Project (Daewoo Express)



Submitted to:

Sir Muhammad Asim

Submitted by:

Maida Kosser (221400091) – GL Maheen Saleem (221400063)

Zain Ali (221400084)

Software Requirement Engineering (SE-301-B)

BS Software Engineering (III) GIFT University, Gujranwala

Second Deliverable:

**Vision and Scope Document:**

**Table of Contents**

**1. Business Requirements**

1.1. Background

1.2. Business Opportunity

1.3. Business Objectives

1.4. Success Metrics

1.5. Vision Statement

1.6. Business Risks

1.7. Business Assumptions and Dependencies

**2. Scope and Limitations**

2.1. Major Features

2.2. Scope of Initial Release

2.3. Scope of Subsequent Releases

2.4. Limitations and Exclusions

**3. Business Context**

3.1. Stakeholder Profiles

3.2. Project Priorities

3.3. Deployment Considerations

## Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**1. Business Requirements:**

Business requirements are like the building blocks for any project. They're the basic needs and goals that the project must fulfill to be successful. You can get these requirements from important people like top managers, project leaders, or those who have a clear idea of why the project is happening and what benefits it will bring to the business and customers.

**1.1. Background:**

Daewoo Express is a prominent transportation company known for its bus services. Address the inadequacies in Pakistan's transportation sector, aiming to provide a modernized and efficient travel experience.

**Summarization of rationale context:**

1. **Make it easier for customers to use:** The old website was confusing, so making it easier to use. For example: simplifying the menu so user can find what they need, faster.
2. **Keep up with technology:** Websites need to stay current with the latest tech trends, like being mobile-friendly and having cool features. For example, you can track your bus in real-time to see exactly when it'll arrive.
3. **Mobile-friendly:** Many people use phones to book tickets, but the website didn't work well on phones. Fixing that, so easily buy tickets on phones without any problems.
4. **Listen to what customers want:** Some people had trouble booking tickets or finding information on the old website. Fixing those issues based on what customers said.
5. **Make a good impression:** The website looked outdated, but the new one will be modern and professional. This will make people trust Daewoo Express more when they visit the website.

**1.2. Business Opportunity:**

The Daewoo Express traveling website presents a significant business opportunity in revolutionizing the way customers book their travel tickets. As the transportation industry increasingly shifts towards digital solutions, there is a clear need for Daewoo Express to adapt this trend. **By offering an intuitive and efficient online booking platform**.

1. **Market Opportunity/Business Problem:** There's a chance to make traveling easier and more convenient for people. Booking tickets and getting information about bus schedules tricky, fix that problem by making their website better.
2. **Market Environment/Competition:** In the transportation industry, there are other companies offering similar services. Some have websites that are easy to use, while others might not be as good. Daewoo Express wants to stand out by offering the best online experience for customers, making it easy to book tickets and find bus information.
3. **Product Attractiveness:** Compared to other transportation companies, website to add features like live bus tracking and a user-friendly interface, making it more attractive and convenient for customers.
4. **Identifying Unsolved Problems:** It is hard to know exactly when your bus will arrive or to book tickets quickly online. Daewoo Express aims to solve these problems by providing real-time bus tracking and streamlining the booking process on their website.
5. **Fitting with Market Trends/Corporate Strategy:** People are increasingly relying on the internet and mobile devices to plan their travel. Daewoo Express is aligning with this trend by improving its online presence, meeting customer expectations, and staying ahead in the competitive transportation market.

**1.3. Business Objectives:**

Business Objectives for Daewoo Express to achieve specific revenue growth targets, cost-saving objectives, and target release dates and ROI goals through strategic investments and improvements in its operations and services. These objectives are quantifiable and measurable, providing a clear focus on delivering value to the business.

* **Revenue Growth:** Increase revenue through higher ticket sales and expanded service offerings.
* **Cost Savings:** Implement cost-saving measures to achieve profitability, such as efficiency measures in fleet management and maintenance to reduce operational costs. They plan to do this by managing their buses better and using less fuel.
* **Return on Investment (ROI):** Achieve a positive ROI on investments made in upgrading the online booking system, technology upgrades, and marketing strategies aimed at increasing brand visibility and customer acquisition.
* **Target Release Dates:** Finish updating their online booking system by the middle of next year to coincide with peak travel seasons, making ticket booking easier for travelers during busy periods.
* Top of Form

**1.4. Success Metrics:**

1. **Definition of Success:**

Success will be defined by achieving the set business objectives, including:

* + - 15% reduction in operational costs.
    - 20% increase in ticket sales.
    - 10% ROI on investments in the online booking system and customer service.
    - Launching the upgraded online booking system by the end of the second quarter.

1. **Measurable Criteria:**
   * **Ticket Sales:** Compare the number of tickets sold in the current year with the previous year, aiming for a 20% increase.
   * **Operational Costs:** Analyze the operational expenses and aim for a 15% reduction through improved fleet management and fuel efficiency.
   * **ROI:** Evaluate the returns generated from investments in the online booking system and customer service improvements, targeting a 10% increase.
   * **Timely Launch:** Ensure the upgraded online booking system is launched by the end of the second quarter as planned.
2. **Factors Impacting Success:**
   * **Internal Factors:** Efficient implementation of operational improvements, effective utilization of resources, and successful execution of investment plans.
   * **External Factors:** Economic conditions, market competition, regulatory changes, and customer preferences for online booking and service quality.
3. **Measurement and Assessment:**
   * Regular monitoring of ticket sales, operational expenses, and returns on investments.
   * Tracking progress towards the targeted objectives through quarterly reviews and performance evaluations.
   * Gathering customer feedback and satisfaction surveys to assess the impact of service improvements on customer experience.

**1.5. Vision Statement:**

**For [target customer]:** everyone.

**Who [statement of the need or opportunity]:** seeking seamless, convenient, and accessible transportation solutions.

**The [product name]:** Daewoo Express website.

**Is [product category]:** a comprehensive online platform.

**That [major capabilities, key benefit, compelling reason to buy or use]:** streamlines booking, tracking, and information access.

**Unlike [primary competitive alternative, current system, current business process]:** traditional ticketing methods or fragmented transportation services.

**Our product [statement of primary differentiation and advantages of new product]:** offers a unified, user-friendly experience.

The **Daewoo express** is **comprehensive online platform**, revolutionize travel experiences by offering **seamless**, **convenient**, and **accessible** transportation solutions. Our vision is a world where traveling is **effortless**, **safe**, and **enjoyable** for **everyone,** supported by **innovative technology**, **exceptional service**, and a commitment to **sustainability, unlike the** traditional ticketing methods or fragmented transportation services.

Top of Form

**1.6. Business Risks:**

1. **Marketplace Competition**: Daewoo Express faces tough competition from other bus transportation companies offering similar services. The risk of losing market share to competitors is moderate, considering the established presence of rival companies.
2. **Timing Issues:** Delays in the development and implementation of new technologies or services, such as upgrading the online booking system, could lead to missed opportunities and dissatisfaction among customers. The risk of timing issues is moderate, as delays may result in a loss of competitive advantage.
3. **User Acceptance:** There is a risk that customers may not readily accept changes to the booking process or new services offered by Daewoo Express.
4. **Implementation Issues:** Technical glitches or operational challenges during the implementation of new technologies or services leads to business risks may arise during the implementation phase and impact customer satisfaction.
5. **Risk Mitigation Actions:**

* **Market Analysis:** Conduct regular market analysis to stay informed about competitor strategies and consumer preferences. This will help identify emerging trends and adjust its business strategy accordingly.
* **Strategic Planning:** Make a detailed plan that helps Daewoo Express finish projects on time even if there are delays.
* **Customer Engagement:** Talk to customers a lot to understand what they want and how they feel about changes.
* **Quality Assurance:** Check everything carefully to catch problems and fix them before they cause trouble. This helps Daewoo Express make sure everything works well and customers have a good experience.

**1.7. Business Assumptions and Dependencies:**

**Assumptions:**

1. Customers prefer online booking and expect convenient, user-friendly interfaces.
2. There is a market demand for sustainable transportation options.
3. The regulatory environment allows for the implementation of new technologies and services in the transportation sector.

**Dependencies:**

1. Availability of reliable internet connectivity for seamless online booking and tracking.
2. Collaboration with technology partners such as software developers or IT service provider for the development and maintenance of the online booking system.
3. Compliance with regulatory requirements related to data privacy and security in online transactions.
4. Coordination with transportation authorities for route approvals and infrastructure support.

**2. Scope and Limitations:**

1. **Scope:**

* The project aims to develop an online booking system and enhance customer services to improve the overall travel experience for passengers using Daewoo Express buses.
* Features include real-time booking, tracking, promo code redemption, and payment options, as well as customer support functionalities to address inquiries and feedback.
* Advertise the new online booking system and improved services to let more people know about them.

1. **Limitations:**

* Customer feedback will be collected and considered, not all requested features may be implemented immediately due to resource constraints.
* The project does not extend to services beyond bus transportation, such as accommodation or tour packages.
* The project does not include major infrastructure changes to bus stations to get more buses.

**2.1. Major Features:**

* **Real-time Booking and seat selection:** Users can book online bus tickets and select seat avoiding the need to visit physical ticket counters.
* **Tracking:** Real-time updates on bus locations and arrival times. Passengers can track the location and estimated arrival time of their buses in real-time.
* **Payment Options:** Integration with payment gateways for secure transactions. The system offers various payment methods, including online payment gateways like credit cards.
* **Customer Support:** Dedicated customer support functionalities allow users to inquire about their bookings and provide feedback on their experiences.
* **User-Friendly Interface:** User-friendly interface for booking, transection and browsing routes, schedules.

**2.2. Scope of Initial Release:**

* Customers can easily book their tickets.
* Basic features including route search, seat selection, and payment processing.
* Integration with major payment gateways for secure transactions without any hassle.

**2.3. Scope of Subsequent Releases:**

* Expansion of route coverage bus services to more places.
* Introduction of loyalty programs and promotional offers by promo code redemption feature where you earn rewards for using our service like discounts or free rides.
* Enhancement of user experience with personalized recommendations by customer feedback mechanisms for continuous improvement.
* Integration with third-party travel services for seamless travel planning. So you can plan your whole trip in one place. This means you can book your bus ticket, find accommodation, and plan activities all in one go, making your travel planning easier.

**2.4. Limitations and Exclusions:**

1. **Onboard Entertainment Systems:** While some stakeholders may anticipate onboard entertainment systems, such as TVs or Wi-Fi, these are not planned to be included in the new product at this time.
2. **Food and Beverage Services:** Although food and beverage services are common on long-distance buses, Daewoo Express does not plan to offer these amenities in the initial release of the product.
3. **Customizable Seating Options:** While some customers may desire customizable seating options, such as premium seating or seat selection, these features are not part of the current product scope.
4. **Intermodal Transportation Integration:** While integrating with other modes of transportation, like trains or planes, could enhance the travel experience, it is not planned for inclusion in the initial release of the product.

By identifying these limitations and exclusions, stakeholders can have realistic expectations about the features and characteristics of the new product.

**3. Business Context:**

It summarizes some of the business issues around the project, including profiles of major customer categories, assumptions that went into the project concept, and the management priorities for the project.

**3.1. Stakeholder Profiles:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Stakeholder** | **Major Value** | **Attitudes** | **Major Interests** | **Constraints** |
| **Bus Operators** | Efficient operation of bus services, increased passenger satisfaction. | Desire for reliable and well-maintained buses, streamlined operations | Routes planned well, drivers to save fuel, buses to be maintained properly, and problems solved quickly. | Limited resources for fleet maintenance,follow safety regulations, and competition from other transportation providers. |
| **Government Regulatory Agencies** | Ensuring compliance with transportation regulations. | Emphasis on enforcing regulatory requirements. | Fostering innovation in the transportation sector, and ensuring fair competition among service providers. | Addressing public concerns regarding transportation safety and accessibility. |
| **Passengers:** | Safe and comfortable travel experiences. | Expect reliable and punctual services. | On-time arrivals, comfortable seating, and clear communication about schedules and delays. | Limited budget for travel expenses, need for accessible services for all passengers. |
| **Suppliers:** | Maintaining a good business relationship and steady orders. | Want reliable payments and clear communication. | Providing quality products and services, timely delivery of supplies. | Ensuring they meet quality and safety standards, managing their own operational costs. |

**3.2. Project Priorities:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Dimension** | **Driver**  **(state objective)** | **Constraint**  **(state limits)** | **Degree of Freedom**  **(state allowable range)** |
| **Customer Satisfaction:** | Ensuring a positive experience | Implement features to enhance customer satisfaction, such as user-friendly interfaces. | iterative improvements based on feedback |
| **Revenue Growth:** | Increasing sales and profitability. | Focus on revenue-generating features and initiatives, such as expanding service offerings and optimizing pricing strategies. | Exploring innovative revenue streams and partnerships while balancing investment costs to maximize returns. |
| **Regulatory Compliance:** | Adhering to legal requirements and standards. | Ensuring strict compliance with transportation regulations, safety standards, and data privacy laws. | Collaborating with regulatory authorities to stay abreast of evolving compliance requirements and proactively address any regulatory changes. |
| **Operational Efficiency:** | Streamlining processes for cost savings. | Implementing measures to optimize fleet management, fuel consumption, and operational workflows to reduce expenses. | Investing in technologies and training programs that enhance operational efficiency and employee productivity. |
| **Employee Satisfaction:** | Providing a conducive work environment for staff. | Ensuring employee well-being, training, and professional development opportunities to foster job satisfaction and retention. | Implementing employee feedback mechanisms and recognition programs to boost morale and productivity. |

**3.3. Deployment Considerations:**

Deployment Planning for Daewoo Express:

**i. User Accessibility:** Ensure that the booking platform is accessible to all users, can be easily accessed on various devices such as smartphones, tablets, and computers.

**ii. Scalability:** Design the booking system to handle potential increases in the number of passengers and bookings, ensuring smooth operations even during peak times or periods of high demand.

**iii. Security:** Implement stringent security measures to safeguard passengers' personal information and payment details, protecting against unauthorized access.

**iv. Regulatory Compliance:** Ensure that the booking system complies with relevant transportation regulations and data protection laws to maintain trust and legality in operations.

**v. Integration:** Plan for seamless integration with existing Daewoo systems, such as ticketing and fleet management, as well as third-party services like payment gateways, to provide a comprehensive booking experience for passengers.

**vi. Training and Support:** Provide training and support resources for passengers and staff members to navigate the booking platform effectively, ensuring a smooth and user-friendly experience.

**vii. Testing:** Conduct rigorous testing of the booking platform to identify and address any technical issues or glitches before launching it to the public, ensuring a seamless booking process for passengers.

**viii.** **Feedback Mechanisms:** Establish channels for passengers to provide feedback on their booking experience, allowing Daewoo to continuously improve and enhance the booking platform based on user input.

**Planning elicitation:**

**Table of Contents**

**1.** User Requirements Elicitation

**1.1.** Elicitation objectives

**1.2.** Elicitation strategy and planned techniques

**1.3.** Schedule and resource estimates

**1.4.** Documents and systems needed for independent elicitation

**1.5.** Expected products of elicitation efforts

**2.** Activities for a single requirements elicitation session

## Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**1. User Requirements Elicitation:**

The business analyst should plan the project’s approach to requirements elicitation. Even a simple plan of action increases the chance of success and sets realistic expectations for the stakeholders. An elicitation plan includes the techniques you’ll use, when you plan to use them, and for what purpose. As with any plan, use it as a guide and reminder throughout the project, but realize that you might need to change the plan throughout the project. Top of Form

**1.1. Elicitation Objectives:**

Improve customer experience and operational efficiency through the implementation of enhanced services and online booking system.

1. Gather **passenger feedback** to understand preferences, needs and pain points.
2. **Identify key features** and functionalities desired in the new online booking system.
3. Determine operational **challenges** faced by staff and areas for improvement.
4. Assess **regulatory requirements** related to transportation services.
5. **Explore innovative technologies** that can enhance the travel experience.
6. Define **performance metrics** to measure the success of the new initiatives.

**1.2. Elicitation Strategy and Planned Techniques:**

In Elicitation Strategy a combination of techniques used. Techniques may include surveys, workshops, interviews, and observation.

**Techniques:**

1. **Interviews:** play a crucial role in understanding the needs of Daewoo Express customers and stakeholders. By conducting interviews with various groups such as passengers, bus operators, and regulatory agencies, the company can gather valuable insights to improve its services and operations. Here's how Daewoo Express can apply interviews effectively:

* **Be Friendly:** When they meet people for interviews, they should make them feel comfortable and explain why they're talking to them.
* **Stay on Topic:** They should focus on what they need to know to make customers happy, run their buses better, and follow the rules.
* **Have Questions Ready:** Before the interviews, they should think of questions to ask. These questions should cover things like how easy it is to book tickets, what services passengers want on the bus, and how to make sure everyone stays safe.
* **Share Ideas:** They can also suggest new ideas and ways to solve problems based on what they learn during the interviews.
* **Listen Carefully:** It is important to really listen to what people say, ask questions if they're not sure, and repeat back what they heard to make sure they understand correctly.

1. **Observation:** Observing how Daewoo Express staff and passengers go about their tasks can be incredibly valuable. Here's how the company can make the most of observations:

* **Choose Important Tasks:** Daewoo can focus on critical tasks, like ticketing processes or passenger boarding, to understand where improvements can be made.
* **Keep it Short:** To minimize disruption, observations should be brief, perhaps just a couple of hours, allowing staff to carry on with their duties smoothly.
* **Look for Problems:** Observations can reveal any existing issues or inefficiencies in current processes, helping Daewoo identify areas for improvement with their new system.
* **Ask Questions:** It is okay to interrupt and ask questions if something isn't clear during observations. This can provide valuable insights into why certain tasks are performed in specific ways.
* **Take Notes:** Daewoo should document their observations thoroughly to ensure nothing important is overlooked and to facilitate review and analysis later on.

1. **Questionnaires:** are like surveys that Daewoo Express can use to ask a lot of people about their needs and experiences. They're great because they're cheap and easy to send out to a large number of passengers or staff members. Here's how Daewoo can use questionnaires effectively:

* **Write Clear Questions:** It's important to write questions that everyone can understand easily. Daewoo should make sure the questions cover all the possible answers people might have.
* **Give Complete Answer Options:** Make sure the options for answering cover all the possible choices and leave room for people to write in their own answers if needed.
* **Avoid Biased Questions:** Don't make questions that lead people to answer in a certain way. Keep them neutral.
* **Use Consistent Scales:** If Daewoo uses rating scales in the questionnaire, they should use them the same way throughout.
* **Choose Closed or Open Questions:** Closed questions have specific answer choices, while open-ended questions allow people to answer freely. Daewoo should decide which type to use based on what they want to learn.
* **Get Expert Advice**: It's a good idea for Daewoo to talk to someone who knows how to design questionnaires well to make sure they ask the right questions to the right people.
* **Test before Sending:** Before sending out the questionnaire, Daewoo should test it to make sure the questions are clear and there are no important questions missing.
* **Keep It Short:** People might not want to answer a lot of questions, so Daewoo should keep the questionnaire short and focused.

**1.3. Schedule and Resource Estimates:**   
For Daewoo Express, the schedule and resource estimates for elicitation activities would look something like this:

**Participants:**

* Customers for interviews and surveys.
* Financial experts for interviews and surveys.
* Executives and regulatory representatives for key discussions.

**Resource Estimates:**

1. **Prepare and conduct interviews**:
   * Time: 2 weeks
   * Resources: Interviewers, interview preparation materials, interview facilities.
2. **Survey distribution and collection:**
   * Time: 3 weeks
   * Resources: Survey creation tools, distribution channels (online platforms, email, etc.), survey collection mechanisms, staff for monitoring responses.
3. **Analysis of information:**
   * Time: 1 week
   * Resources: Data analysis tools, analysts or team members responsible for analyzing interview and survey responses, meeting rooms for discussions.
4. **Estimated effort and time for team members:**
   * Time: 6 weeks
   * Resources: Team members dedicated to conducting interviews, distributing surveys, analyzing information, and collaborating on the elicitation process.

Overall, the estimated timeline for these activities would be around 12 weeks (2 + 3 + 1 + 6 weeks). This timeline allows sufficient time for gathering, analyzing, and interpreting information from various stakeholders, ensuring comprehensive insights are obtained to inform decision-making and project planning at Daewoo Express.

**1.4. Documents and Systems Needed for Independent Elicitation:**   
By analyzing documents, system interfaces, or user interfaces for Daewoo Express, access to specific materials. Daewoo Express relies on various documents and interfaces to ensure smooth operations:

1. **Manuals:** Guides detailing Daewoo's operational procedures, such as ticketing and scheduling processes.
2. **Interface Diagrams:** Visual representations of how Daewoo's systems are connected, like the link between ticketing and GPS tracking.
3. **User Interface Designs:** Examples of how passengers and staff interact with Daewoo's systems, such as booking tickets online or accessing schedules.
4. **Software Specifications:** Detailed information about Daewoo's software functionality, including any specific features or requirements.
5. **Technical Documentation:** Information about the technology infrastructure used by Daewoo, including details about computers, networks, and other technical aspects.

Having access to these materials helps in understanding how Daewoo operates and allows for the identification of areas where improvements can be made to enhance efficiency and customer experience.

**1.5. Expected Products of Elicitation Efforts:**

Knowing the expected products of elicitation efforts helps in targeting the right stakeholders, topics, and details during the process. For Daewoo Express, the expected products could include:

* **Use Cases:** Detailed descriptions of how users interact with the system, outlining specific scenarios and actions.
* **Software Requirements Specification (SRS):** A comprehensive document outlining the functional and non-functional requirements of the software system.
* **Analysis of Questionnaire Results:** A report summarizing the findings from surveys or questionnaires conducted during elicitation, highlighting key insights and areas for improvement.
* **Quality Attribute Specifications:** Specifications outlining the desired quality attributes or characteristics of the software system, such as performance, reliability, and usability.

Having clarity on these expected products ensures that the elicitation efforts are focused and aligned with the project objectives and requirements.

**2. Activities for a Single Requirements Elicitation Session:**

* **For Interview:**
* **Prepare elicitation:**
* **Elicitation Objectives:**
  + Gather insights from customers (users) about their expectations and requirements when using the Daewoo Express website.
  + Understand the specific needs and expectations of stakeholders involved in website development and management, including administrators and help center representatives.
* **Elicitation Scope and Agenda:**
  + **Scope:** Engage with various customer segments and stakeholders to capture diverse perspectives, including users, administrators, and help center representatives.
  + **Agenda:**
    - Week 1: Introduction and project overview.
    - Week 2-3: User feedback collection.
    - Week 4: Administrator and help center discussions, and feedback consolidation.
* **Resources Preparation:**
  + **Participants:**
    - Invite key stakeholders such as website developers, marketing team members, administrators, help center representatives, and users.
  + **Materials:**
    - Prepare interview guides tailored to gather feedback on website usability, booking process, service offerings, and customer preferences for each actor.
    - Ensure recording capabilities for documentation and analysis purposes.
* **Questions Preparation:**

**User Interviews:**

* + - How would you describe your experience when using the Daewoo Express website?
    - What features or services do you find most valuable on the website?
    - Can you identify any areas where the website can be improved to better meet your needs?

**Administrator Discussions:**

* + - What are the key technical requirements that the website must fulfill from an administrative standpoint?
    - How can the website's backend interface be improved to enhance administrative tasks?
    - Are there any specific functionalities or features you believe are crucial for website management?

**Help Center Discussions:**

* + - What are the most common user inquiries or issues received by the help center regarding the website?
    - How can the website's support services be enhanced to better assist users with their queries or concerns?
    - Are there any additional resources or tools that would benefit the help center in supporting website users effectively?

**Perform Elicitation Activities:**

• **Elicitation Session:**

**Interview Session:**

Sure, here are the responses to the questions for each stakeholder group:

**User Interviews:**

1. How would you describe your experience when using the Daewoo Express website?
   * **Response:** "The website is generally user-friendly and easy to navigate, but I encounter occasional difficulties during the booking process."
2. What features or services do you find most valuable on the website?
   * **Response:** "I find the real-time seat availability feature and the online ticket booking system to be the most valuable."
3. Can you identify any areas where the website can be improved to better meet your needs?
   * **Response:** "I believe the website could be more mobile-friendly and provide better filtering options for ticket searches."

**Administrator:**

1. What are the key technical requirements that the website must fulfill from an administrative standpoint?
   * **Response:** "We require seamless integration with our ticketing system and robust security measures to protect user data."
2. How can the website's backend interface be improved to enhance administrative tasks?
   * **Response:** "Streamlining the process for updating schedules and managing bookings would greatly improve efficiency."
3. Are there any specific functionalities or features you believe are crucial for website management?
   * **Response:** "Having detailed analytics on user behavior and performance metrics would help us make informed decisions."

**Help Center:**

1. What are the most common user inquiries or issues received by the help center regarding the website?
   * **Response:** "Users often contact us for assistance with booking errors, password resets, and navigation problems."
2. How can the website's support services be enhanced to better assist users with their queries or concerns?
   * **Response: "**Implementing a comprehensive FAQ section and providing live chat support would improve user satisfaction."
3. Are there any additional resources or tools that would benefit the help center in supporting website users effectively?
   * **Response:** "Having access to a knowledge base with troubleshooting guides and instructional videos would be valuable."

These responses provide valuable insights into the perspectives and needs of users, administrators, and help center representatives regarding the Daewoo Express website.

**Closing:**

• **Thank Participants:**

• Express gratitude to participants for their valuable input and time from each actor group (users, administrators, help center).

**Summarize Key Findings:**

• Provide a summary of key insights gathered during the elicitation session for each actor group.

**Express Excitement:**

• Share enthusiasm for the potential improvements and future success of the Daewoo Express website based on the feedback received from all stakeholders.

**Follow-up after Elicitation:**

**Organize and Share Notes:**

• Compile detailed reports from interview transcripts and stakeholder discussions for each actor group.

• Analyze findings to inform website development priorities for users, administrators, and help center representatives.

**Document Open Issues:**

• Address any unresolved concerns, such as technical challenges or conflicting requirements, identified during each actor's feedback session.

• Establish clear action plans for addressing open issues and communicate them to relevant stakeholders.

**Conclusion:** By following this structured approach to requirements elicitation, Daewoo Express can gather comprehensive insights from various stakeholders, including users, administrators, and help center representatives. These insights can then be used to prioritize website improvements and enhance the overall user experience, leading to increased customer satisfaction and business success.

Top of Form

**Observation:**

**Preparation:**

1. **Decide What to Talk About:**
   * **Determine key areas of focus such as website usability, booking process, and feedback mechanisms.**
2. **Make a List of Questions:**
   * **Prepare a set of questions covering user experiences and preferences related to the website.**
3. **Create Simple Pictures:**
   * **Develop visual aids showcasing different parts of the website to facilitate discussion during interviews.**

**Perform Elicitation Activities:**

1. **Lead Discussions:**
   * **Engage with members of the website team to understand their perspectives and insights.**
2. **Ask Prepared Questions:**
   * **Pose questions regarding user experiences, pain points, and suggestions for improvement.**
3. **Show Website Pictures:**
   * **Present visual representations of the website to gather feedback and generate ideas for enhancement.**
4. **Listen Actively:**
   * **Pay close attention to responses and ask follow-up questions to gain deeper insights.**
5. **Encourage Participation:**
   * **Foster an environment where team members feel comfortable sharing their thoughts and ideas.**

**Follow Up After Elicitation:**

1. **Take Notes:**
   * **Document key points and insights gleaned from the discussions.**
2. **Share Notes with the Team:**
   * **Circulate the summary of observations among the team members for review and feedback.**
3. **Identify Problems or Questions:**
   * **Identify any issues or questions that arise during the observation process.**
4. **Assign Responsibility for Solutions:**
   * **Delegate tasks to team members to address identified problems and track progress towards resolution.**

**Application of Single Elicitation Process:**

**Observation:**

**Preparation:**

* **Elicitation: Identify key areas of focus for website improvement. Prepare questions and visual aids to facilitate discussion.**
  + **Example Questions:**
    - **How would you rate the ease of navigating through the website?**
    - **What challenges have you encountered while using the booking process?**
    - **Do you feel the feedback mechanisms on the website are effective in capturing user opinions?**

**Perform Elicitation Activities:**

* **Elicitation: Lead discussions with the website team, asking prepared questions and presenting website pictures to elicit feedback.**

**Follow Up After Elicitation:**

* **Elicitation: Take notes on insights gathered during discussions. Share notes with the team, identifying problems or questions and assigning responsibility for solutions.**

**Meeting Admin, Users, and Help Center Staff:**

**Preparation:**

* **Before meeting with these stakeholders, ensure a thorough understanding of their roles, responsibilities, and interactions with the website.**

**Perform Elicitation Activities:**

1. **Engage with Admin:**
   * **Meet with the admin responsible for website management, data analytics, and user engagement strategies.**
   * **Discuss their perspectives on the website's performance, data management, and strategies for enhancing user engagement.**
   * **Present visual aids illustrating admin interfaces and data analytics dashboards to facilitate discussion.**
2. **Engage with Users:**
   * **Meet with a diverse group of users who represent different demographics and usage patterns.**
   * **Observe users as they navigate through the website, paying attention to their interactions, hesitations, and frustrations.**
   * **Encourage users to verbalize their thoughts and experiences while using the website.**
3. **Engage with Help Center Staff:**
   * **Meet with help center staff members responsible for customer support and issue resolution.**
   * **Discuss their experiences in handling user inquiries and resolving issues.**
   * **Observe the tools and processes they use to assist users and gather feedback.**

**Ask Questions and Record Responses:**

* **Questions for Admin:**
  + **How do you assess the website's performance in terms of user engagement and data analytics?**
  + **What are the main challenges you face in managing website operations and data effectively?**
  + **How do you gather and utilize user feedback to inform website improvements?**
* **Questions for Users:**
  + **How would you describe your overall experience with the website?**
  + **Can you walk us through the process of booking a ticket and share any challenges you faced?**
  + **What features or functionalities do you find most useful, and which ones do you think need improvement?**
* **Questions for Help Center Staff:**
  + **What are the most common issues or inquiries that users contact the help center about?**
  + **How effective do you find the current support tools and processes in addressing user concerns?**
  + **Are there any recurring patterns or areas for improvement that you've noticed in user feedback?**

**Record Responses and Insights:**

* **Document responses from admin, users, and help center staff, noting key insights and areas for improvement.**
* **Take notes on observations during interactions and any notable patterns or trends identified.**

**Conclusion:**

**By engaging directly with admin, users, and help center staff, Daewoo Express can gain comprehensive insights into various aspects of their website and services. Analyzing the feedback and suggestions gathered from these stakeholders will enable informed decision-making and targeted improvements to enhance the overall user experience and satisfaction.**

* Top of Form
* **For Questionnaire:**

**Prepare for Elicitation:**

* **Understand Scope and Agenda:**
  + Clarify the objectives of improving the Daewoo Express website, such as enhancing user experience, increasing ticket bookings, and improving customer satisfaction.
* **Prepare Resources:**
  + Develop survey questions tailored to gather insights about website usage, satisfaction, and preferences.

**Survey Questions:**

1. **On a scale of 1 to 5, how frequently do you use online platforms for booking intercity bus tickets?**

1: Never

2: Rarely

3: Occasionally

4: Frequently

5: Very frequently

1. **On a scale of 1 to 5, how valuable do you find the features or functionalities offered by online ticket booking platforms like Daewoo Express?**

1: Not valuable at all

2: Somewhat valuable

3: Moderately valuable

4: Very valuable

5: Extremely valuable

1. **On a scale of 1 to 5, how satisfied are you with the current online ticket booking platforms available in the market?**

1: Not satisfied at all

2: Slightly satisfied

3: Moderately satisfied

4: Very satisfied

5: Completely satisfied

1. **On a scale of 1 to 5, how important is it for you to have a user-friendly and intuitive booking process on online ticketing platforms?**

1: Not important at all

2: Somewhat important

3: Moderately important

4: Very important

5: Extremely important

1. **On a scale of 1 to 5, how likely are you to recommend improvements in online ticket booking platforms like Daewoo Express to better meet your travel needs?**

1: Not likely at all

2: Slightly likely

3: Moderately likely

4: Very likely

5: Extremely likely

1. **How satisfied are you with the variety of routes and destinations offered by online ticket booking platforms like Daewoo Express?**
   * 1: Not satisfied at all
   * 2: Slightly satisfied
   * 3: Moderately satisfied
   * 4: Very satisfied
   * 5: Completely satisfied
2. **On a scale of 1 to 5, how responsive do you find the customer support services provided by online ticket booking platforms like Daewoo Express?**
   * 1: Not responsive at all
   * 2: Slightly responsive
   * 3: Moderately responsive
   * 4: Very responsive
   * 5: Extremely responsive
3. **How likely are you to use additional services or features offered by online ticket booking platforms like Daewoo Express, such as travel insurance or seat selection?**
   * 1: Not likely at all
   * 2: Slightly likely
   * 3: Moderately likely
   * 4: Very likely
   * 5: Extremely likely
4. **On a scale of 1 to 5, how transparent do you perceive the pricing and fee structures of online ticket booking platforms like Daewoo Express?**
   * 1: Not transparent at all
   * 2: Slightly transparent
   * 3: Moderately transparent
   * 4: Very transparent
   * 5: Completely transparent
5. **How satisfied are you with the overall reliability and punctuality of the bus services booked through online platforms like Daewoo Express?**
   * 1: Not satisfied at all
   * 2: Slightly satisfied
   * 3: Moderately satisfied
   * 4: Very satisfied
   * 5: Completely satisfied

**Perform Elicitation Activities:**

• **Elicitation Session:**

* Introduce the purpose of the survey and explain the importance of gathering user feedback from various stakeholders, including users, administrators, and help center representatives.
* Administer the questionnaire to participants either online or through other means.
* Ensure that responses are collected from users, administrators, and help center representatives to capture diverse perspectives.

**Survey Results:**

**User Responses:**

1. **Frequency of Use:**
   * Users predominantly rated their frequency of using online platforms for booking intercity bus tickets as "Frequently" or "Very frequently," indicating a high reliance on such services for travel needs.
2. **Value of Features:**
   * Users mostly rated the features and functionalities offered by online ticket booking platforms like Daewoo Express as "Moderately valuable" to "Very valuable," suggesting a positive perception of the available offerings.
3. **Satisfaction with Current Platforms:**
   * User satisfaction with current online ticket booking platforms varied, with responses ranging from "Moderately satisfied" to "Completely satisfied," indicating room for improvement in certain areas.
4. **Importance of User-Friendly Booking Process:**
   * Users emphasized the importance of having a user-friendly and intuitive booking process, with a majority rating it as "Very important" or "Extremely important" for their online ticketing experience.
5. **Likelihood to Recommend Improvements:**
   * Users expressed a high likelihood to recommend improvements in online ticket booking platforms like Daewoo Express to better meet their travel needs, with many responses falling in the "Moderately likely" to "Extremely likely" range.

**Administrator Responses:**

1. **Variety of Routes and Destinations:**
   * Administrators generally reported high satisfaction with the variety of routes and destinations offered by online ticket booking platforms like Daewoo Express, with most responses indicating "Moderately satisfied" to "Completely satisfied."
2. **Responsiveness of Customer Support Services:**
   * Administrators perceived the customer support services provided by online ticket booking platforms as generally responsive, with responses ranging from "Moderately responsive" to "Extremely responsive."
3. **Likelihood to Use Additional Services:**
   * Administrators indicated a moderate to high likelihood of using additional services or features offered by online ticket booking platforms like Daewoo Express, such as travel insurance or seat selection.
4. **Transparency of Pricing and Fee Structures:**
   * Administrators perceived the pricing and fee structures of online ticket booking platforms as transparent, with responses predominantly falling in the "Moderately transparent" to "Completely transparent" range.
5. **Reliability and Punctuality of Bus Services:**
   * Administrators reported high satisfaction with the overall reliability and punctuality of the bus services booked through online platforms like Daewoo Express, with most responses indicating "Very satisfied" to "Completely satisfied."

**Help Center Representative Responses:**

1. **Common User Inquiries and Issues:**
   * Help center representatives identified common user inquiries and issues related to booking errors, password resets, and navigation problems, highlighting areas for improvement in user assistance and support services.
2. **Enhancement of Support Services:**
   * Help center representatives emphasized the need for implementing a comprehensive FAQ section and providing live chat support to improve user satisfaction and streamline support procedures.
3. **Additional Resources for Effective Support:**
   * Help center representatives expressed the importance of having access to a knowledge base with troubleshooting guides and instructional videos to effectively support website users.

**Follow-up after Elicitation:**

• **Organize and Share Notes:**

* Compile the survey results and organize them for further analysis, distinguishing responses from users, administrators, and help center representatives.
* Share the findings with the relevant stakeholders, including website developers, marketing team members, and management.

**Requirement Elicitation Insights:**

• **User Perspective:** The survey provides insights into user behavior, satisfaction levels with website features, and their willingness to recommend improvements.

• **Administrator Feedback:** Administrators offer valuable insights into technical requirements, backend interface improvements, and essential functionalities for effective website management.

• **Help Center Input:** Feedback from help center representatives highlights common user inquiries, support service enhancements, and additional resources required for effective user assistance.

**Conclusion:**

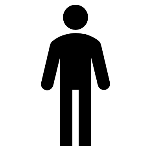
By synthesizing insights gathered from users, administrators, and help center representatives, Daewoo Express gains a comprehensive understanding of stakeholder priorities and concerns. This knowledge enables the prioritization of website enhancements to meet the diverse needs and preferences of all stakeholders effectively. Through these improvements, Daewoo Express aims to deliver an enhanced website experience, drive increased ticket bookings, and elevate overall customer satisfaction.

**Third Deliverable**

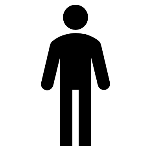
**(First Part):**

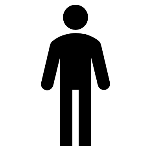
**1. Use Case:**

Daewoo express



User



 Admin

Help Centre

**2. User Stories:**

* **User Story #1: User Registration**

1. As a user who wants to access exclusive features, I want to register for an account on the Daewoo Express platform, so that I can enjoy personalized services and benefits.
2. As a new user interested in booking bus tickets, I want to create an account on the Daewoo Express platform, so that I can manage my bookings and preferences easily.

* **User Story #2: User Login**

1. As a registered user, I want to log in to my account with my credentials, so that I can access my profile information and view my booking history effortlessly.
2. As a returning customer, I want to sign in to my Daewoo Express account using my username and password, so that I can quickly proceed with booking my next trip without re-entering my details.

* **User Story #3: Book Ticket**

1. As a logged-in user, I want to be able to book tickets for my desired routes and schedules, so that I can plan my travel in advance and secure my seats.
2. As a traveler preparing for an upcoming trip, I want to use the Daewoo Express platform to easily book my bus tickets online, so that I can avoid long queues and ensure my seat availability.

* **User Story #4: Search for Routes and Schedules**

1. As a user planning a trip, I want to search for available routes and schedules on the Daewoo Express platform, so that I can find the most convenient option for my travel plans.
2. As a commuter looking to travel to a specific destination, I want to search for bus routes and schedules on the Daewoo Express website, so that I can choose the most suitable departure time for my journey.

* **User Story #5: View and Modify Bookings**

1. As a user with a confirmed booking, I want to view my booked tickets on the Daewoo Express platform, so that I can review my travel details and make any necessary modifications.
2. As a traveler who needs to change my travel dates, I want to be able to modify my existing bookings easily through the Daewoo Express website, so that I can adjust my plans without hassle.

* **User Story #6: Payment**

1. As a user ready to confirm my booking, I want to make secure payments for my tickets using various payment methods available on the Daewoo Express platform, so that I can finalize my reservations without concerns.
2. As a customer booking multiple tickets, I want to have the option to pay for all bookings in a single transaction on the Daewoo Express website, so that I can complete my purchase efficiently.

* **User Story #7: Notification**

1. As a user who has booked tickets, I want to receive timely notifications regarding my bookings, including confirmation, updates, and reminders, so that I can stay informed about my travel arrangements.
2. As a passenger waiting for departure, I want to receive real-time notifications about any changes in the bus schedule or delays, so that I can adjust my plans accordingly and avoid inconvenience.

* **User Story #8: Promo Code Redemption**

1. As a user looking for discounts, I want to redeem promo codes or discount vouchers during the booking process on the Daewoo Express platform, so that I can avail special offers and save money on my tickets.
2. As a frequent traveler, I want to have the option to apply promo codes to my bookings on the Daewoo Express website, so that I can enjoy exclusive discounts and rewards as a loyal customer.

* **User Story #9: Real-time Bus Tracking**

1. As a user planning my journey, I want to track the real-time location and status of buses on the Daewoo Express platform, so that I can monitor my bus's progress and plan my arrival time accordingly.
2. As a commuter with a tight schedule, I want to track the live location of my bus on the Daewoo Express website, so that I can anticipate any delays and manage my time effectively.

* **User Story #10: Help Center**

1. As a user encountering an issue, I want access to a help center on the Daewoo Express platform, where I can find answers to frequently asked questions and receive assistance from customer service representatives, so that I can resolve my concerns quickly.
2. As a traveler needing support, I want to access the help center on the Daewoo Express website, so that I can get assistance with any booking-related queries or technical issues I may encounter during my journey.

* **User Story #11: Logout**

1. As a user concerned about security, I want to log out of my Daewoo Express account securely after completing my tasks or when I'm done using the platform, so that I can protect my personal information from unauthorized access.
2. As a user sharing a device, I want to have the option to log out of my account on the Daewoo Express website, so that I can ensure the privacy of my account and prevent others from accessing my booking details.

**Third Deliverable(Second Part):**

**Functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **Features** | **Actors** | ***Functional Requirements*** |
| Register | User, Admin | * The website shall provide a registration form with fields for user's name, email, and password. * Upon submission, the system shall verify that all required fields are filled and that the email provided is in the correct format. * The system shall check if the email provided during registration is unique and not already associated with an existing account. * After successful registration, the system shall send a confirmation email to the provided email address for account activation. * Upon clicking the confirmation link in the email, the system shall activate the user's account and redirect them to the login page. |
| Login | User, Admin | * The website shall display a login form with fields for the user's email and password. * Upon submission, the system shall authenticate the user's credentials by checking them against the stored user data. * The system shall ensure that the user's account is active and not blocked or suspended before allowing login. * After successful authentication, the system shall redirect the user to their dashboard or the homepage. * In case of unsuccessful login attempts, the system shall display appropriate error messages and provide options for password recovery. |
| Book Ticket | User, Admin | * The website shall provide a search interface where users can enter their desired route, date, and number of seats. * Upon submission, the system shall retrieve and display available buses, schedules, and seat availability based on the user's input. * Users shall be able to select seats from the available options and proceed to the booking confirmation page. * The system shall calculate the total fare based on the selected seats and any applicable discounts or taxes. * After successful payment, the system shall generate a booking confirmation with a unique booking ID and send it to the user's email. |
| Search for Routes and Schedules | User, Admin | * The website shall provide a search functionality where users can enter their departure and destination locations, as well as the desired travel date. * The system shall retrieve and display available bus routes and schedules matching the user's search criteria. * Users shall be able to filter and sort the search results based on various parameters such as departure time, duration, and fare. * The system shall provide real-time updates on seat availability and any changes in the bus schedules. |
| View/Modify Booking | User, Admin | * Users shall have access to a section where they can view their booked tickets along with details such as the departure time, bus number, and seat numbers. * Users shall be able to modify booking details such as the date, time, or number of seats (if available) before the departure time. * The system shall update the booking information in real-time and reflect any changes made by the user. * Users shall receive confirmation notifications via email or SMS after successfully modifying their bookings. * The system shall provide an option for users to cancel their bookings within a specified timeframe and receive refunds if applicable. |
| Payment | User, Admin | * The website shall provide a secure payment gateway that supports credit/debit card, net banking, and digital wallet payments. * The payment gateway shall use encryption protocols (such as SSL) to secure users' payment information during transmission. * After successful payment, the system shall generate a payment confirmation message and send it to the user's registered email address or mobile number. * The payment confirmation message shall include details such as the transaction ID, booking details, and payment amount. * Users shall have the option to view their payment history and download payment receipts from their account dashboard. |
| Notification | User, Admin, Help Center | * + The website shall send notifications to users via email, SMS, or in-app notifications for booking confirmations, updates, or changes.   + Users shall be able to specify their preferred notification method (email, SMS, etc.) through their account settings.   + Notifications shall include clear and concise information about the booking status, changes in schedule, or any relevant updates.   + The system shall provide an option for users to opt-in or opt-out of receiving specific types of notifications.   + In case of critical updates or emergencies, the system shall send immediate notifications to users via all available channels. |
| Promo Code Redemption | User,Admin | * Users shall have the option to enter promo codes during the booking process through a designated field on the checkout page. * The website shall validate the entered promo code to ensure its authenticity and applicability. * Upon successful validation, the system shall apply the corresponding discount or offer to the total booking amount. * The system shall display the applied discount and the updated booking total before the user confirms the payment. * Users shall receive a confirmation message indicating the successful application of the promo code and the adjusted booking amount. |
| Real-time Bus Tracking | User,Admin | * Users shall have access to a real-time bus tracking feature that displays the live location of their booked bus. * The website shall use GPS or similar tracking technologies to retrieve and update the bus's current location on a map interface. * Users shall be able to view additional information such as the bus's estimated arrival time at their destination and any upcoming stops. * The system shall provide options to zoom in/out and pan across the map interface for better visualization of the bus's route. * Users shall receive notifications or alerts in case of delays, route diversions, or other relevant updates regarding their booked bus. |
| Helpline | User, Help center | * + Users shall have access to customer support services for assistance with bookings, payments, or other inquiries.   + Customer support shall be available through multiple channels, including phone, email, and live chat, during specified operating hours.   + The website shall display contact details for customer support prominently on the homepage and within the user account dashboard.   + Support agents shall respond promptly to user queries and provide helpful assistance in resolving issues or concerns.   + Users shall have the option to rate their support experience and provide feedback for continuous improvement.   Top of Form |
| Logout | User, Admin | * + The website shall provide a visible "Logout" button or link for users to log out of their accounts.   + When the user clicks the "Logout" button, the website shall prompt for confirmation before proceeding with the logout action.   + Upon confirmation, the website shall clear the user's session data stored on the server to invalidate the current session.   + After clearing the session, the website shall display a confirmation message confirming the successful logout.   + Upon confirmation, the website shall automatically redirect the user to the login page. |

***Use Case Scenarios***

## 1.1. Use Case Scenario

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-01 Register |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to create a new account on the Daewoo Express platform. |
| Trigger: | User decides to register for an account on the Daewoo Express platform. |
| Precondition: | None |
| Post Condition: | User successfully creates a new account. |
| Normal Flow: | 1. User navigates to the registration page on the Daewoo Express website. 2. User provides necessary details such as name, email, password, etc. 3. User clicks on the "register" button. 4. The system validates the provided information and creates a new account. |
| Alternate Flow: | None |
| Exception: | If there are issues with the registration process due to technical errors, display an error message and advise the user to try again later. |

#### **1.2. Use Case Scenario 2**

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-02 login |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to log in to their account on the Daewoo Express platform. |
| Trigger: | User decides to access their account on the Daewoo Express platform. |
| Precondition: | User has previously registered and has valid login credentials. |
| Post Condition: | User successfully logs in and gains access to their account dashboard. |
| Normal Flow: | 1. User navigates to the login page on the Daewoo Express website. 2. User enters their username and password. 3. User submits the login form. 4. The system verifies the provided credentials. 5. Upon successful verification, the system grants access to the user's account. 6. User is redirected to their account dashboard. |
| Alternate Flow: | 1. If the provided credentials are incorrect: 2. Display an error message informing the user that the provided credentials are incorrect. 3. Provide options for the user to reset their password or register for a new account. |
| Exception: | If there are technical errors during the login process, display an error message and advise the user to try again later. |

#### **1.3. Use Case Scenario 3**

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-03 Ticket Booking |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to book a ticket on the Daewoo Express platform. |
| Trigger: | User decides to book a ticket for a specific route and schedule. |
| Precondition: | User is logged in and navigates to the ticket booking section. |
| Post Condition: | User successfully books a ticket and receives a confirmation. |
| Normal Flow: | 1. User navigates to the ticket booking section on the Daewoo Express website. 2. User selects the desired route and schedule. 3. User provides passenger details such as name, contact information, and seat preference. 4. User selects the payment method. 5. User confirms the booking. 6. The system processes the booking request and reserves the seat. 7. User receives a booking confirmation with details via email or SMS. |
| Alternate Flow: | None |
| Exception: | If there are technical errors during the booking process, display an error message and advise the user to try again later. |

#### **1.4. Use Case Scenario 4**

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-04 Search for routes and Schedule |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to search for available routes and schedules on the Daewoo Express platform. |
| Trigger: | User decides to plan their travel and needs information about available routes and schedules. |
| Precondition: | User is logged in or accessing the Daewoo Express website as a guest. |
| Post Condition: | User views the available routes and schedules. |
| Normal Flow: | 1. User navigates to the route and schedule search section on the Daewoo Express website. 2. User enters the origin and destination locations. 3. User selects the preferred date and time for travel. 4. User submits the search query. 5. The system retrieves and displays the available routes and schedules matching the search criteria. 6. User views the list of available routes and schedules. |
| Alternate Flow: | None |
| Exception: | If there are technical errors during the search process, display an error message and advise the user to try again later. |

#### **1.5. Use Case Scenario 5**

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-05 View And Modify Booking |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to view and modify their booked tickets on the Daewoo Express platform. |
| Trigger: | User decides to review or make changes to their existing bookings. |
| Precondition: | User is logged in and has booked tickets previously. |
| Post Condition: | User successfully views or modifies their booked tickets. |
| Normal Flow: | 1. User navigates to the booking management section on the Daewoo Express website. 2. User selects the option to view or modify existing bookings. 3. User enters the necessary details to identify the booking, such as booking ID or reservation number. 4. The system retrieves and displays the details of the booked ticket. 5. User reviews the booking details and selects the option to modify if necessary. 6. User makes the desired modifications, such as changing the travel date or passenger details. 7. User confirms the changes. |
| Alternate Flow: | None |
| Exception: | If the booking details cannot be retrieved due to technical errors, display an error message and advise the user to try again later. |

#### **1.6. Use Case Scenario 6**

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-06 Payment |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to make a payment for their booked tickets on the Daewoo Express platform. |
| Trigger: | User decides to proceed with the payment for the booked tickets. |
| Precondition: | User has selected the desired tickets for booking and is ready to make payment. |
| Post Condition: | User successfully completes the payment transaction. |
| Normal Flow: | 1. User navigates to the payment section after selecting the desired tickets for booking. 2. User selects the preferred payment method (e.g., credit/debit card, mobile wallet). 3. User enters the payment details, including card information or wallet credentials. 4. User confirms the payment. 5. The system processes the payment transaction securely. 6. User receives a payment confirmation along with the booking details. |
| Alternate Flow: | None |
| Exception: | If the payment transaction fails due to technical issues or insufficient funds, display an error message and provide instructions for resolving the issue. |

#### **1.7. Use Case Scenario 7**

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-07 Notifications |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to receive notifications regarding their bookings and other relevant updates on the Daewoo Express platform. |
| Trigger: | User wants to stay informed about their travel arrangements and updates from Daewoo Express. |
| Precondition: | User has an active account on the Daewoo Express platform and has opted to receive notifications. |
| Post Condition: | User receives notifications regarding their bookings and relevant updates. |
| Normal Flow: | 1. User navigates to the notification settings section on the Daewoo Express website. 2. User selects the types of notifications they wish to receive (e.g., booking confirmations, travel updates, promotional offers). 3. User saves the notification preferences. 4. The system configures the user's notification settings accordingly. 5. User receives notifications via email, SMS, or push notifications on the Daewoo Express app based on their preferences. |
| Alternate Flow: | None |
| Exception: | If there are issues with sending notifications due to technical errors, the system logs the failure and attempts to resend the notifications later. |

#### **1.8. Use Case Scenario 8**

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-08 HelpCenter |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to access the help center for assistance, FAQs, and support on the Daewoo Express platform. |
| Trigger: | User encounters an issue or has a question while using the Daewoo Express platform. |
| Precondition: | User has access to the help center section on the Daewoo Express website or app. |
| Post Condition: | User finds the necessary assistance or information to resolve their query. |
| Normal Flow: | 1. User navigates to the help center section on the Daewoo Express platform. 2. User browses through the FAQs or enters their query in the search bar. 3. User finds relevant articles, FAQs, or support options related to their query. 4. User follows the provided instructions or contacts customer support for further assistance if needed. |
| Alternate Flow: | None |
| Exception: | If the user cannot find relevant assistance or encounters technical issues while accessing the help center, provide an option for contacting customer support directly. |

#### **1.9. Use Case Scenario 9**

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-09 Promo code redemption |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to redeem a promotional code or discount voucher while making a booking on the Daewoo Express platform. |
| Trigger: | User has a valid promotional code and intends to apply it during the booking process. |
| Precondition: | User has selected the desired tickets for booking and has a valid promotional code. |
| Post Condition: | User successfully applies the promotional code, and the discount is reflected in the booking total. |
| Normal Flow: | 1. User proceeds to the booking section on the Daewoo Express platform. 2. User enters the required details for the booking, including the destination, date, and number of passengers. 3. User reaches the payment section, where there is an option to apply a promotional code. 4. User enters the promotional code in the designated field. 5. The system verifies the validity of the promotional code. 6. If the promotional code is valid, the system applies the discount to the booking total. 7. User confirms the booking with the applied discount. |
| Alternate Flow: | 1. If the entered promotional code is invalid or expired: 2. The system displays an error message indicating the invalidity of the promotional code. 3. User may try entering a different promotional code or proceed with the booking without a discount. |
| Exception: | If there are technical issues with applying the promotional code or verifying its validity, the system displays an error message and advises the user to try again later. |

#### **1.10. Use Case Scenario 10**

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-10 Real Time Bus Tracking |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to track the real-time location and status of buses operated by Daewoo Express. |
| Trigger: | User intends to plan their travel more effectively and stay updated on the status of their bus. |
| Precondition: | User has access to the real-time bus tracking feature on the Daewoo Express platform. |
| Post Condition: | User successfully tracks the real-time location and status of the desired bus. |
| Normal Flow: | 1. User navigates to the real-time bus tracking section on the Daewoo Express website or app. 2. User enters the details of their journey, such as the departure city, destination, and desired departure time. 3. The system displays a list of available buses along with their real-time locations and estimated arrival times. 4. User selects the desired bus from the list. 5. The system provides real-time updates on the selected bus's location, estimated arrival time, and any delays. 6. User monitors the real-time updates to plan their travel accordingly. |
| Alternate Flow: | None |
| Exception: | If there are technical issues or data inaccuracies with the real-time bus tracking feature, the system displays an error message and advises the user to check back later or contact customer support for assistance. |

#### **1.11. Use Case Scenario 11**

|  |  |
| --- | --- |
| ID and Name: | MKB\_UC-11 Logout |
| Created by: | Product owner |
| Primary Actor: | User |
| Description: | User wants to securely log out of their account on the Daewoo Express platform. |
| Trigger: | User intends to end their session or secure their account after completing their tasks. |
| Precondition: | User is logged in to their account on the Daewoo Express platform. |
| Post Condition: | User successfully logs out and is redirected to the login page. |
| Normal Flow: | 1. User navigates to the logout option in their account settings or profile section. 2. User confirms their intention to log out of their account. 3. The system securely logs out the user from their account. 4. User is redirected to the login page or the homepage of the Daewoo Express platform. |
| Alternate Flow: | None |
| Exception: | If there are technical issues with the logout process, the system displays an error message and advises the user to try again later. |

Top of Form