**Project # 1**

**Group Members:**

**Maida Kosser 221400091(GL)**

**Maheen Saleem 221400063**

**Zain Ali 221400084**

**Section: B**

**Subject: SRE**

**Name: Travel services Daewoo Express**

****

**Proposal:**

1. **Problem Topic:**

Enhancing the Travel Experience of an On-Demand Travel Platform for Daewoo Express.

1. **Domain:**

Daewoo Express travel Services

1. **Abstract:**

Daewoo Express is a leader in the travel services industry, but creating a safe and comprehensive platform remains a challenge. This platform needs to connect passengers with Daewoo Express in an easy and seamless manner, addressing issues with trust, security, quality control, and legal compliance. Current solutions are inadequate, leaving travelers vulnerable to irregular travel schedules, poor service quality, and a lack of clear communication. This project intends to close these gaps, guaranteeing a platform that not only improves safety and trust but also provides a consistently high level of service across various routes. The ultimate goal is to establish an advanced solution that can adapt to the changing needs of both passengers and service providers in the dynamic Travel industry.

**Functional requirements:**

**FR1:** The website must offer a simple way for customers to log in.

**FR2:** The website must provide a safe login area for Daewoo Express employees.

**FR3:** The website must offer an easy-to-use registration process for customers.

**FR4:** The website must enable staff members' registration with secure authentication.

**FR5:** On the website Users must be able to track Daewoo Express buses in real time.

**FR6:** The website must support seamless one-way and round-trip ticket booking services.

**FR7:** On the website Passengers must have access to a variety of seating options for customization.

**FR8:** The website must provide Travel services to a wide range of Daewoo Express-served destinations.

**FR9:** On the website Customers must be able to evaluate and rate their travel experiences.

**FR10:** The website will guarantee safe online payments, accepting debit cards, credit cards, and digital wallets.

**FR11:** On the website Users will be able to view and download the entire Daewoo Express bus schedule.

**FR12:** On the website Special membership services for frequent travelers will be offered.

**FR13:** The website will provide Travel package bookings.

**FR14:** On the website Passengers will be able to purchase travel insurance through the platform.

**FR15:** The website will provide a strong customer support system to answer questions and provide assistance.

**FR16:** The website will provide Customization options for users to filter travel preferences.

**FR17:** On the website a more often asked passenger question section will be supplied.

**FR19:** The website will provide Customer support contact numbers prominently.

**FR20:** The website will provide Promotional discounts and loyalty programs.

**FR21:** The website will provide the passengers the option to pre-select their preferred seats for a personalized journey experience.

**Non-Functional Requirements:**

**Usability:**

* Users should be able to easily navigate the website with its design prioritizing simplicity and user-friendliness.
* Users should be able to quickly access information such as bus schedules and ticket prices.
* The website should be responsive so that it can be accessed on a variety of devices, including computers, tablets, and phones.
* Users should be guided through features like online booking and real-time tracking with clear and concise instructions.
* Users should also be notified of actions such as ticket confirmation and payment processing through quick feedback mechanisms.

**Reliability:**

* Accurate and up-to-date information on bus schedules, routes, and seat availability should be provided.
* During periods of high website traffic, the website will continue to function, guaranteeing reliable service.
* There must be protections in place to prevent loss or illegal access to passenger data.
* A strong backup plan should enable rapid restoration in case of technical problems.
* Users should be guided by understandable error messages when resolving input errors or system problems.

**Performance:**

* The website needs to load rapidly in order to give users an excellent experience.
* Prioritizing scalability will guarantee that the website continues to work properly even when a large number of people are using it at once.
* Availability 24/7 shall be maintained to serve users from different time zones.
* Ensuring consistent functioning across several platforms, such as PCs, tablets, and phones, is imperative.
* Data optimization will ensure effective use of internet resources and prevent slowdowns.

**Security:**

* Strong security measures must be put in place to prevent unwanted access to passenger data.
* Safety measures must be taken to avoid and limit cyberattacks.
* Sensitive data must be secured using strong encryption technologies.
* The use of Multi-Factor Authentication (MFA) will be implemented as a security measure.

**Portability:**

* To achieve platform independence, consistent operation across several operating systems must be guaranteed.
* For hardware independence, the website must function smoothly across a range of hardware architectures and configurations.
* The website's data must be readily transferable between other platforms.