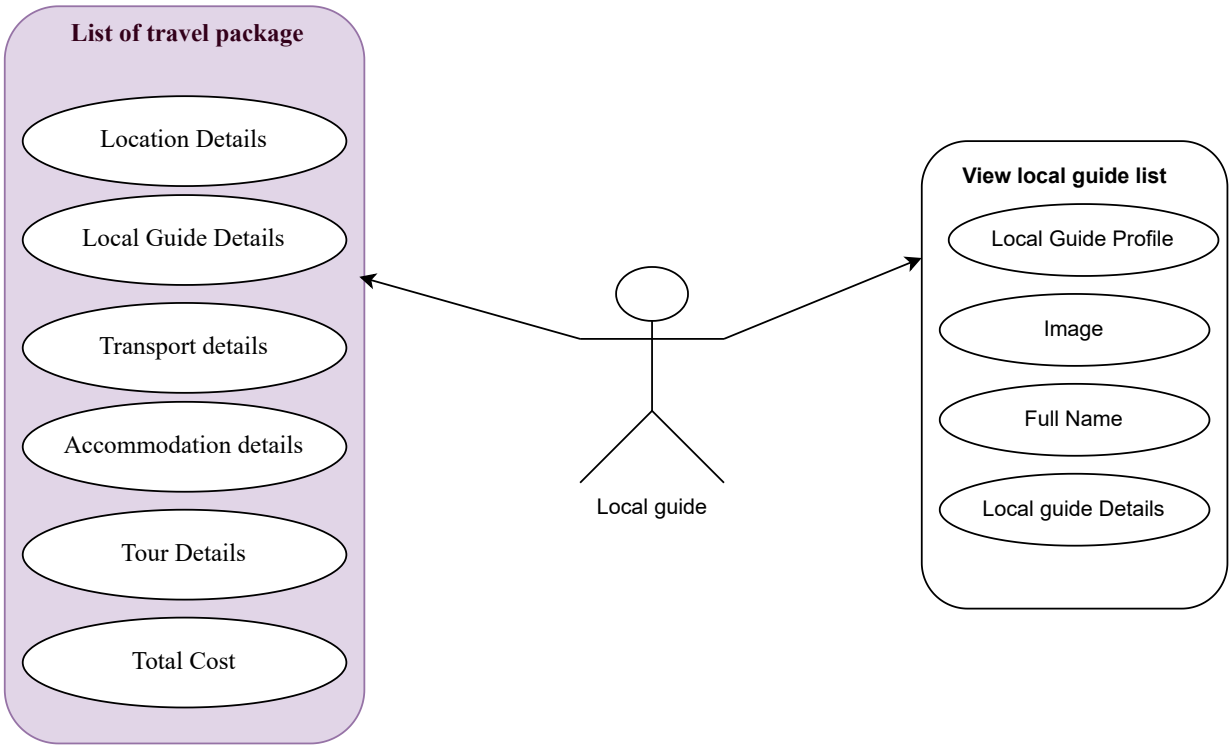
Block Diagram For: Tour Operator



Block Diagram For :Admin



Block Diagram For :Local Guide



Data Flow Diagram For Travel Planner:

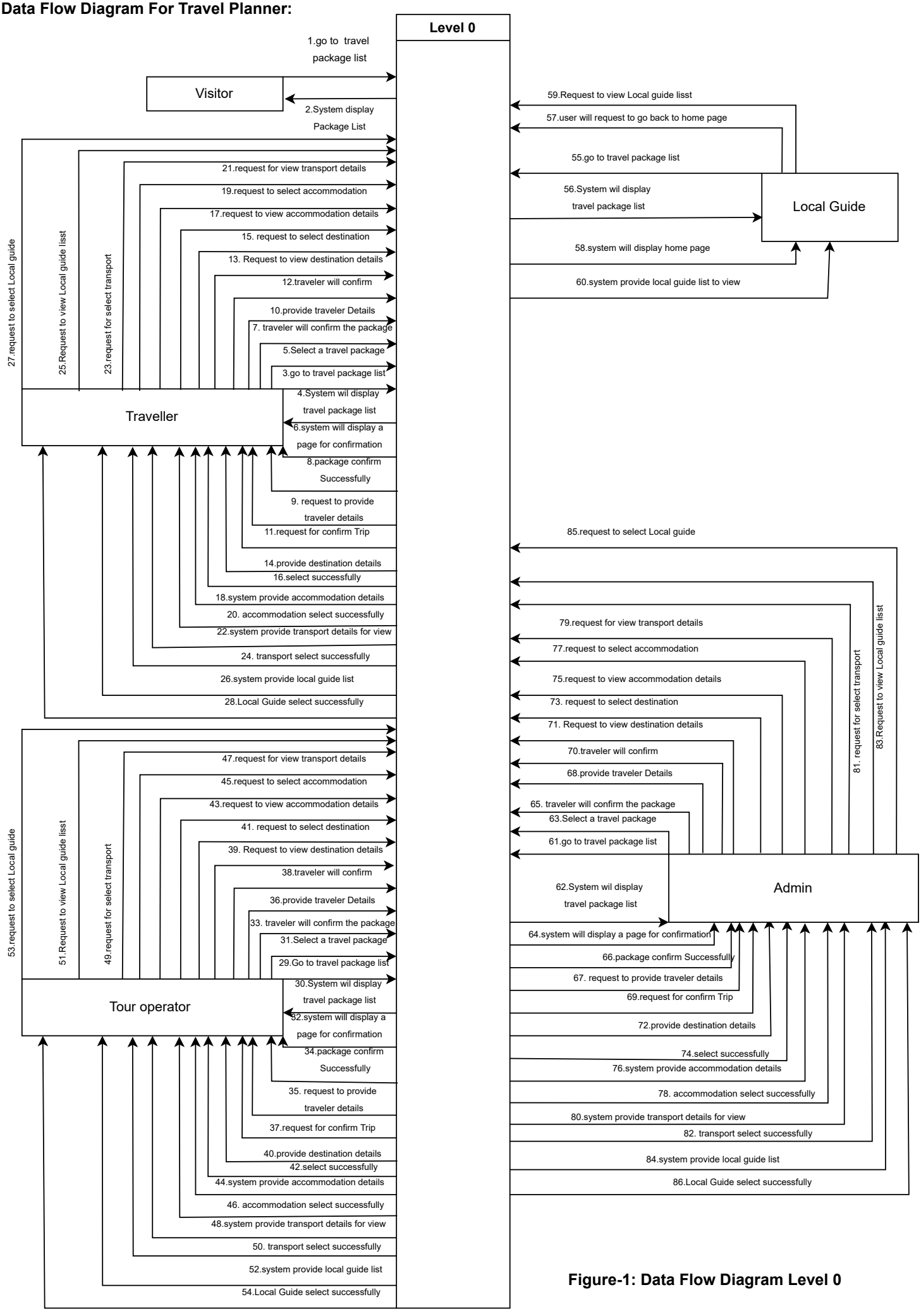


Figure-1: Data Flow Diagram Level 0

Data Flow Diagram For Travel Planner:

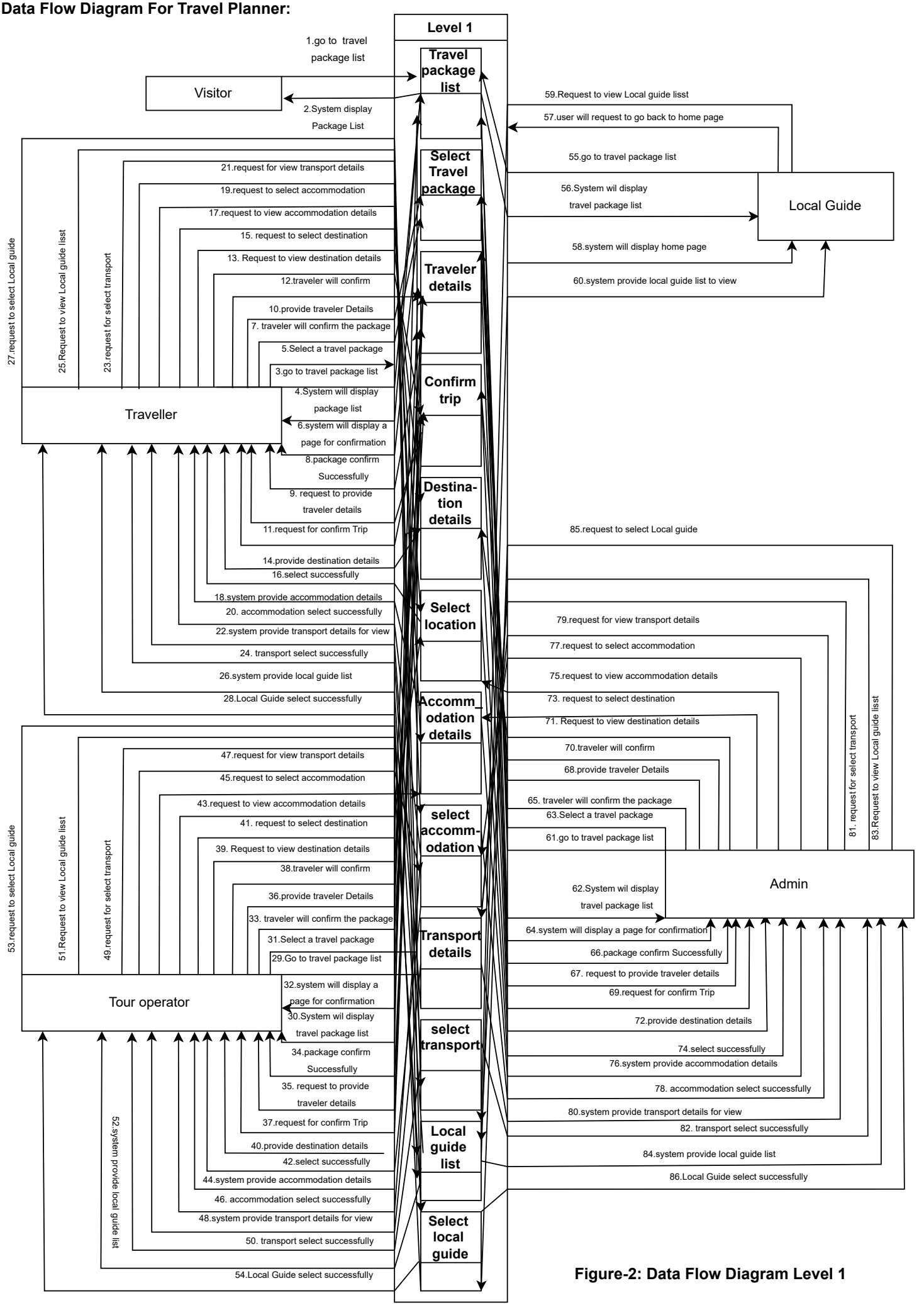
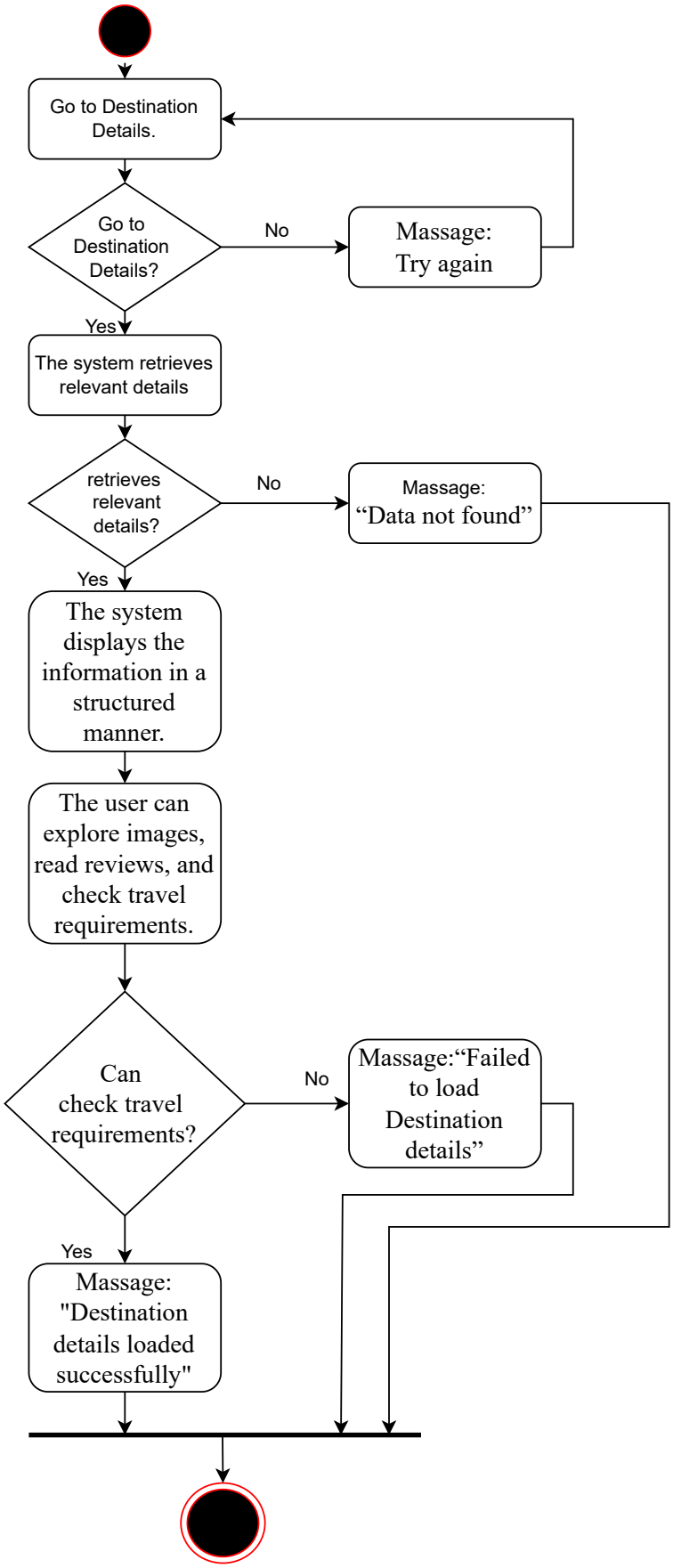
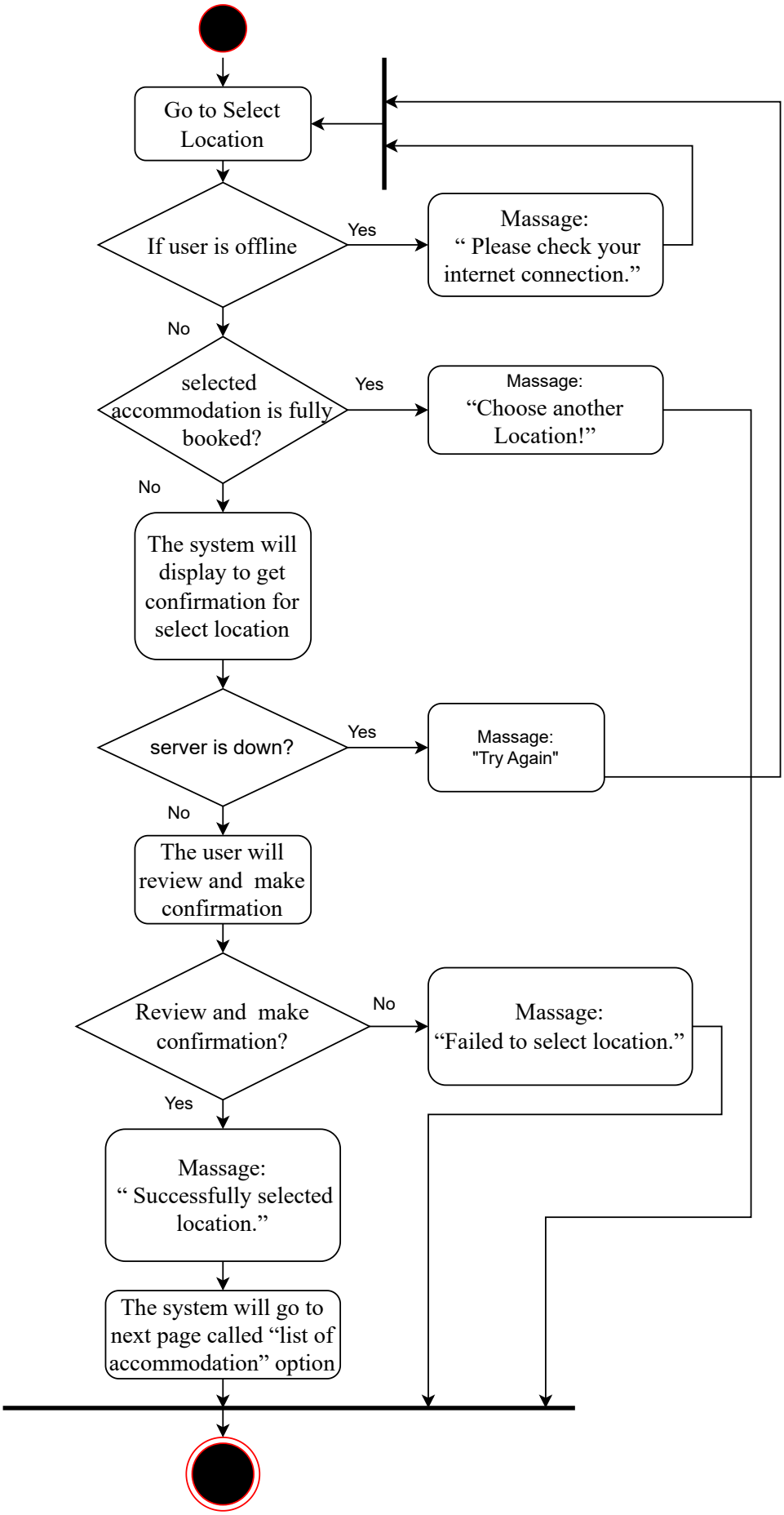


Figure-2: Data Flow Diagram Level 1

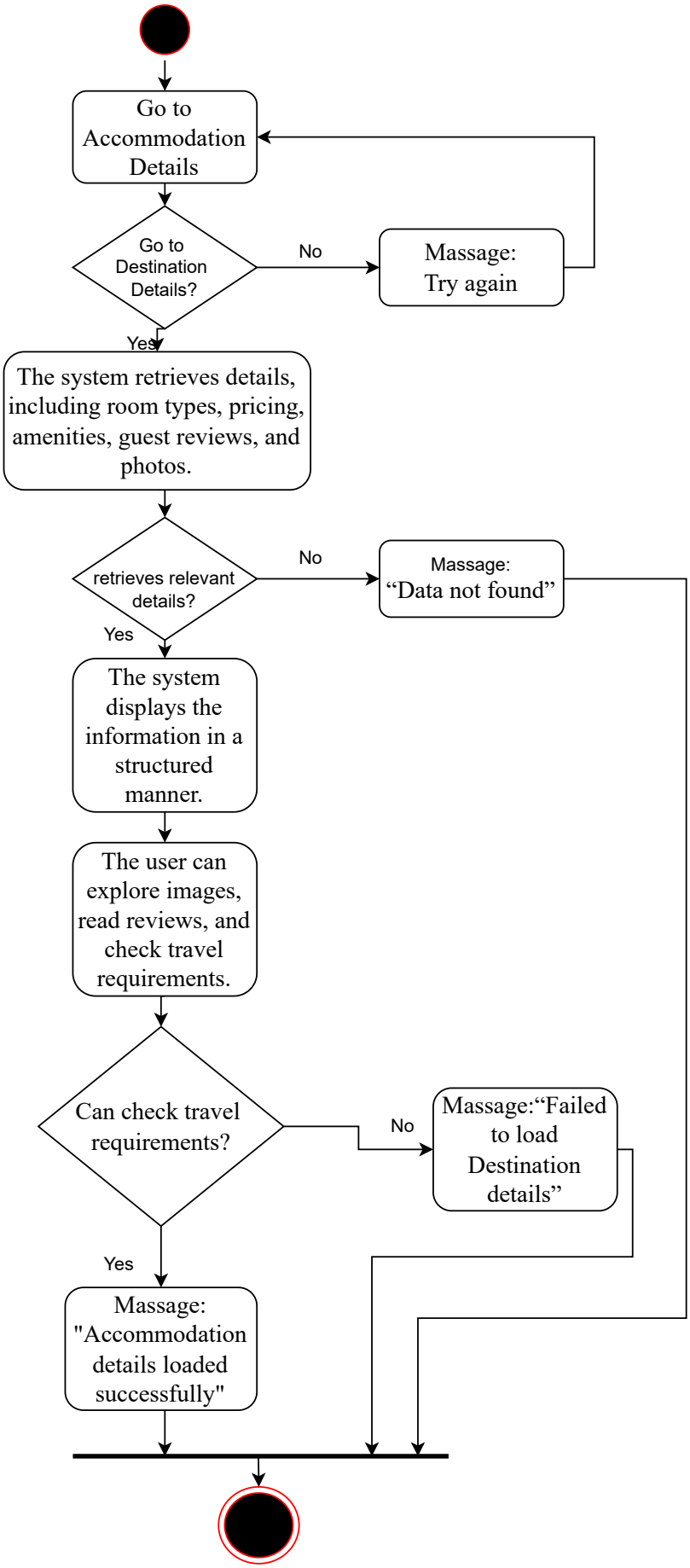
Activity Diagram For: View Destination Details



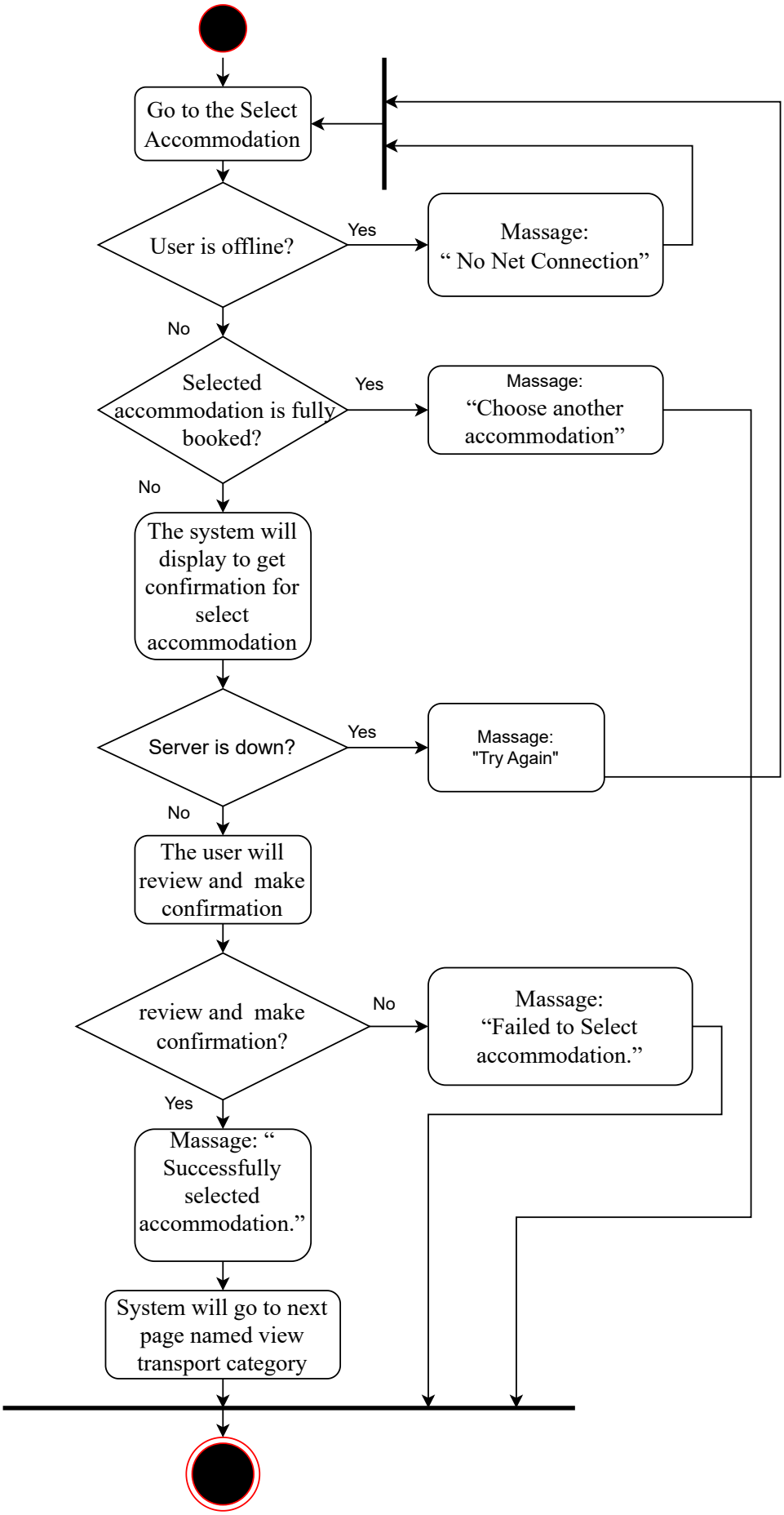
Activity Diagram For: **Select Location**



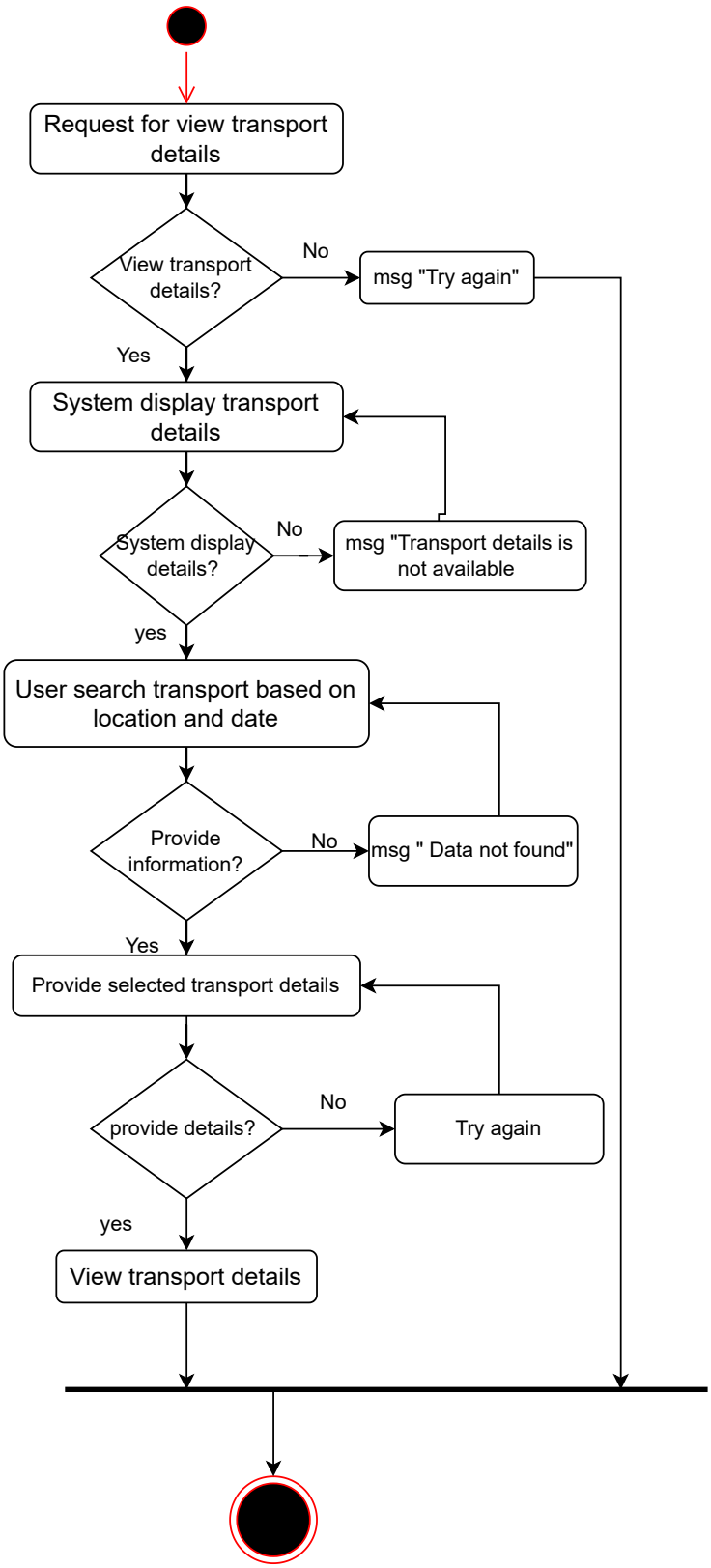
Activity Diagram For: **View accommodation details**



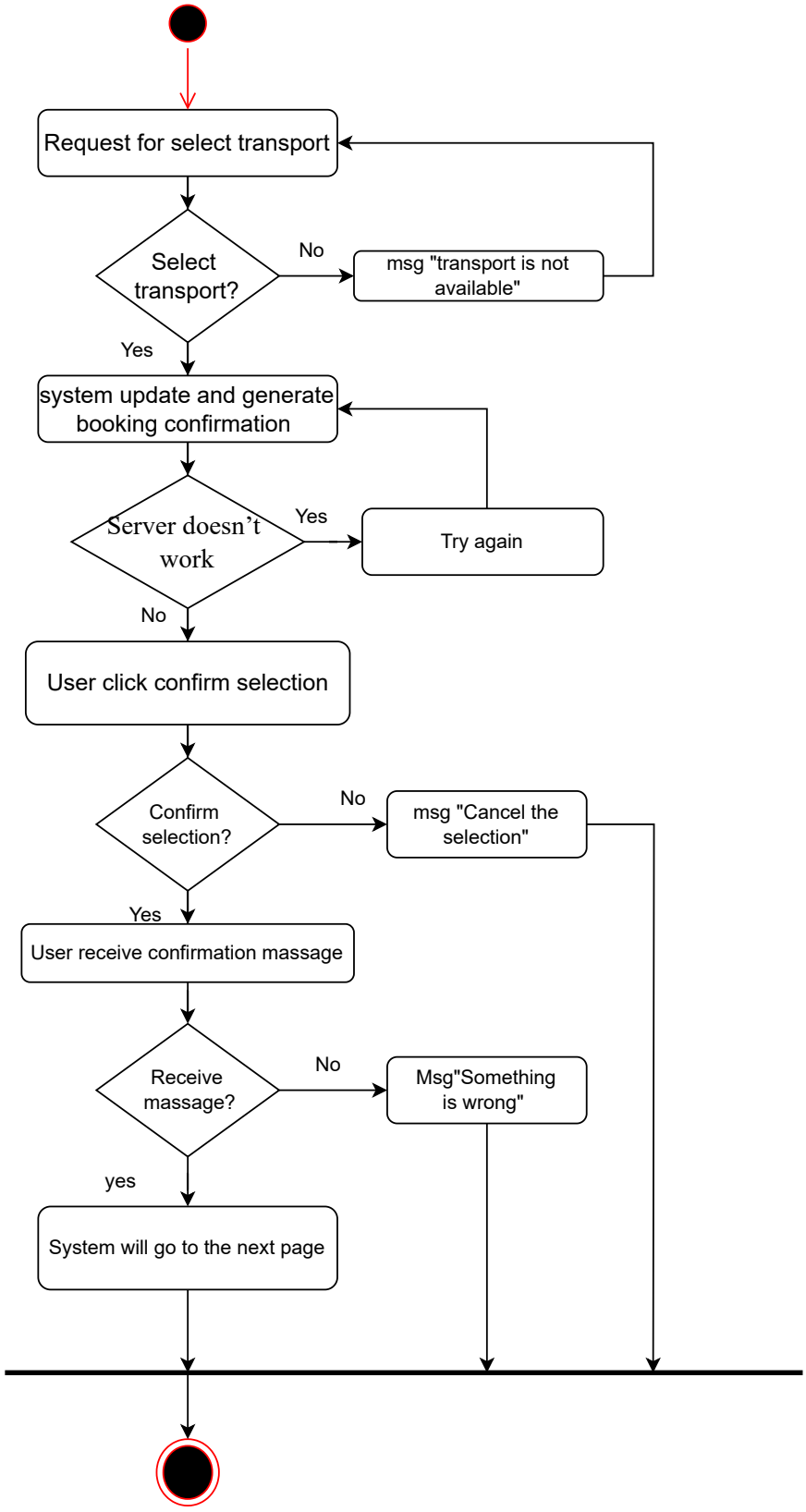
Activity Diagram For: **Select accommodation**



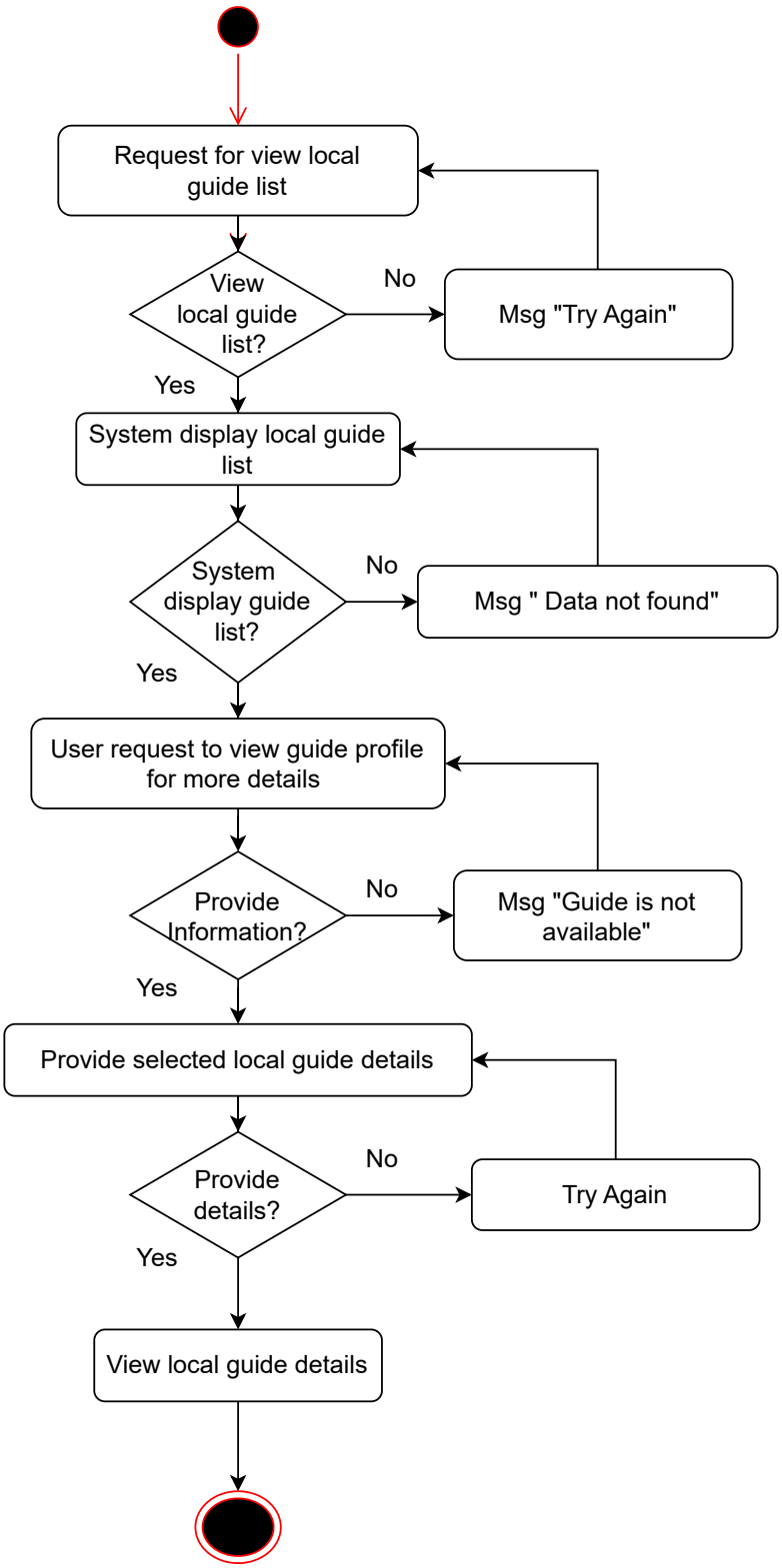
View Transport Details



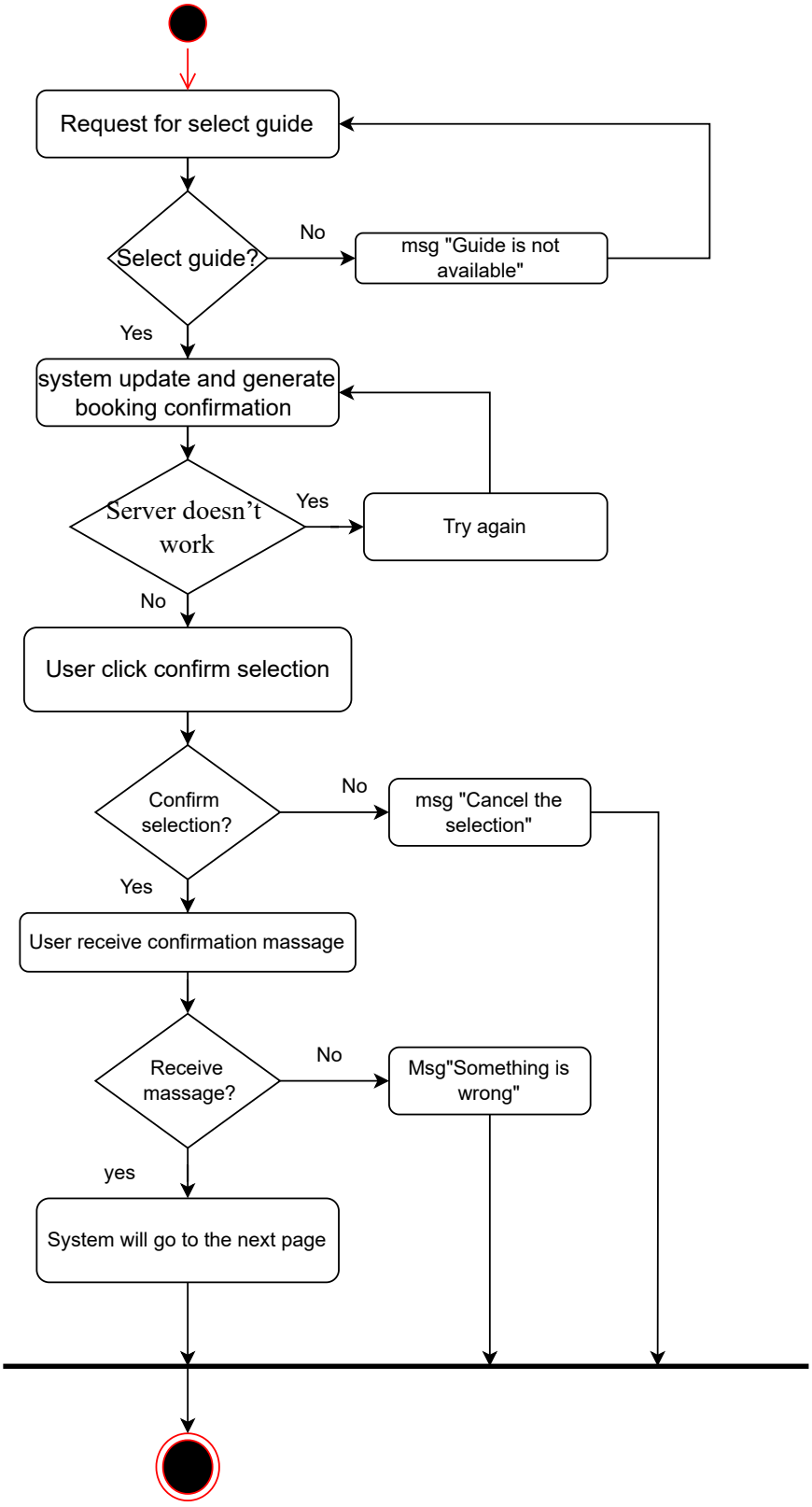
Select Transport



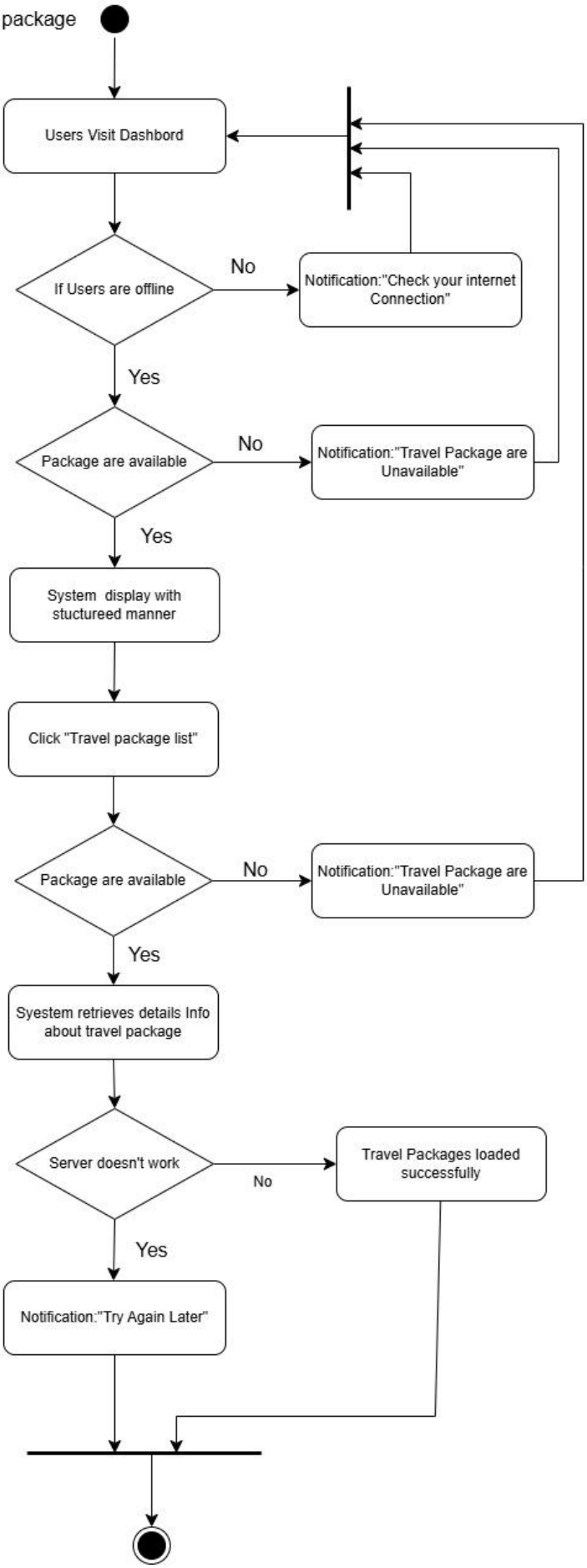
View local guide list



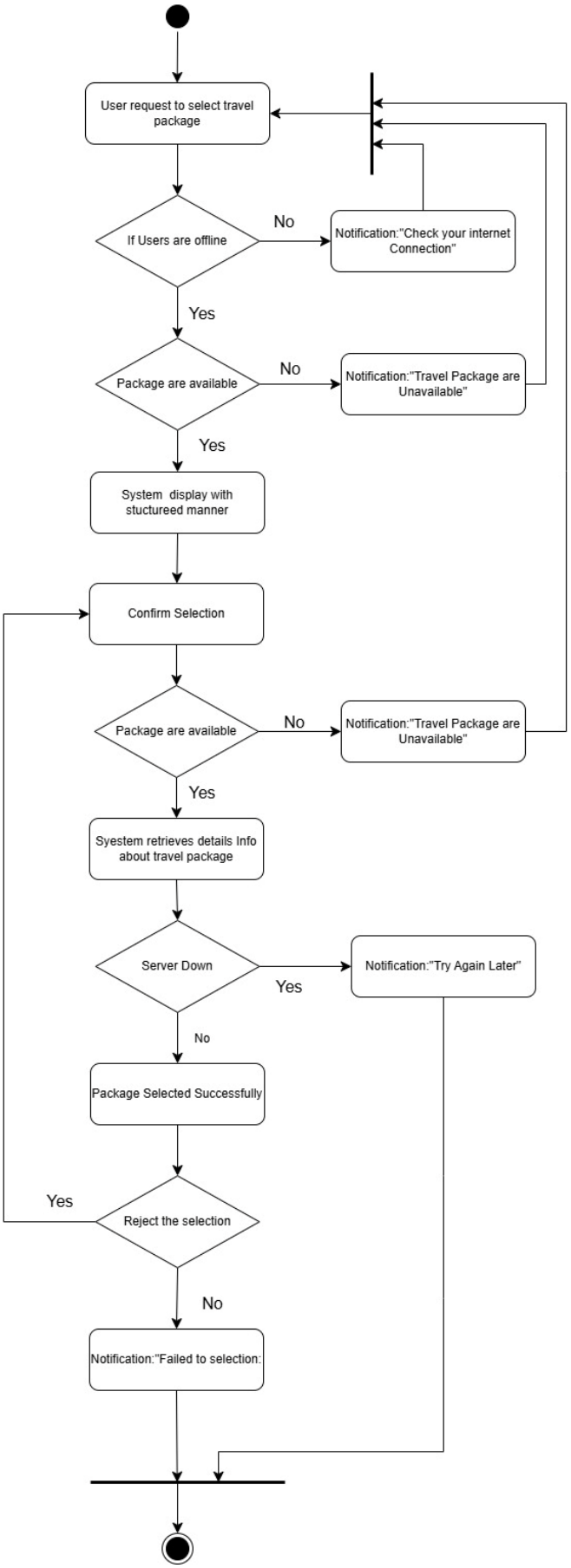
Select Local Guide



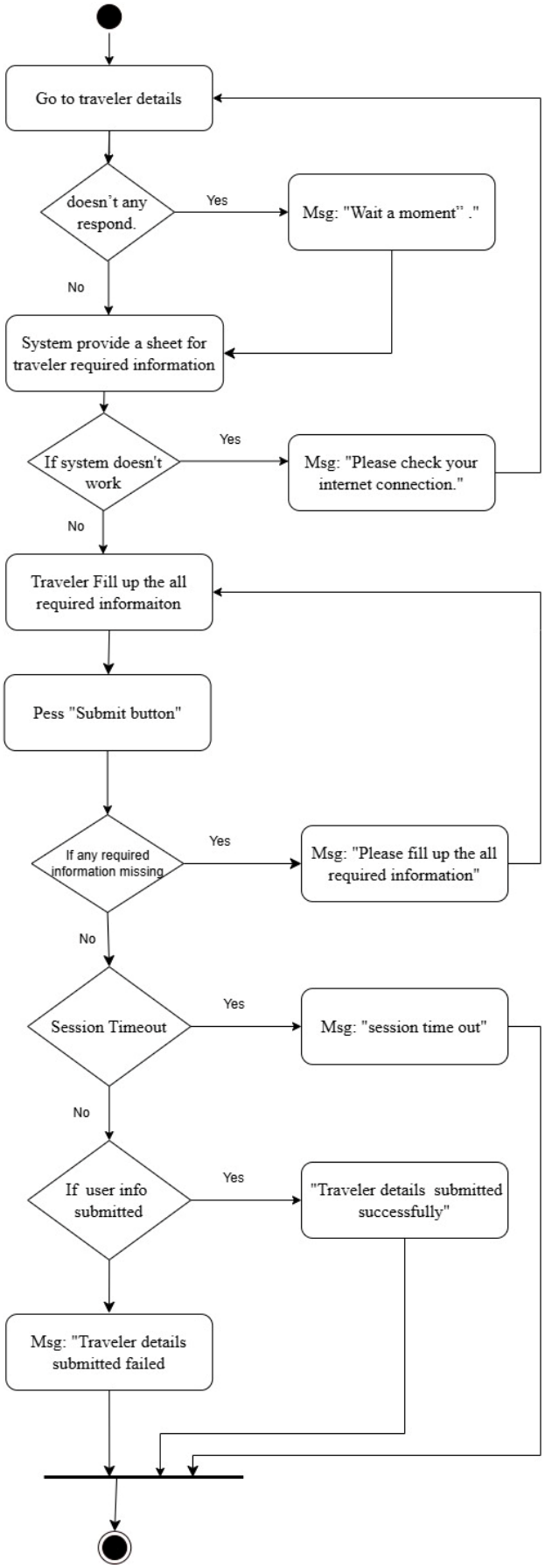
Activity diagram: list of travel package



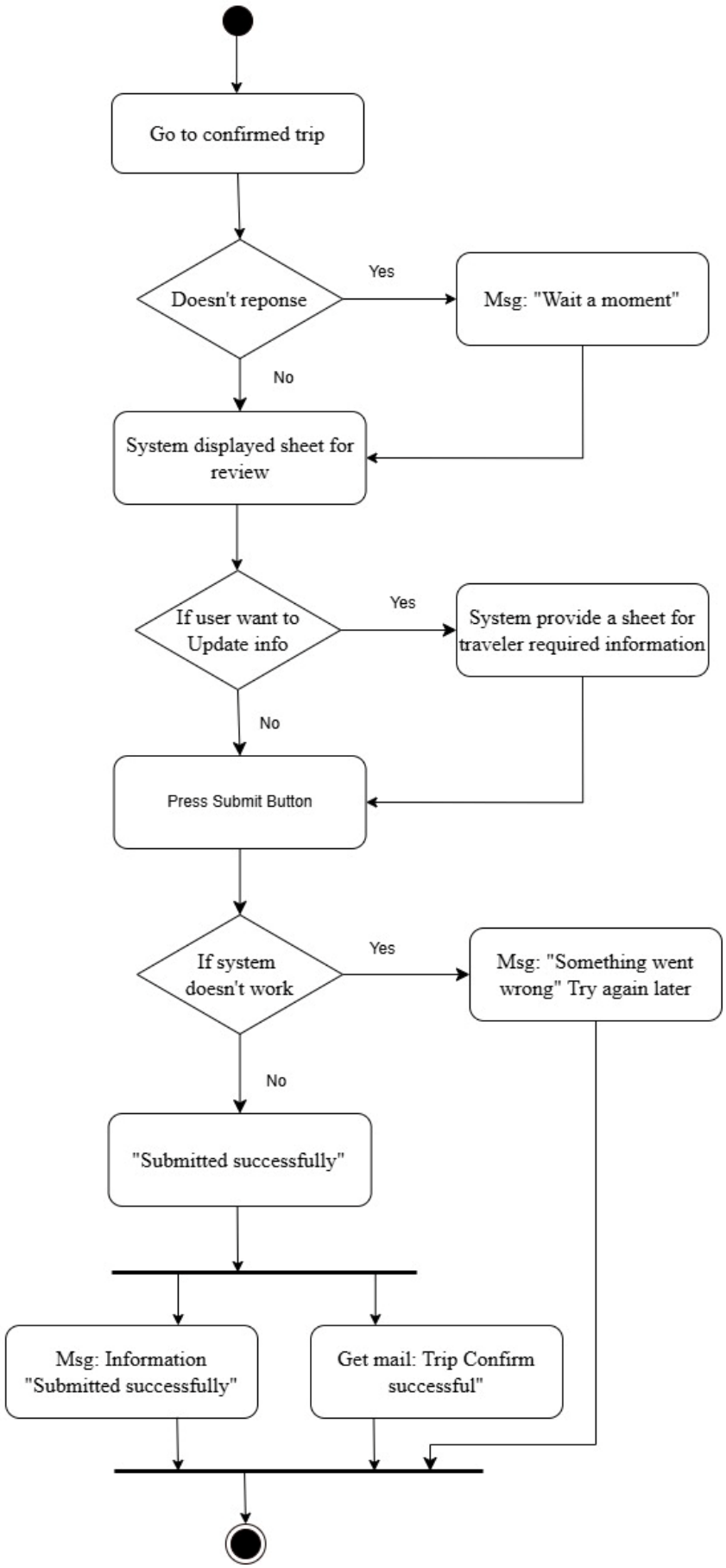
Activity diagram:Select travel package



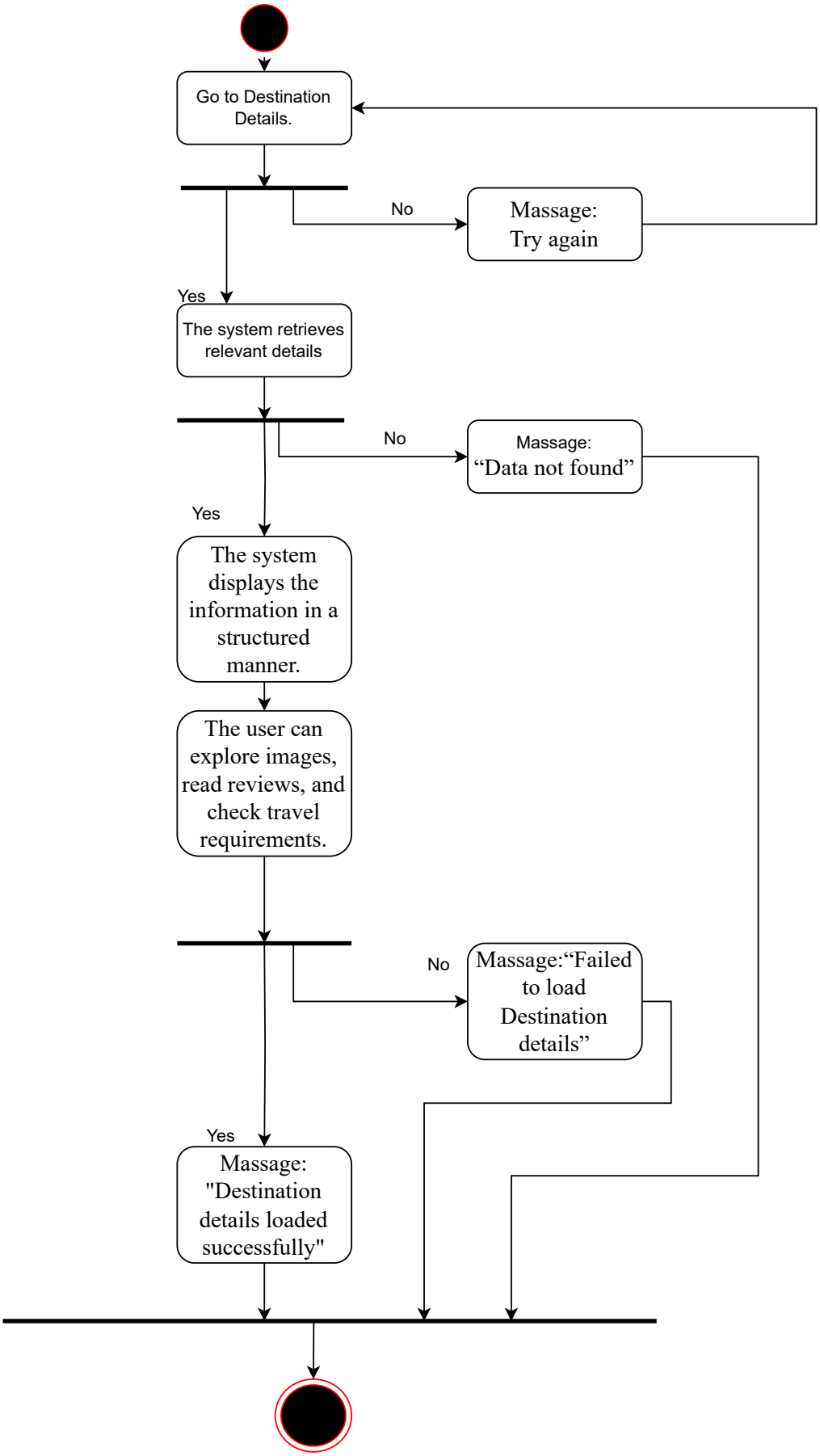
Activity Diagram Give traveler details



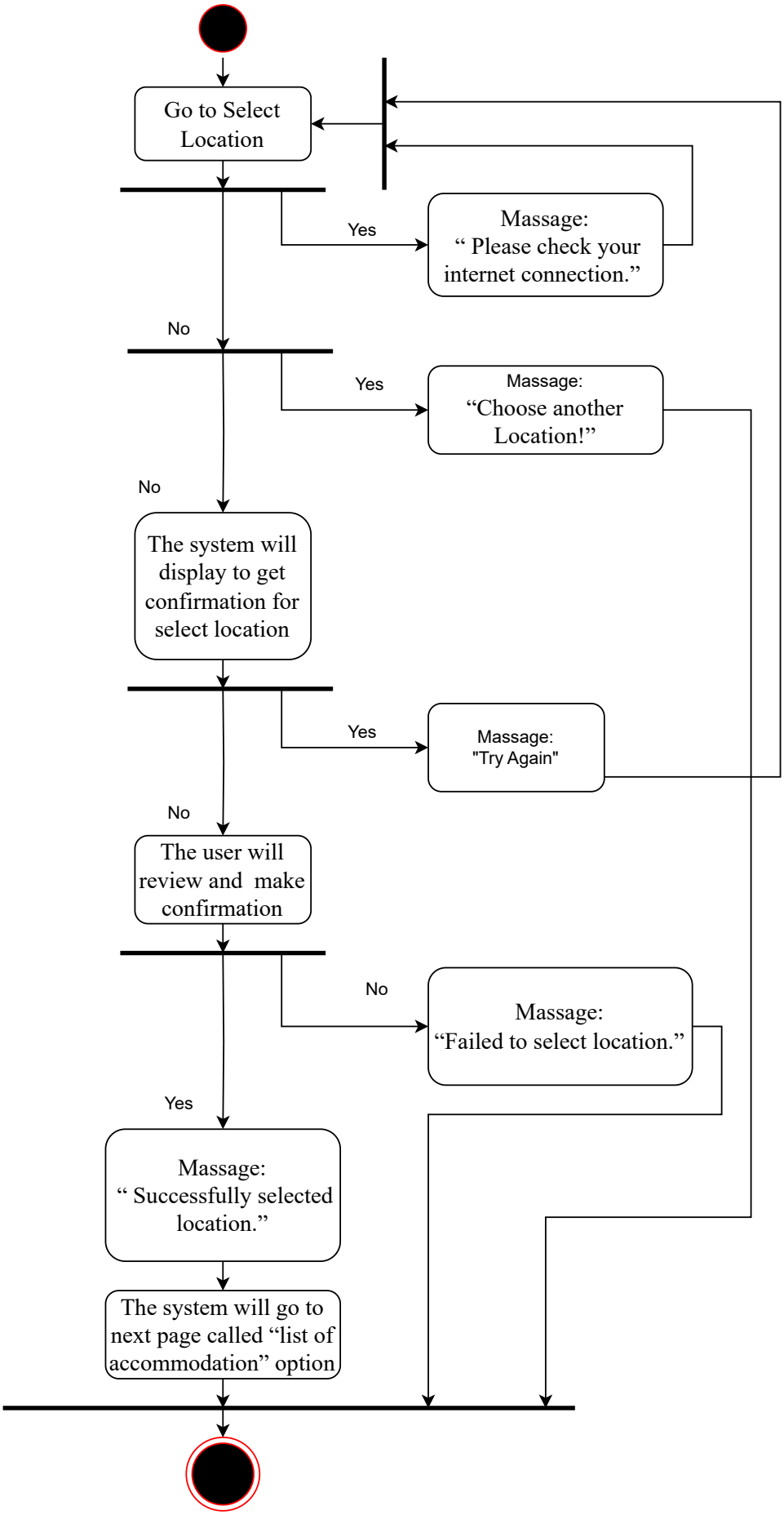
Activity Diagram Comfirm Trip



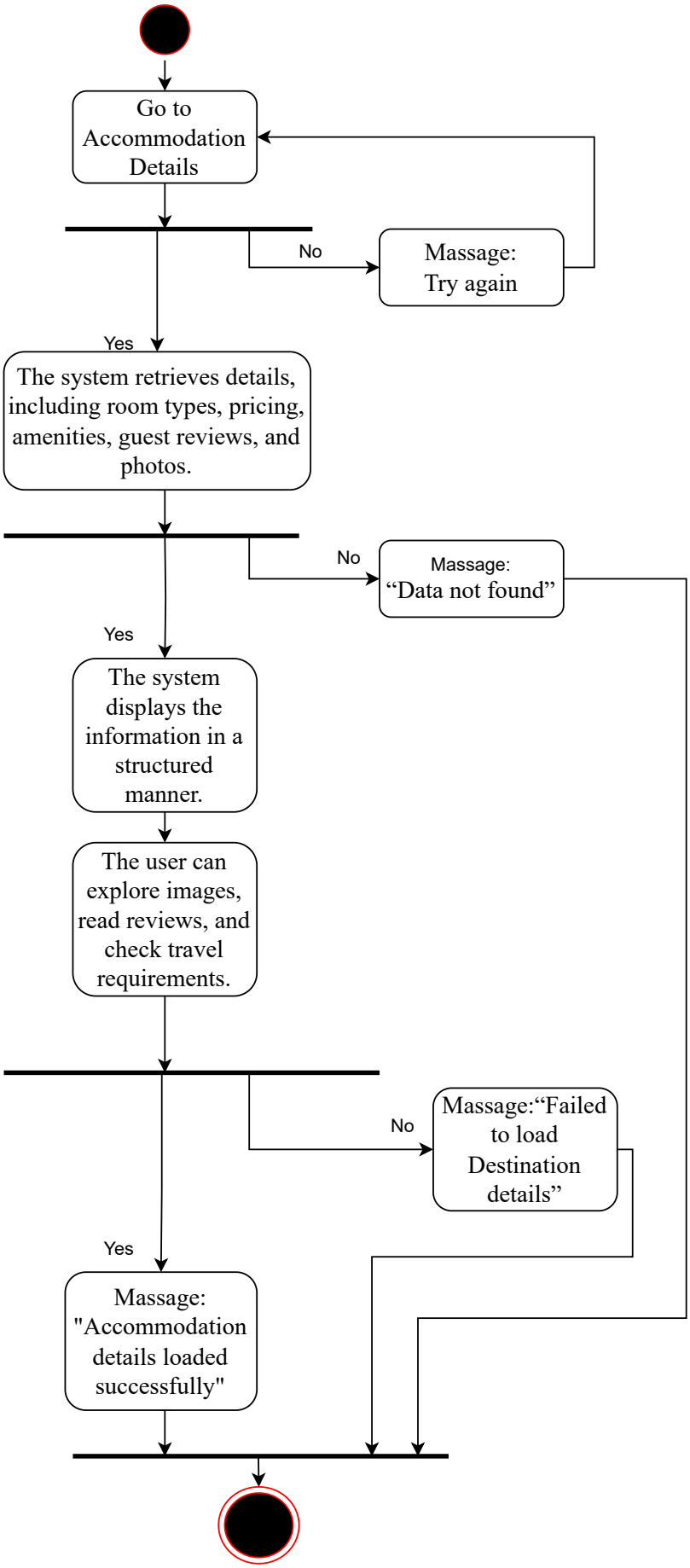
State Diagram For: View Destination Details



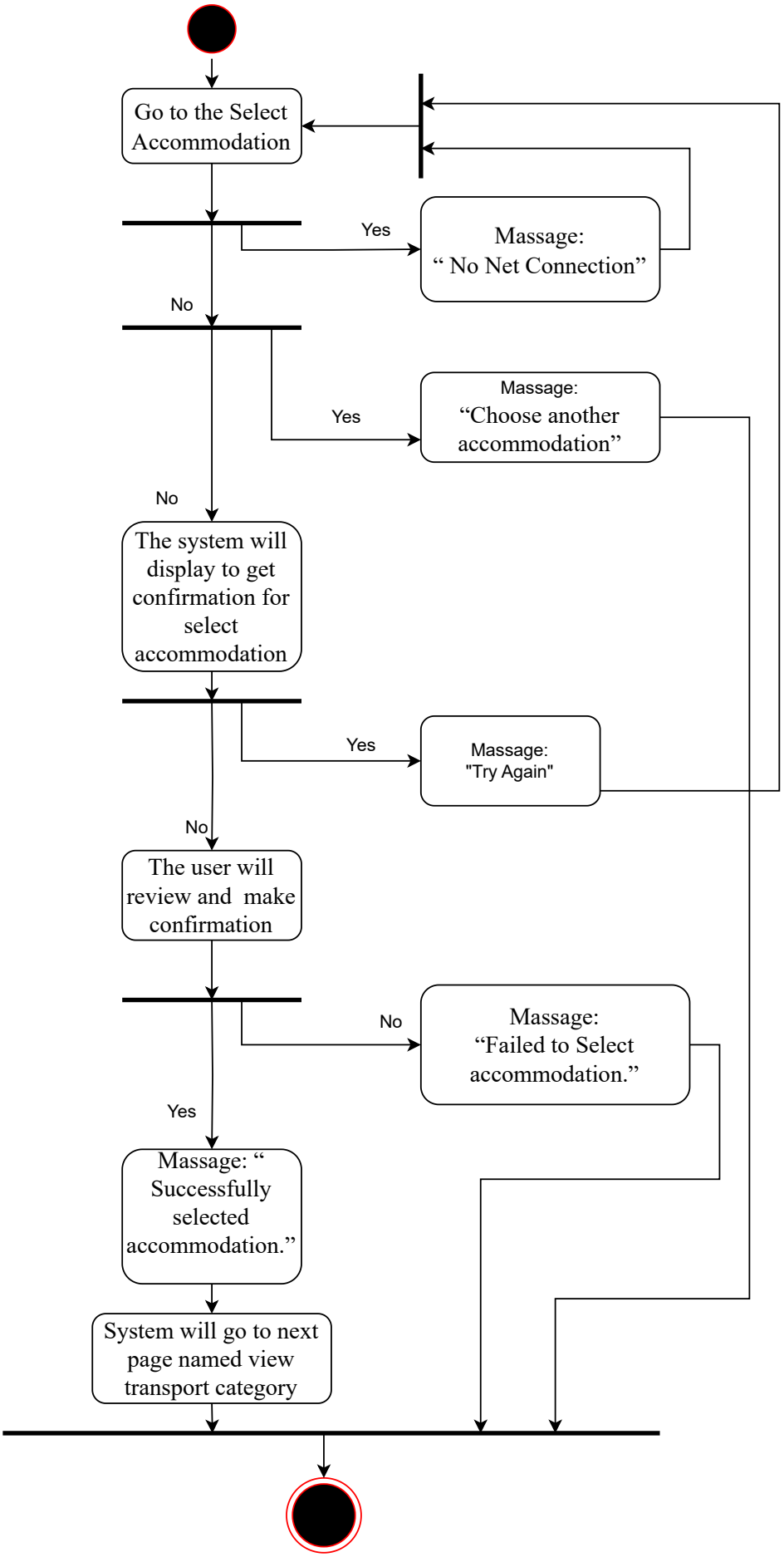
State Diagram For: **Select Location**



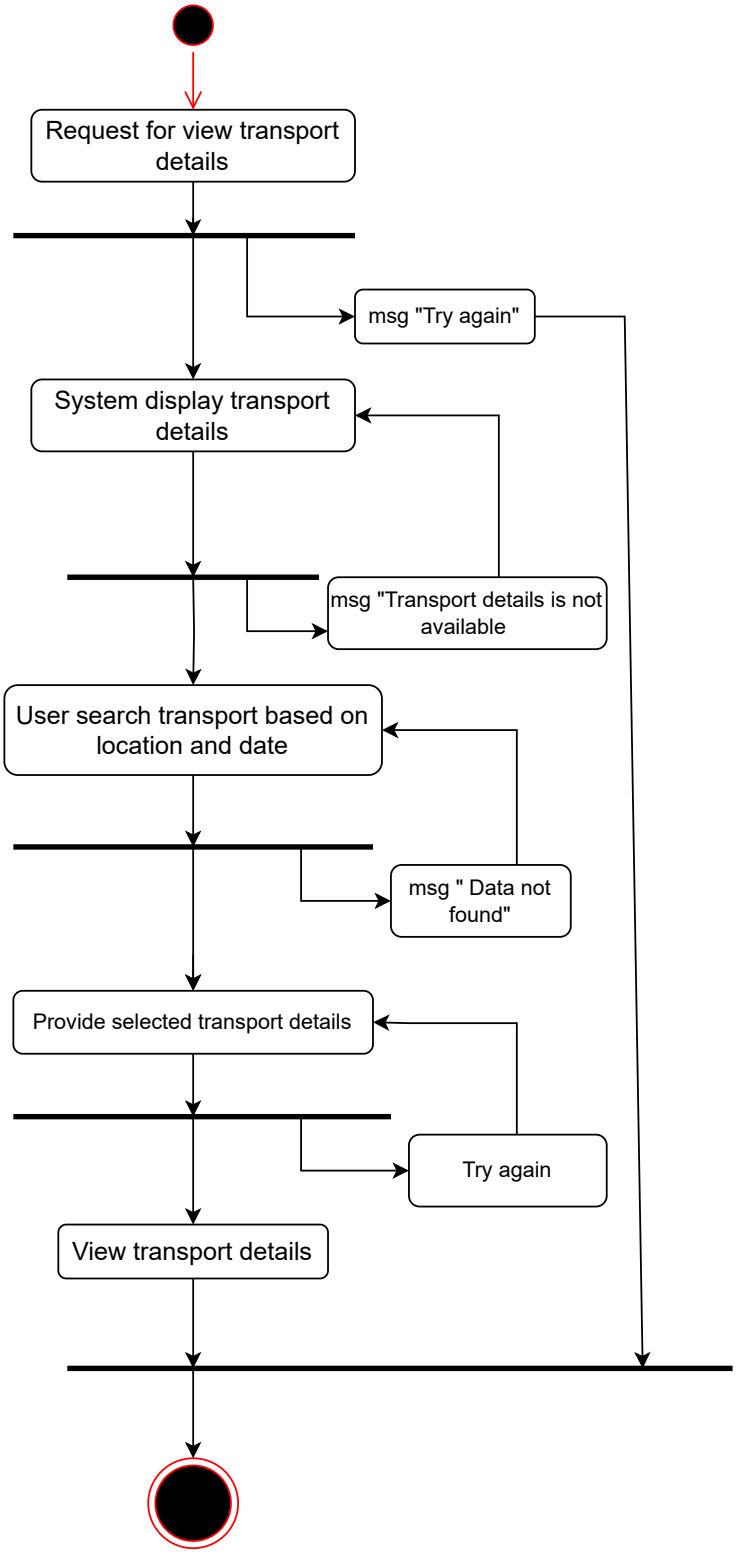
State Diagram For: **View accommodation details**



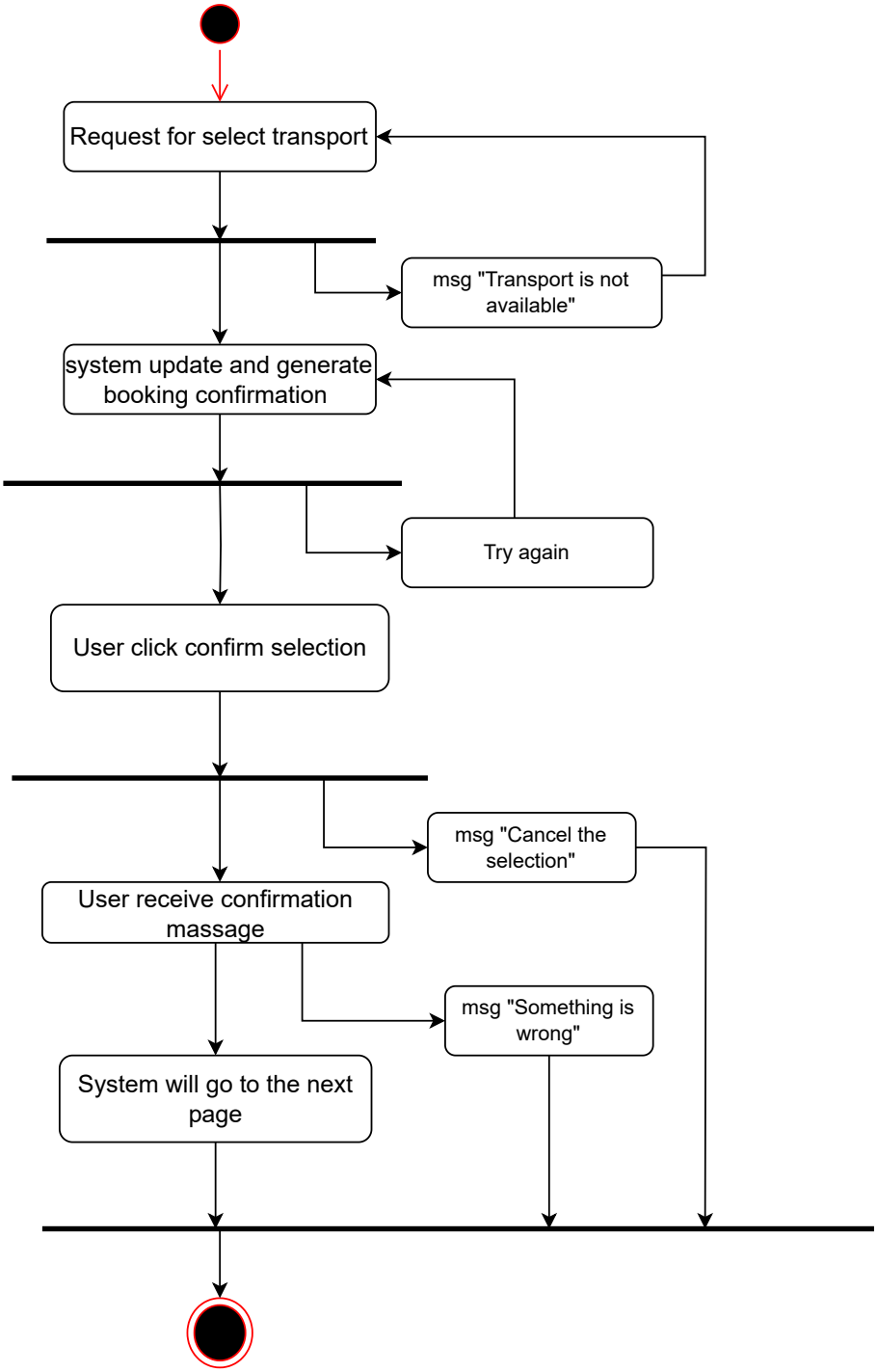
State Diagram For: **Select accommodation**



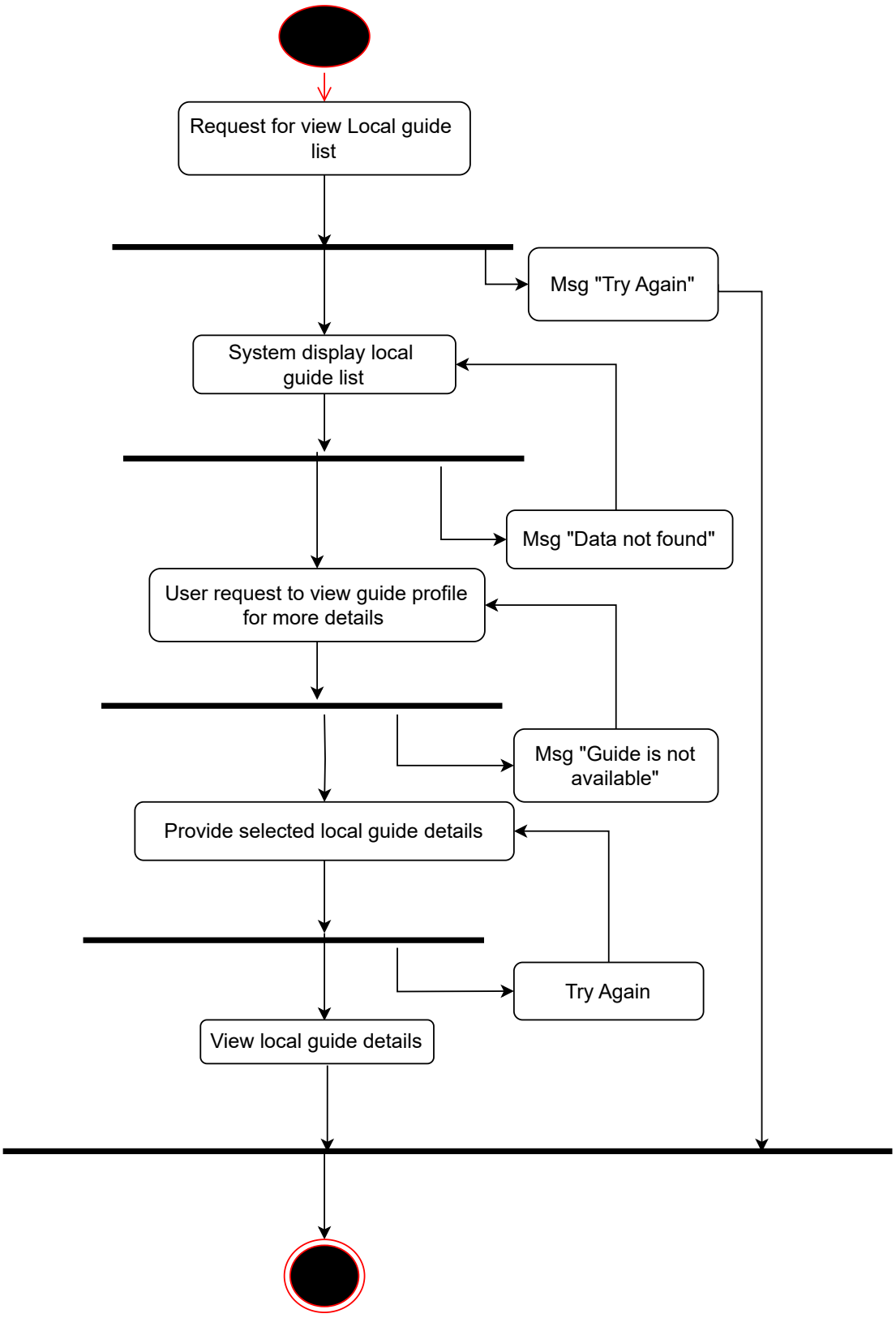
View Transport Details



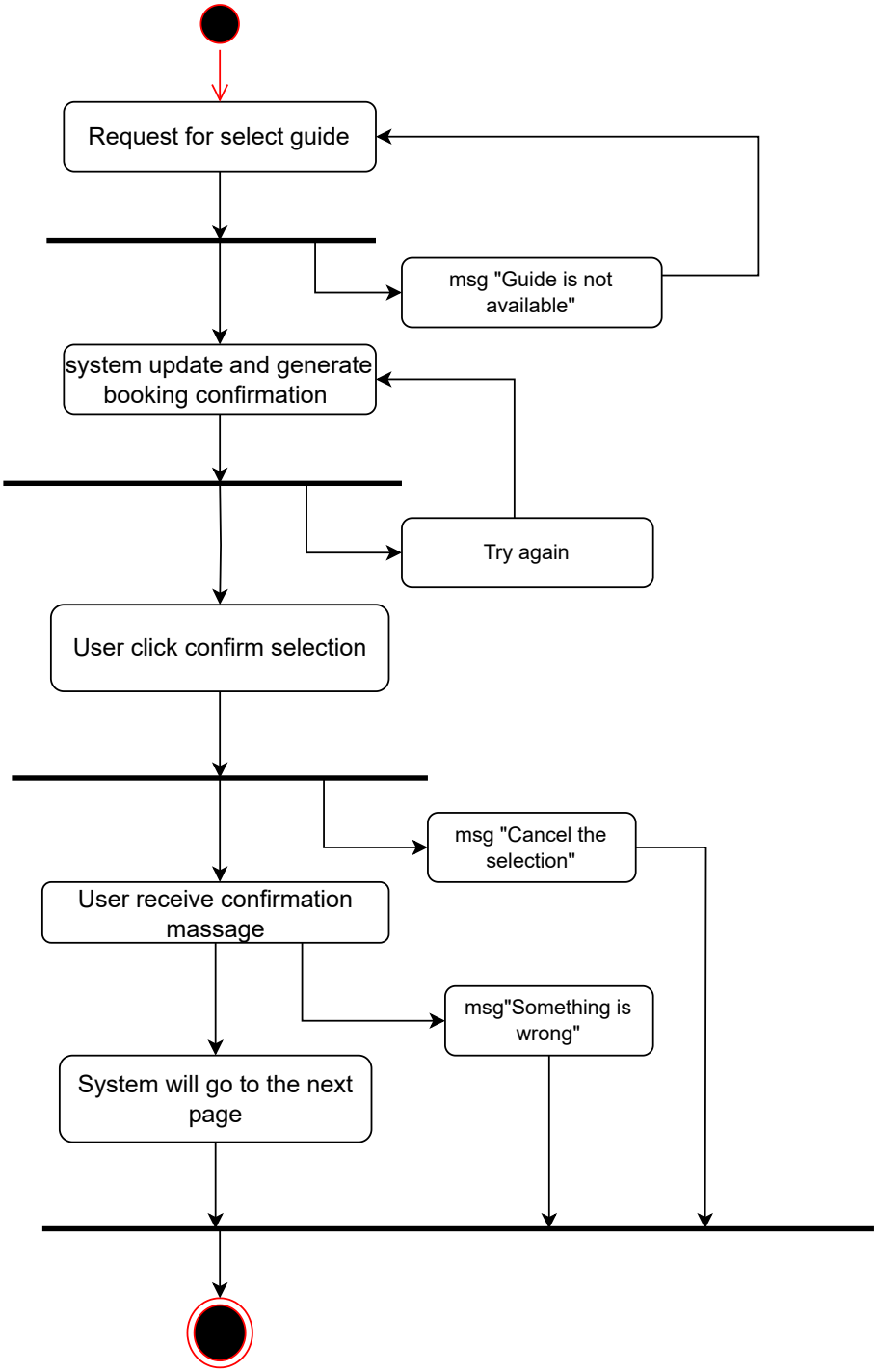
Select Transport



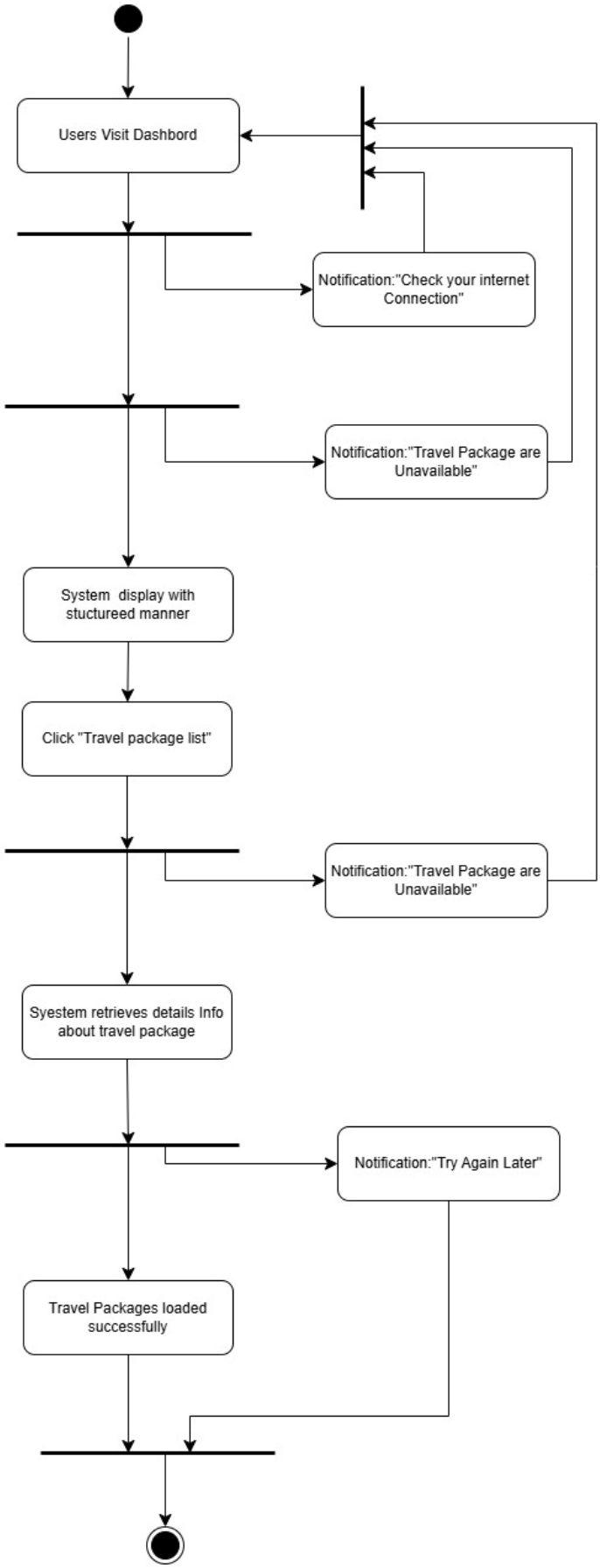
View Local Guide List



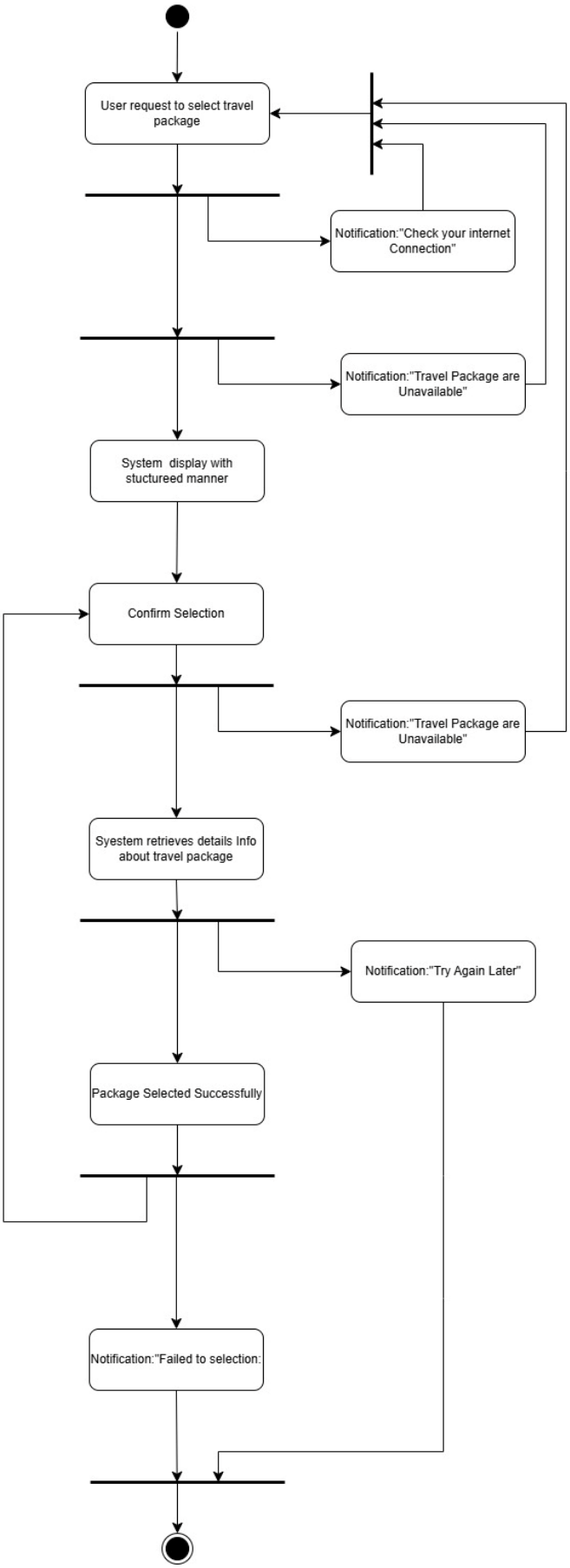
Select Local Guide



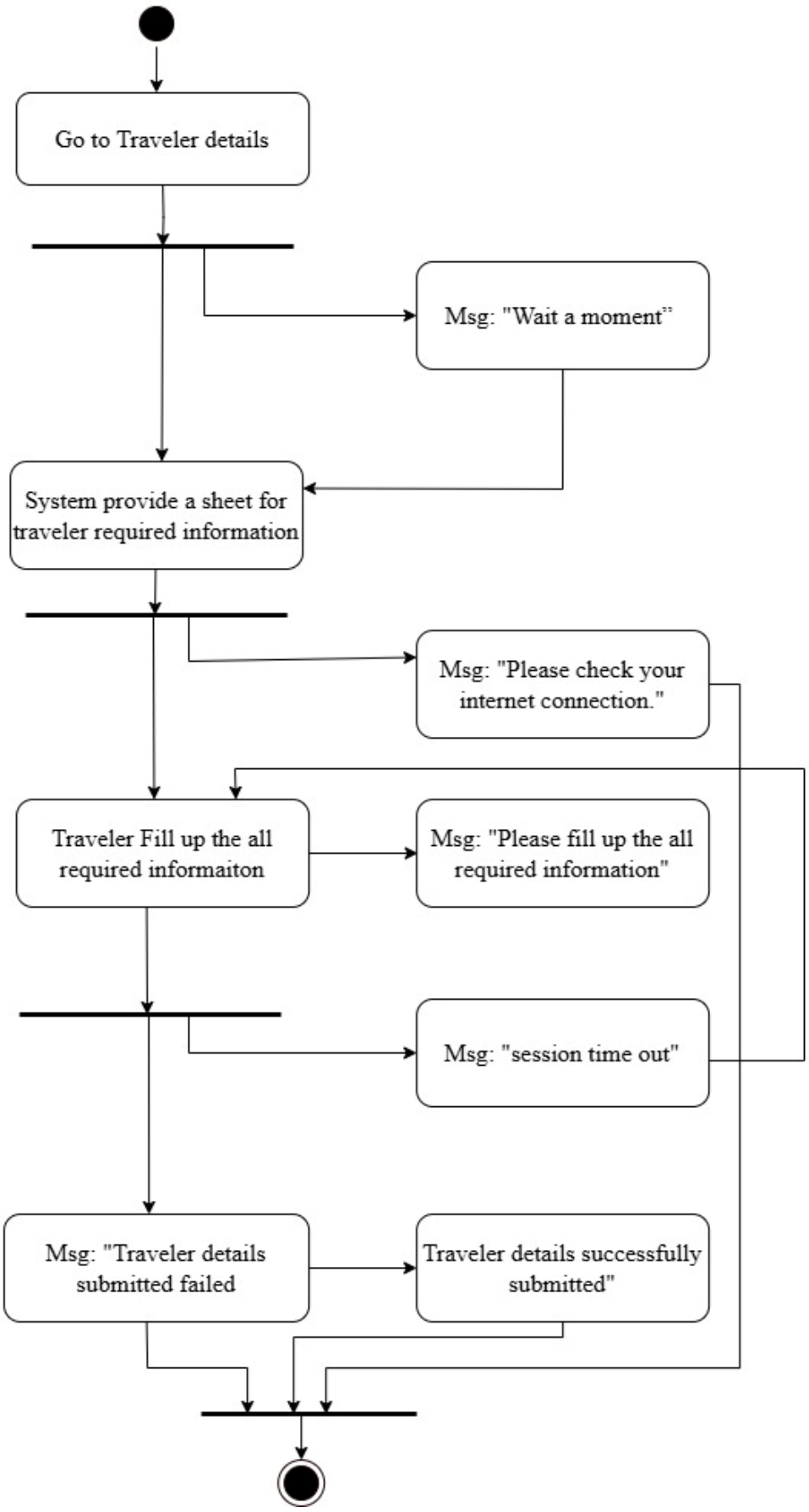
State diagram: list of travel package



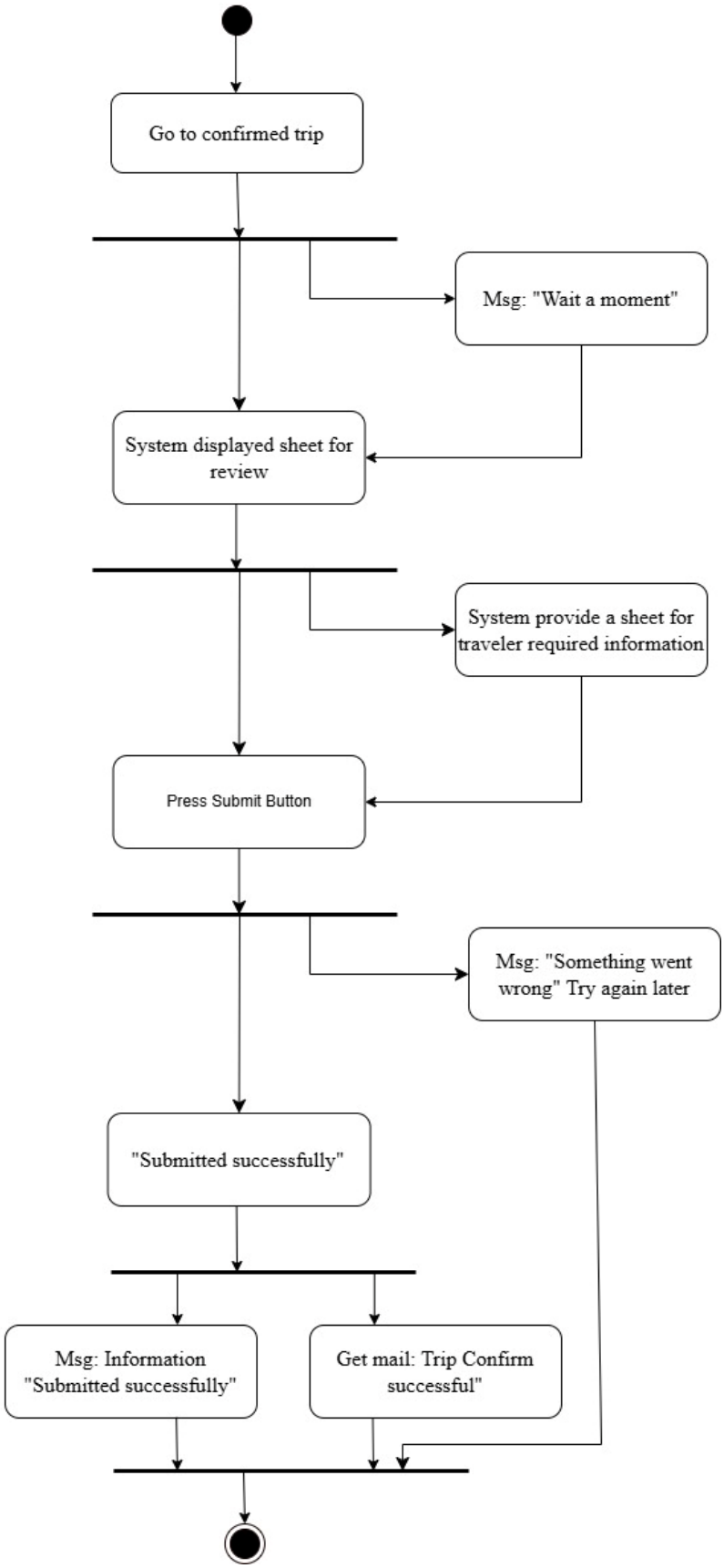
State diagram: Select travel package



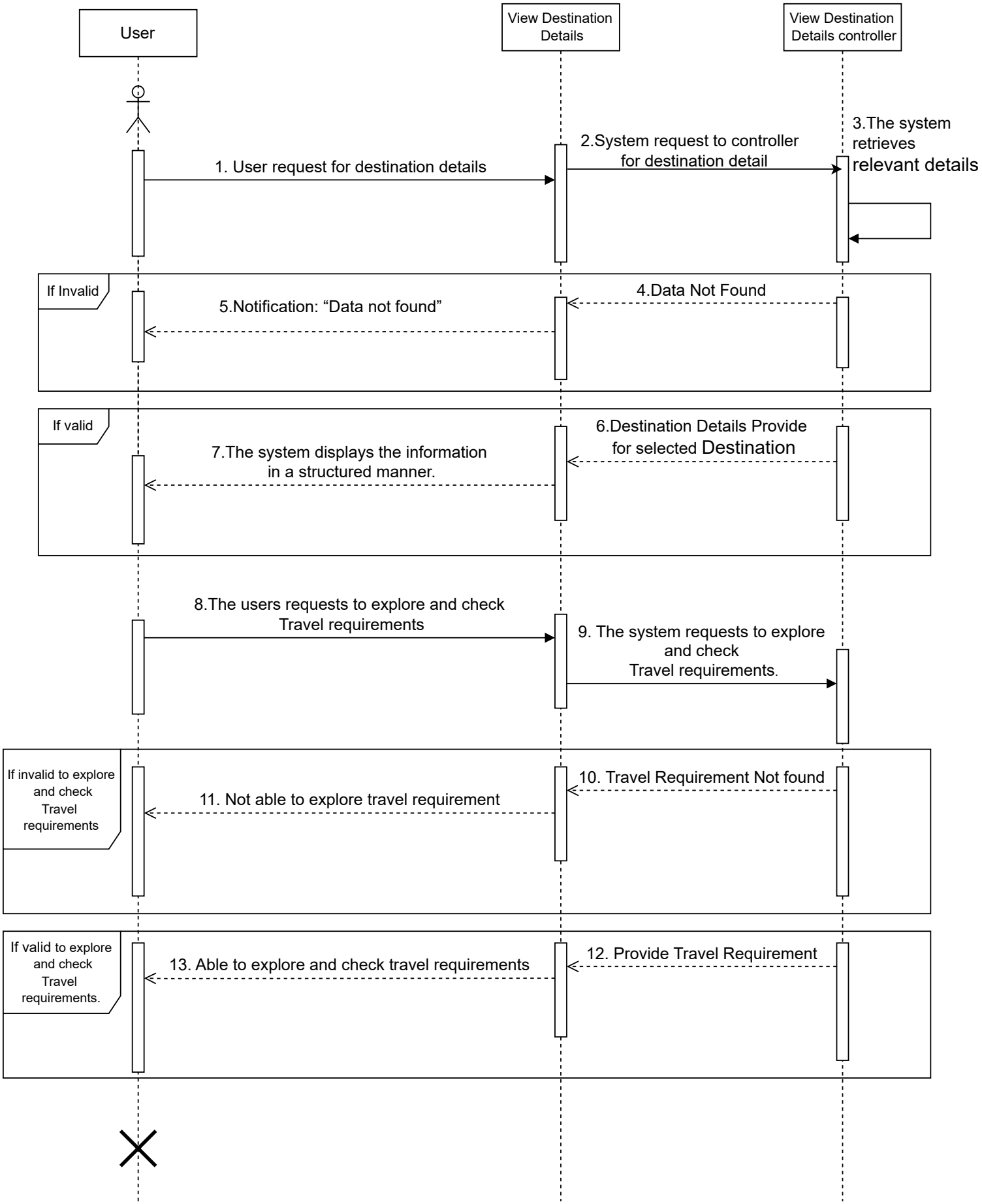
State Diagram Give traveler details



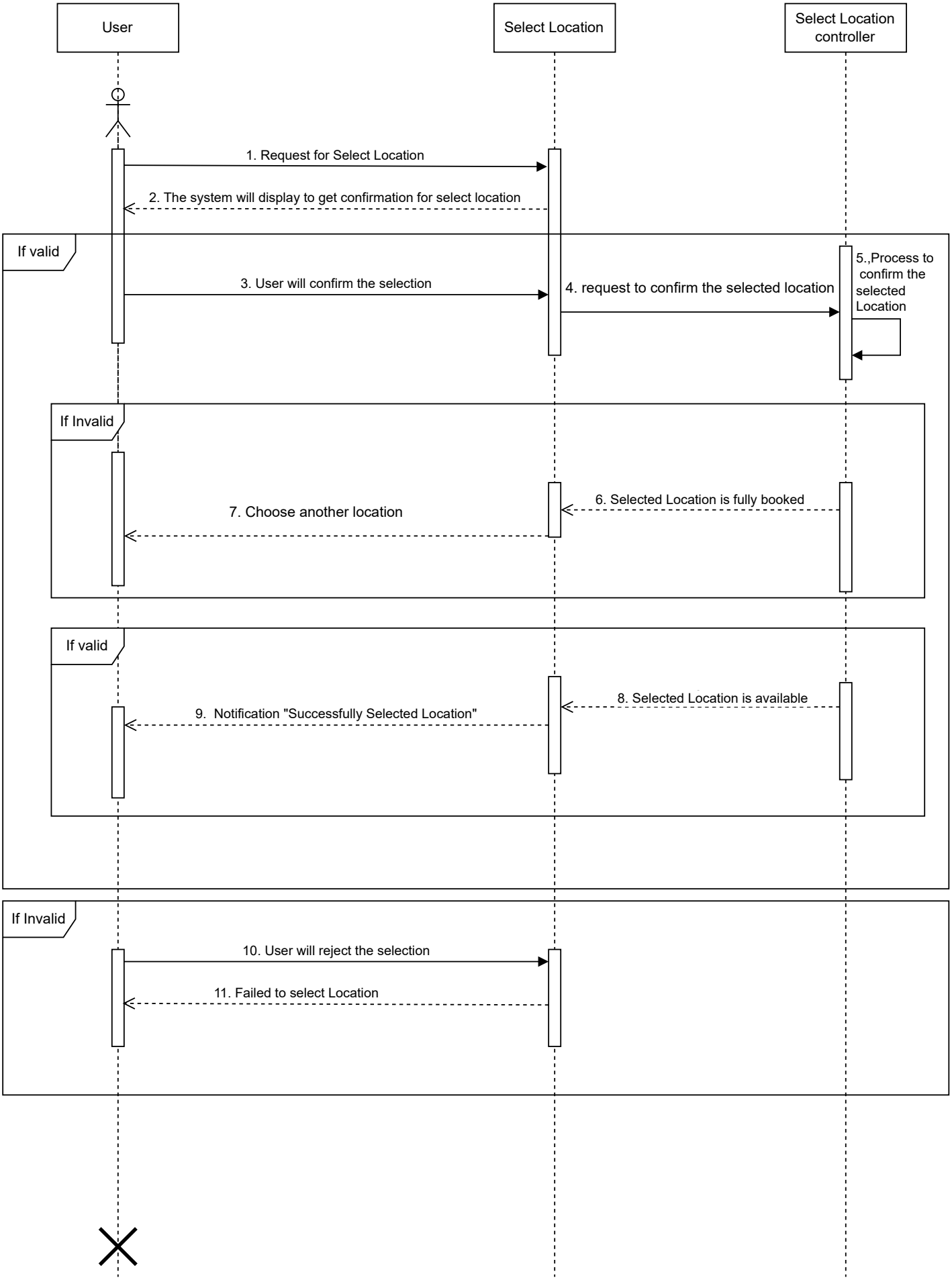
State Diagram Comfirm Trip



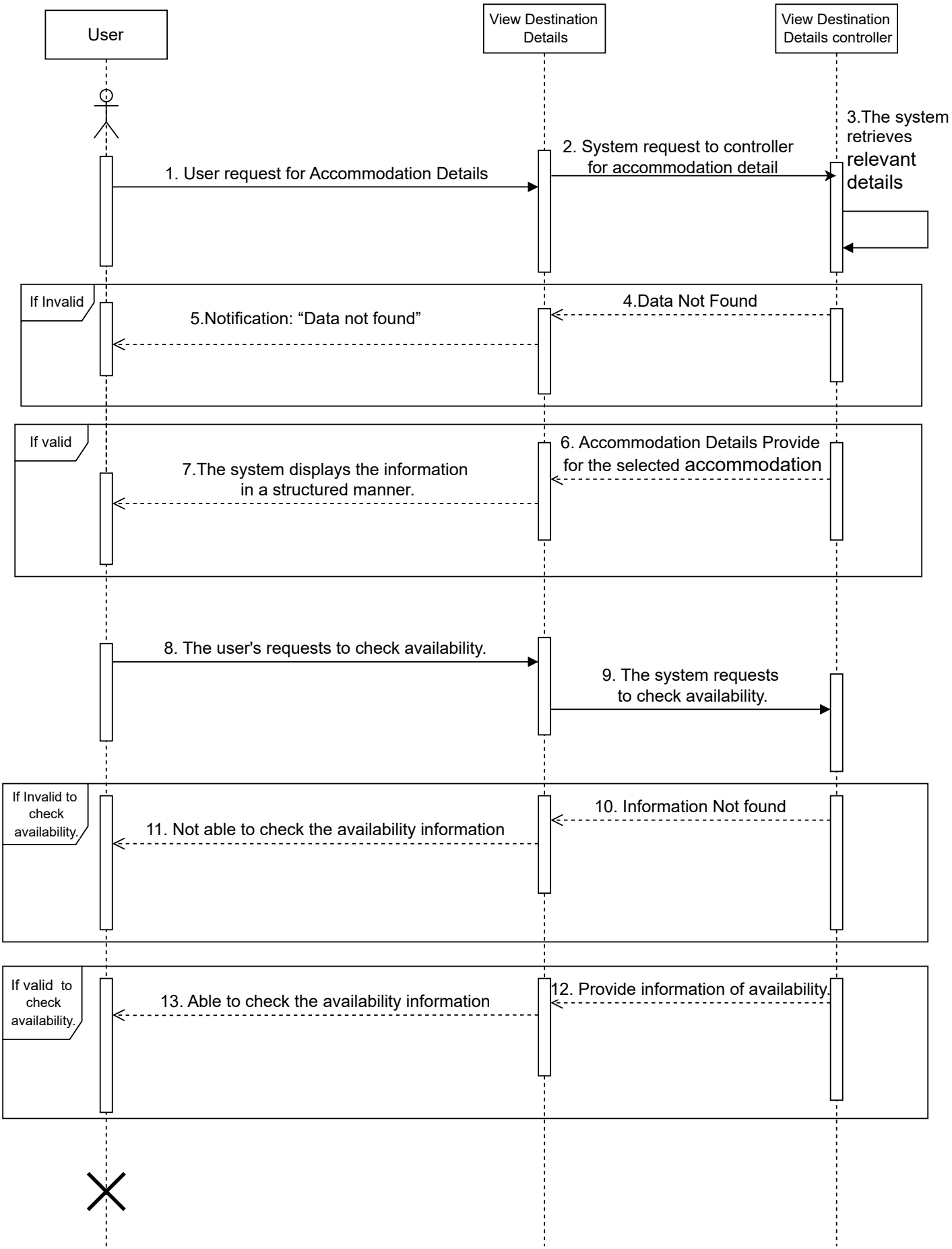
Sequence Diagram For: View Destination Details



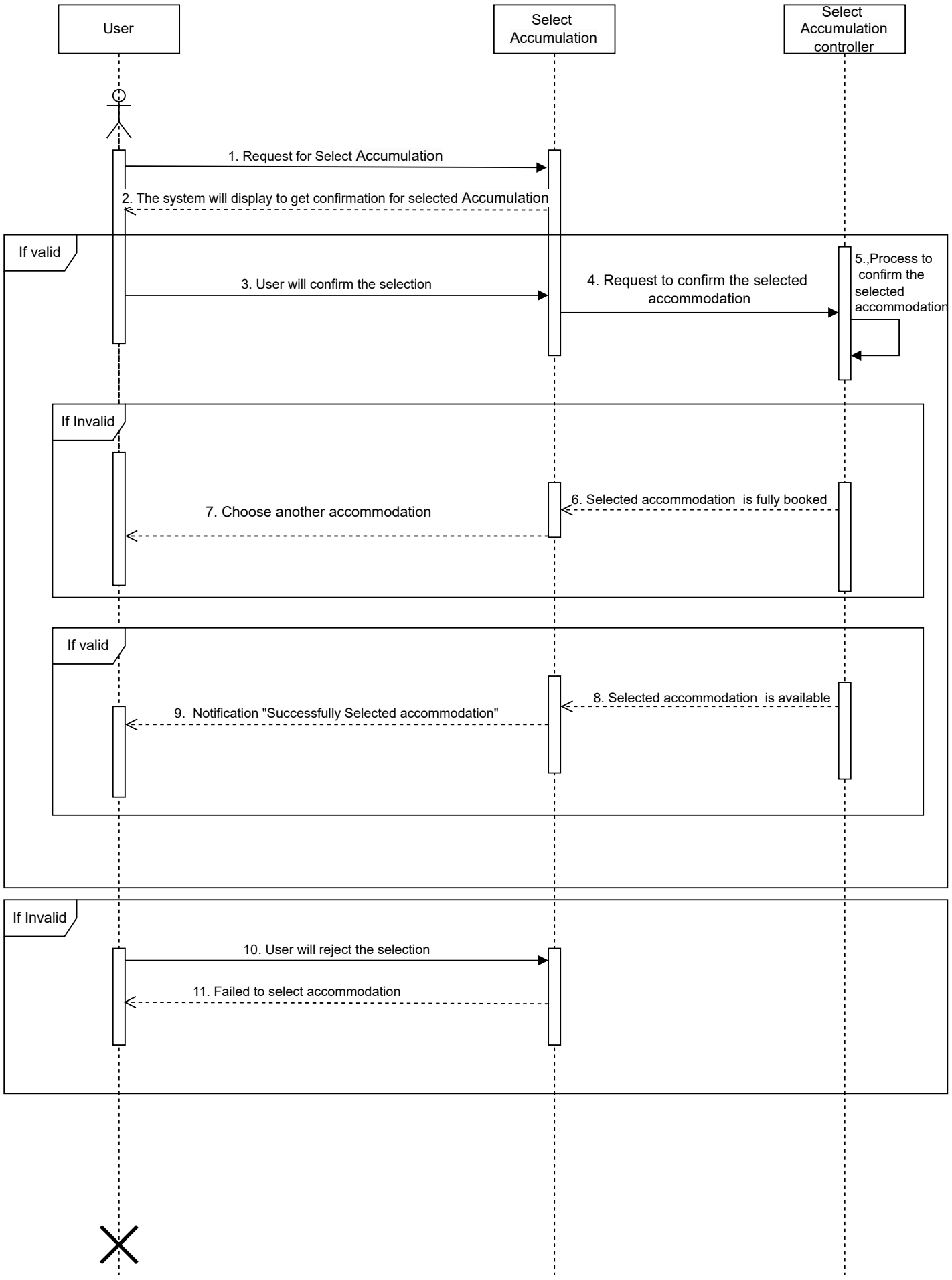
Sequence Diagram For: Select Location



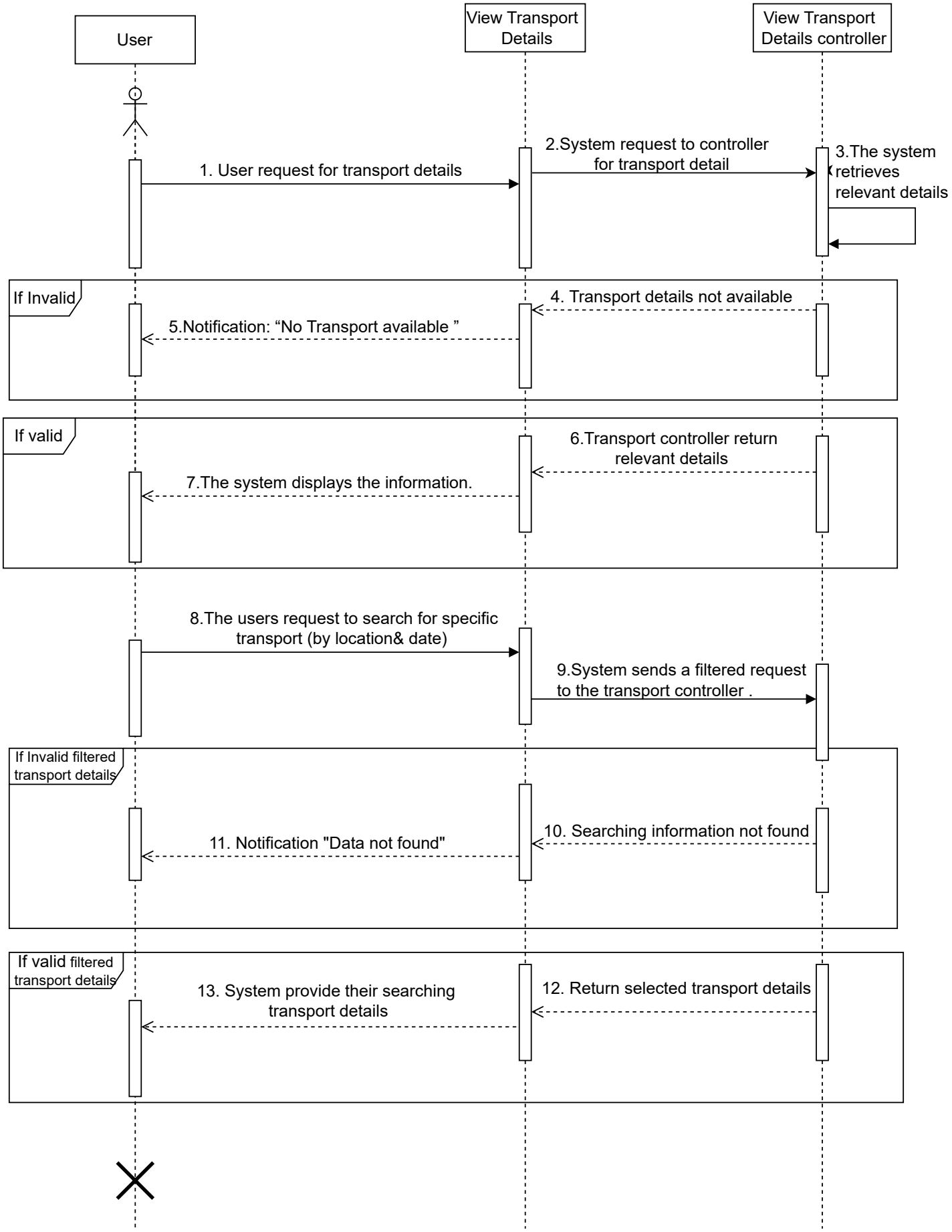
Sequence Diagram For: View Accumulation Details



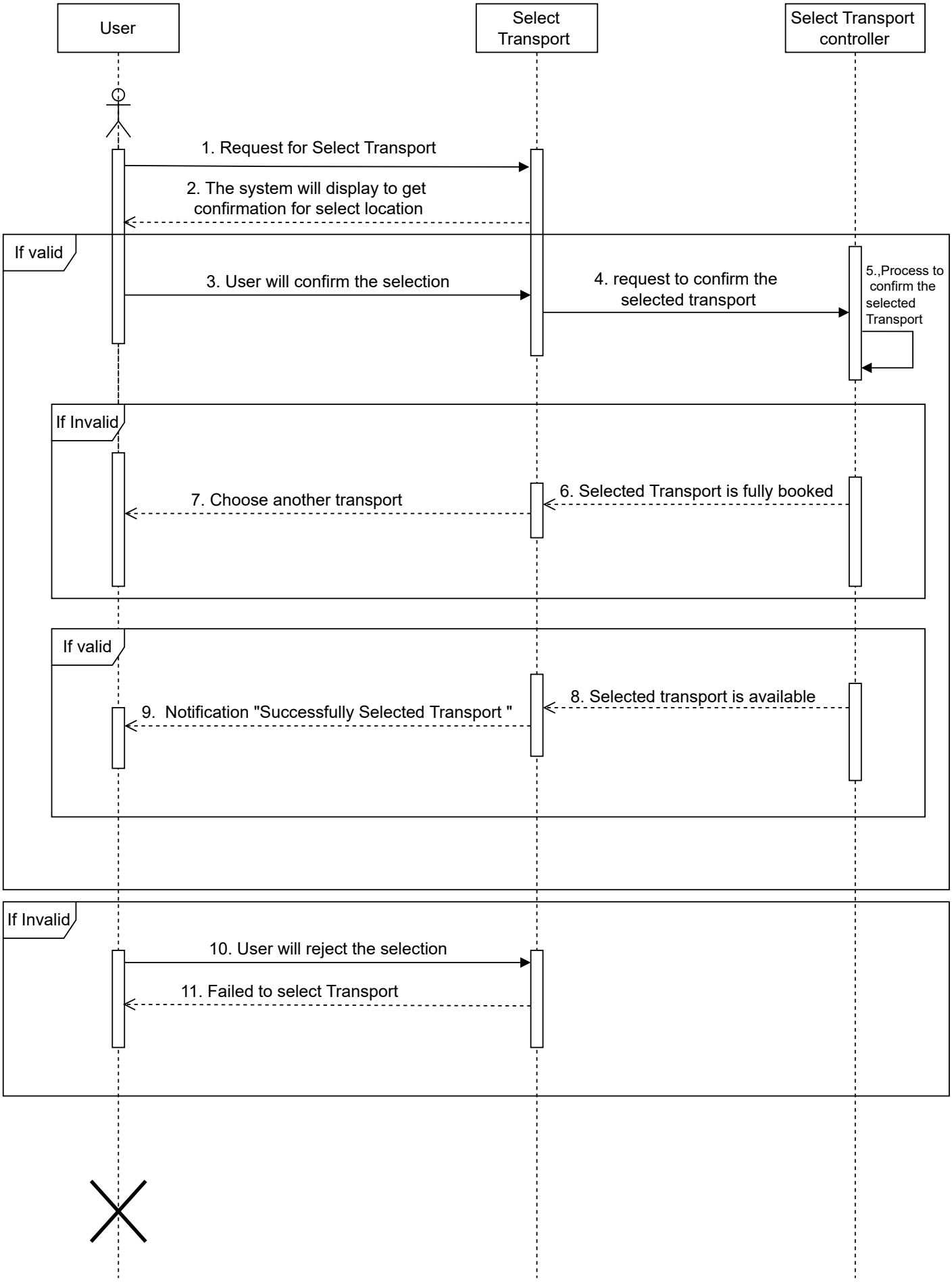
Sequence Diagram For: Select Accumulation



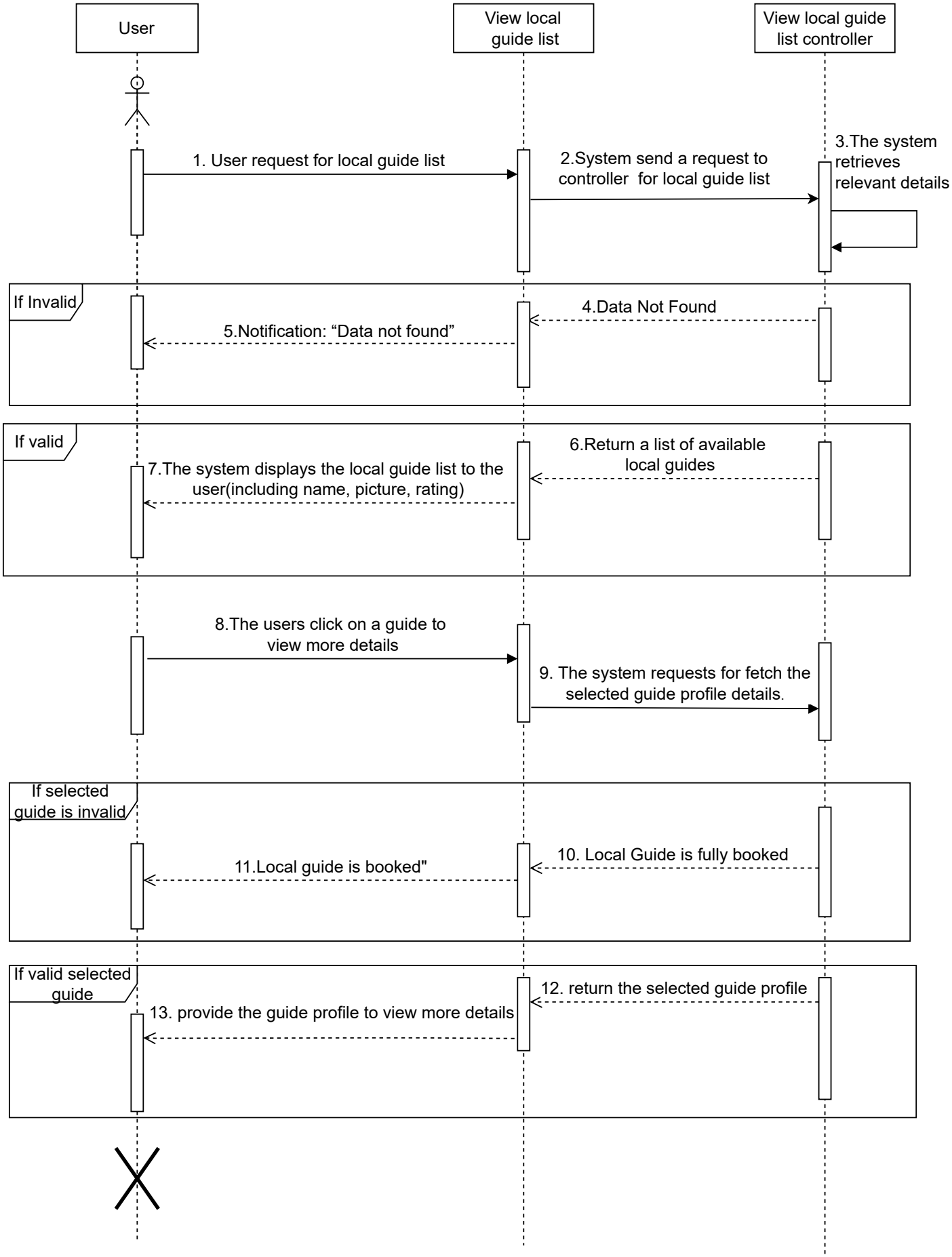
Sequence Diagram For: View Transport Details



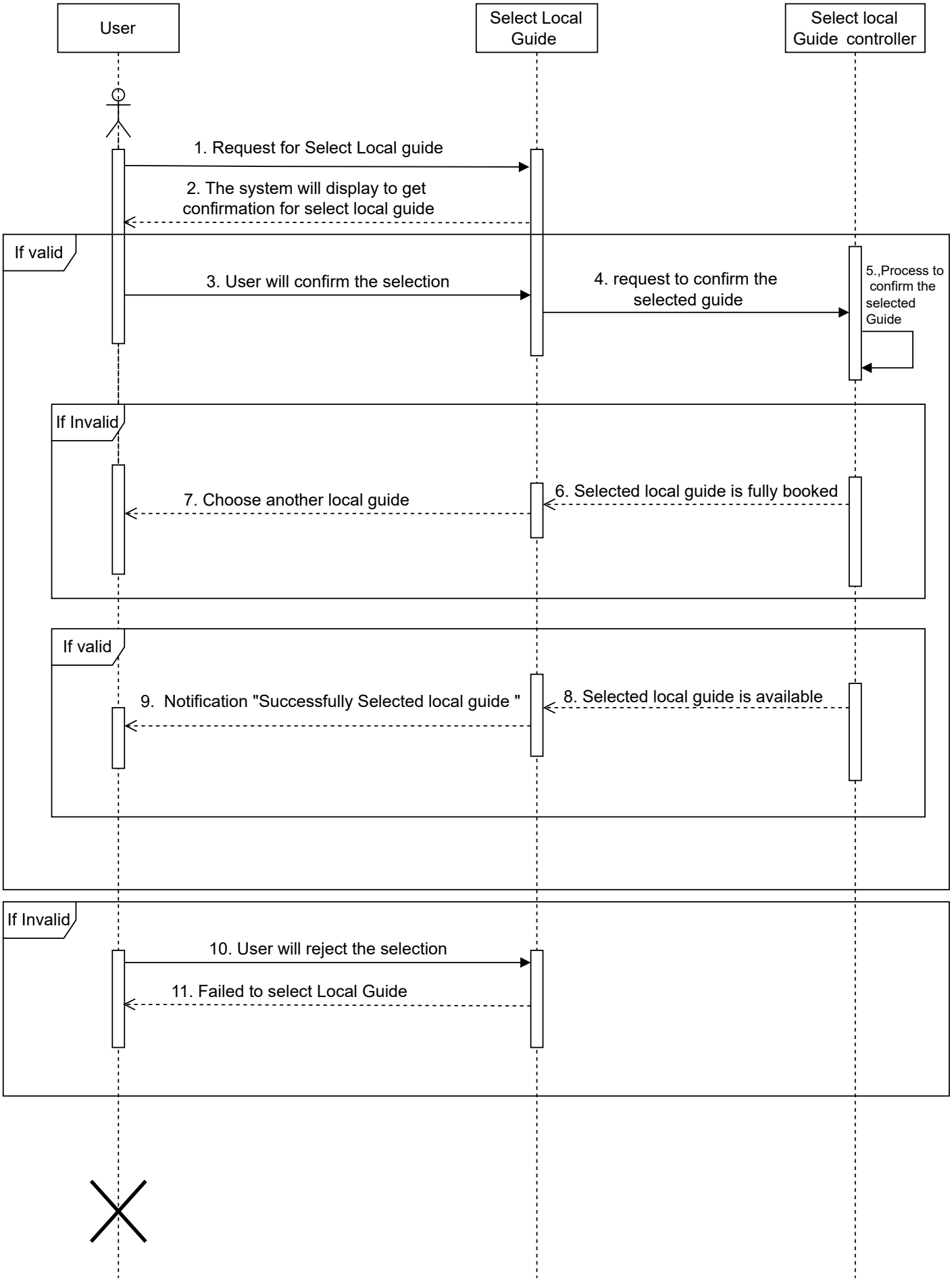
Sequence Diagram For: Select Transport



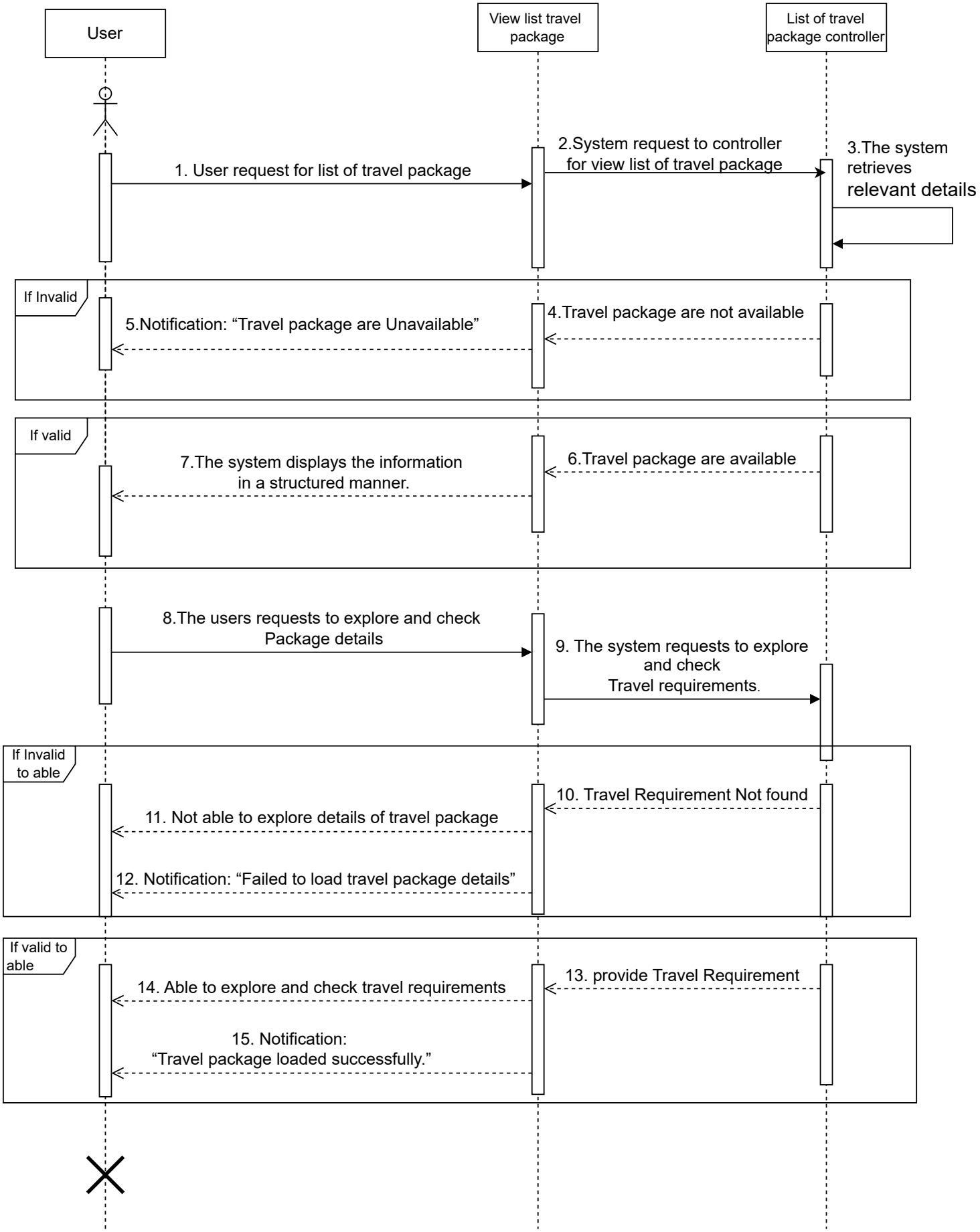
Sequence Diagram For: View local guide list



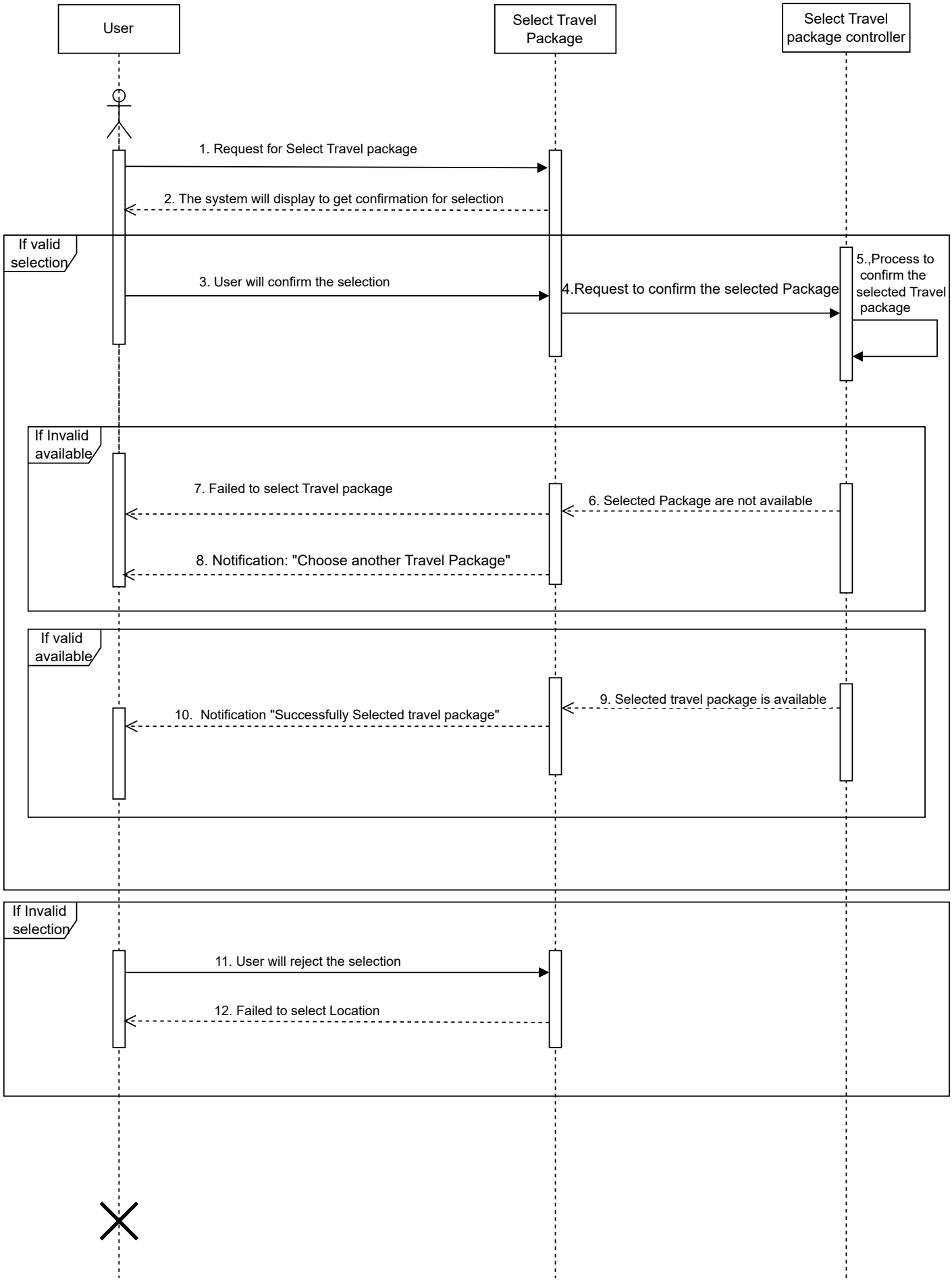
Sequence Diagram For: Select Local Guide



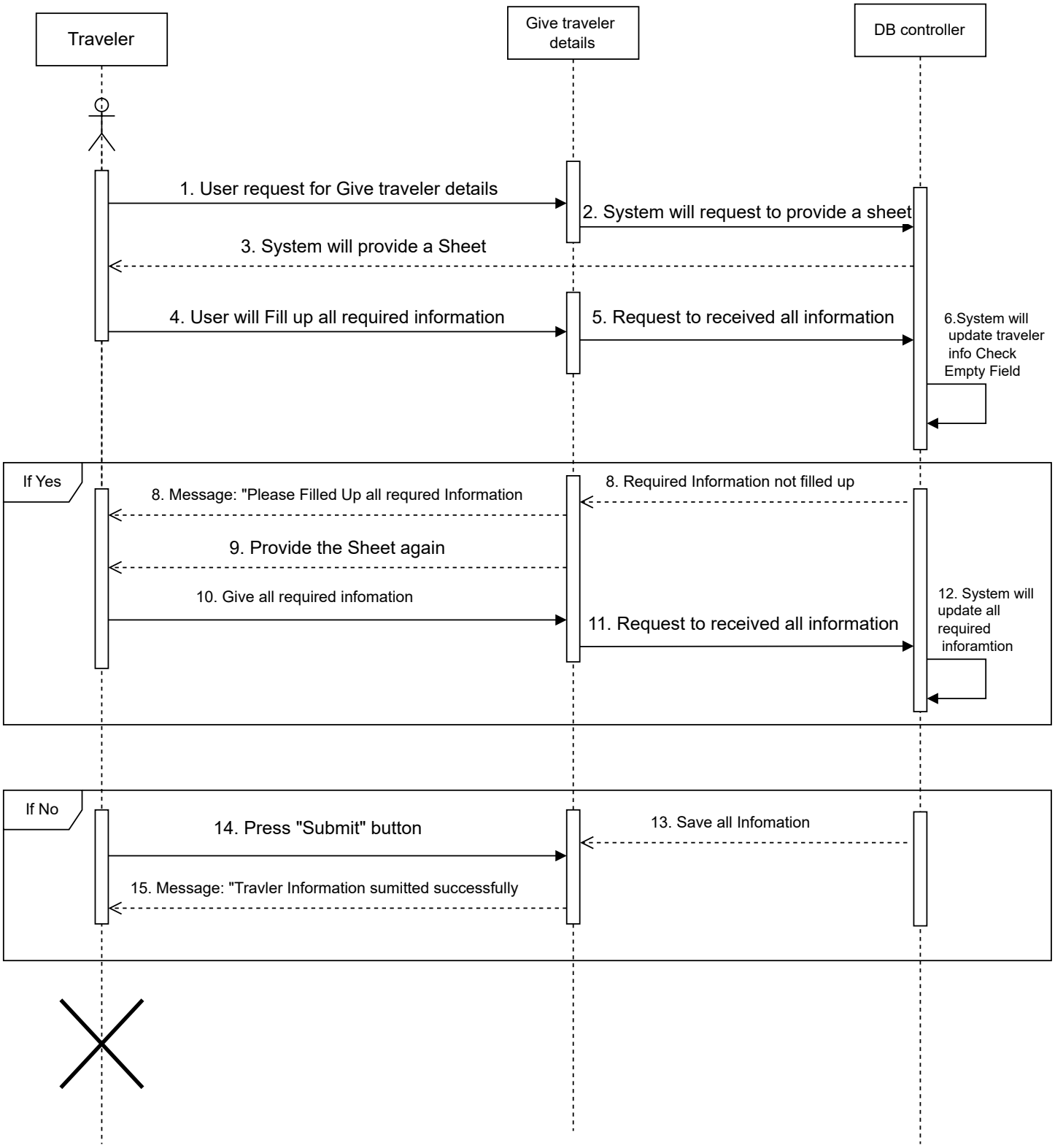
Sequence Diagram For: List of travel package



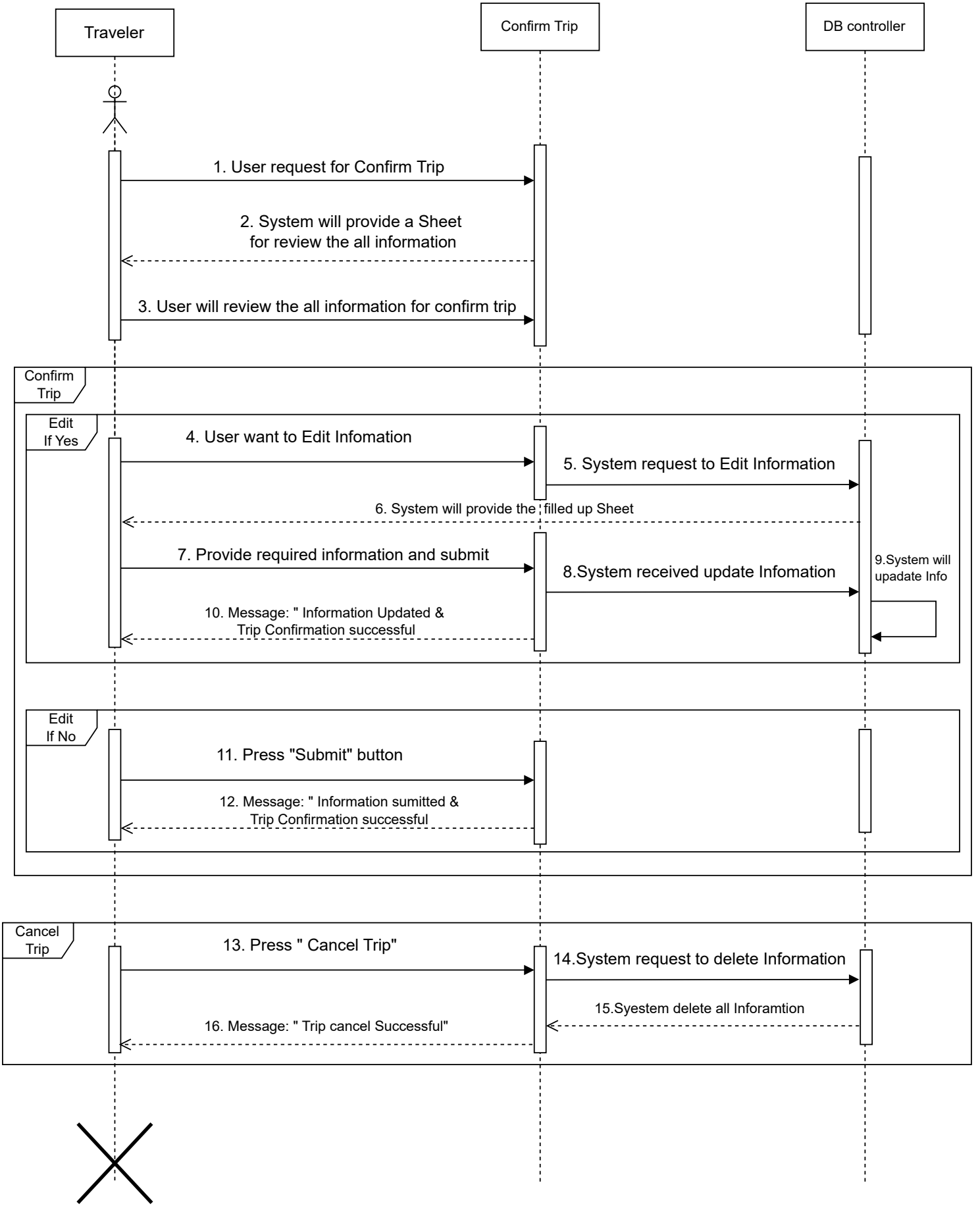
Sequence Diagram For: Select Travel Package



Sequence Diagram For: Give Traveler details



Sequence Diagram For: Confirm Trip



Class Diagram

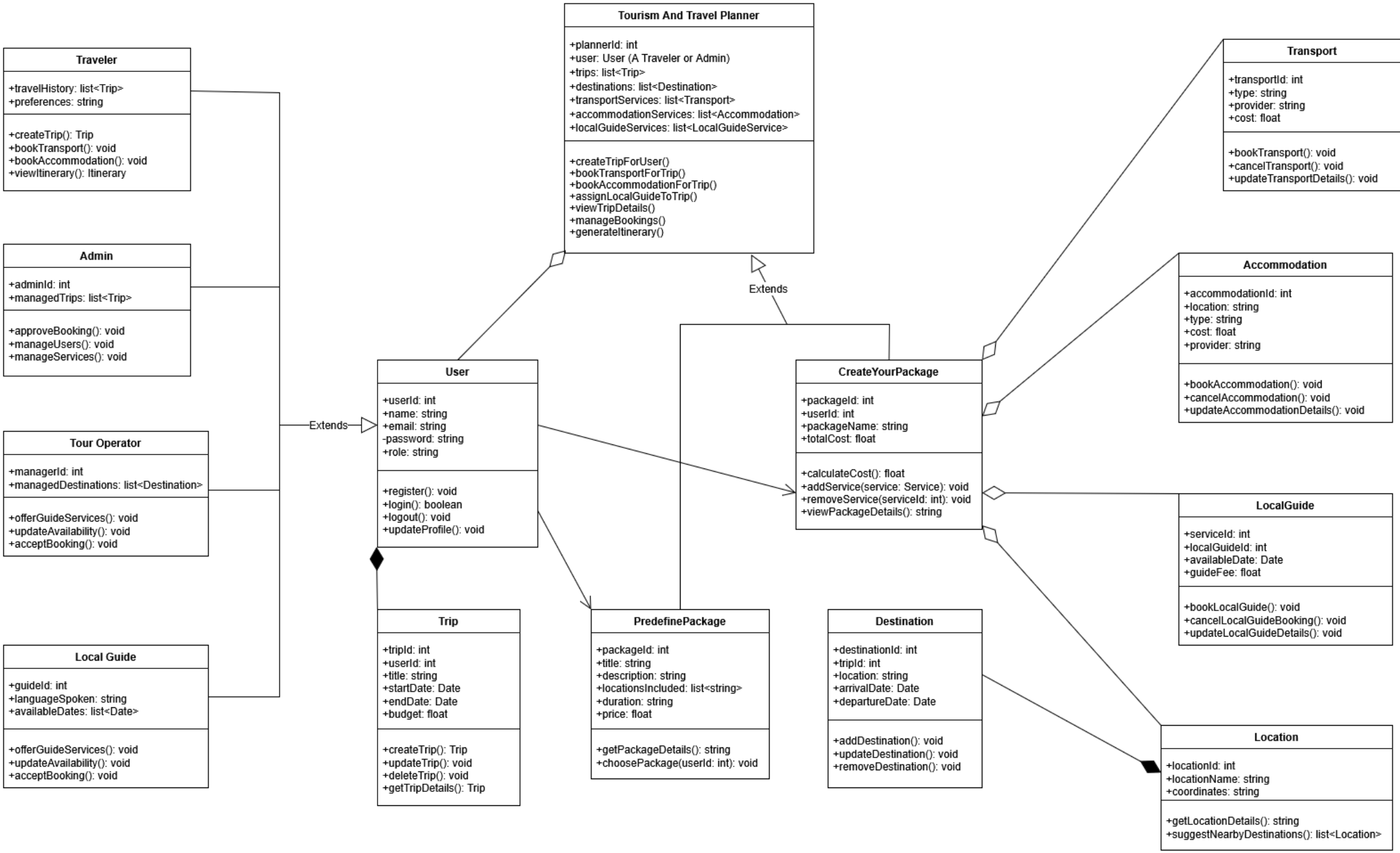


Figure: Class Diagram for Tourism And Travel Planner

ER Diagram

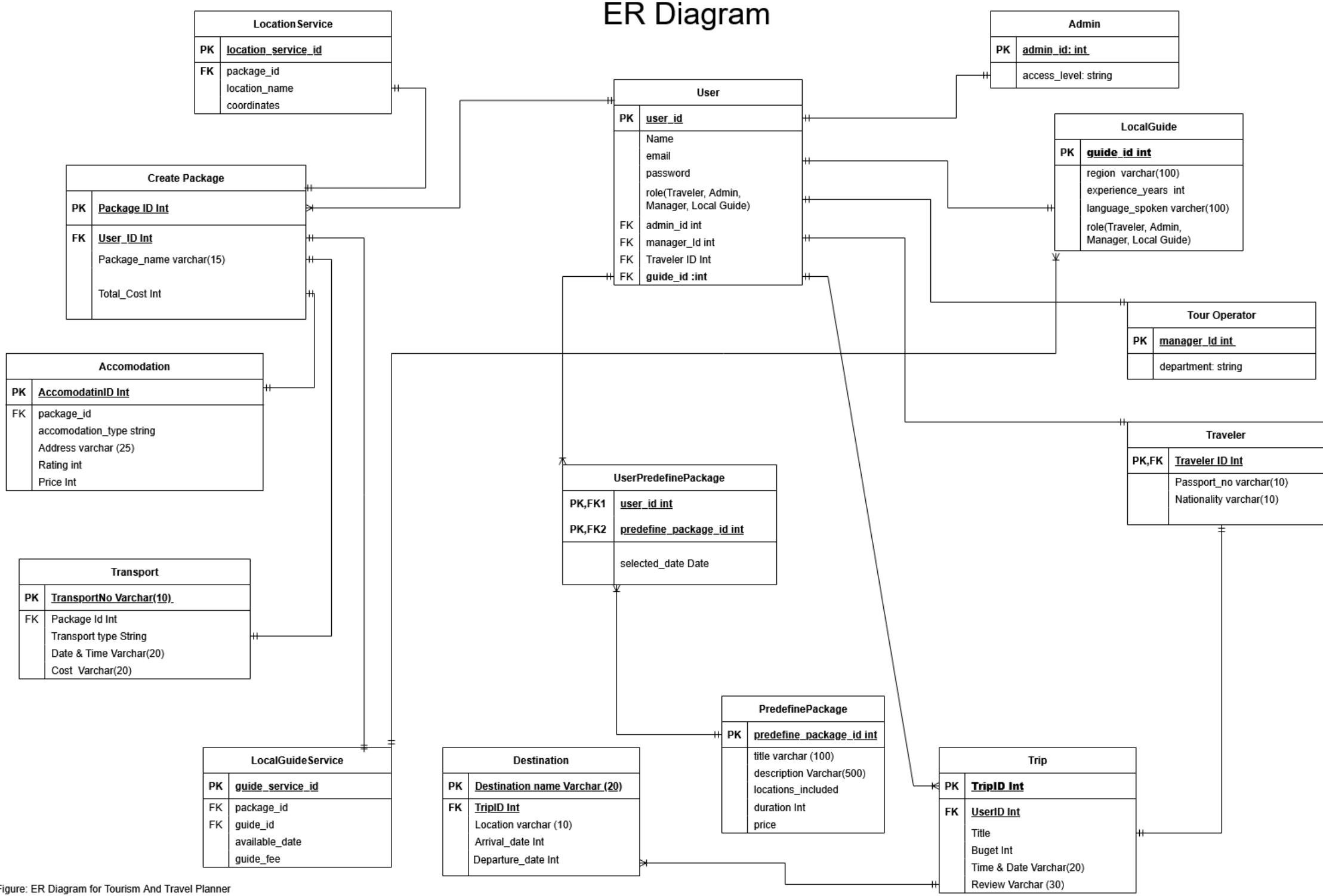


Figure: ER Diagram for Tourism And Travel Planner

Prototype: Live Activities of Tourism and Travel Planner App Prototype

Page: Home Page