

Software Requirements Specification

For

HORSCITY Transportation Services Application

(Phase-1)

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Revision History

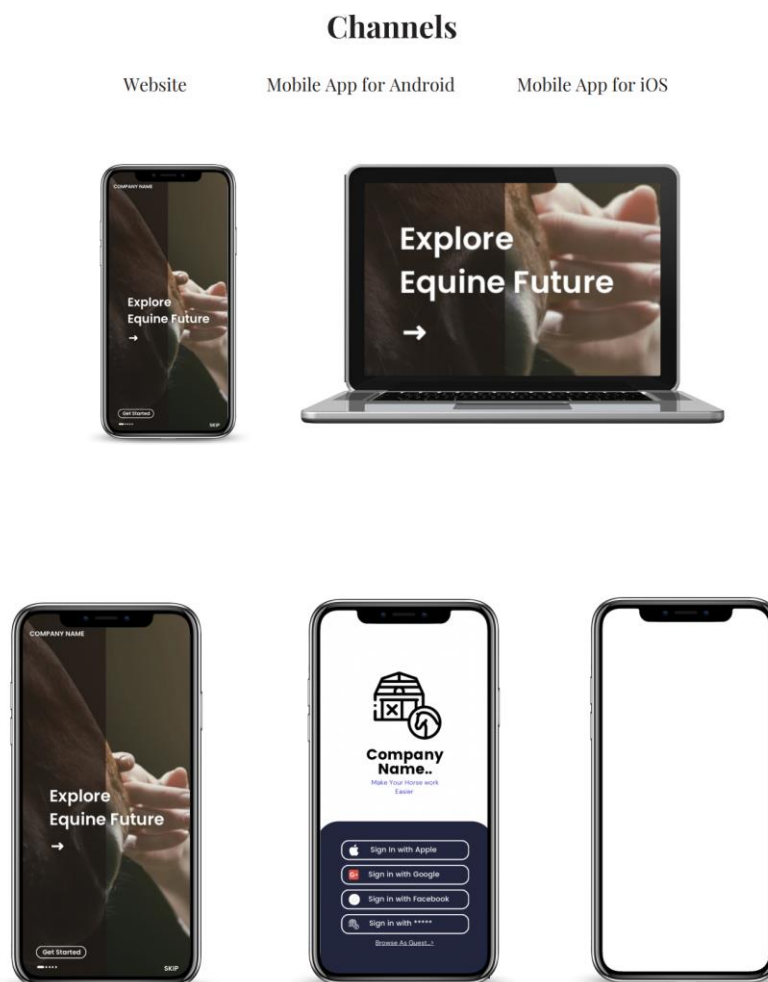
Name	Date	Reason For Changes	Version
1.0	08/May/2023	Initial Draft for Phase-1 Scope	1.0

1. Introduction

1.1 Background

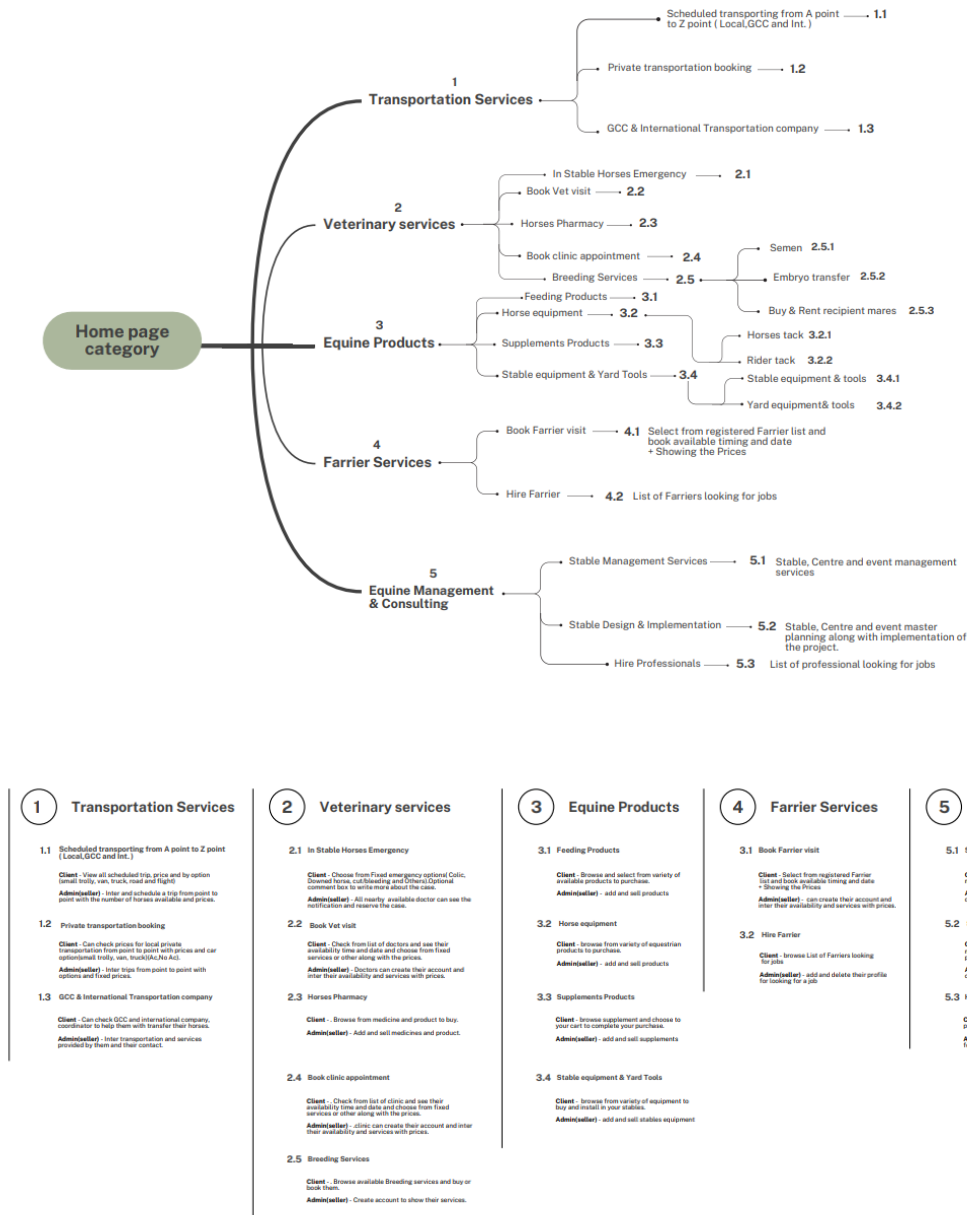
[SBT Abudhabi](#) is an international team of equine and stable management experts with extensive experience in marketing, equine science, and event management. With a belief of every horse deserves the best and we specialize in providing the tools, knowledge, and resources every equine enthusiast needs to enjoy a premium stable experience, SBT delivers the creative solutions you need to build, streamline, and optimize your business's potential, and simplify the journey of stable management for generations to come.

For enhancing the customer experience organization wants to digitalize its business operations related to the services it provides to the customer. The solution envisioned to develop will have 3 channel applications, a website and a mobile application for Android & IOS platforms.



As a complete solution, SBT envisions the solution shall include transportation services, veterinary services, Equine products, Farrier Services, and Equine management and consulting related features. SBT plans to develop this complete solution with a phased

approach. As a part of phase-1 SBT wants to publish a minimum viable product (MVP) which will contain the features that enables 1.1 and 1.2 shown in below diagram



1 Transportation Services	2 Veterinary services	3 Equine Products	4 Farrier Services	5 Equine Management & Consulting
1.1 Scheduled transporting from A point to Z point (Local,GCC and Int.) Client: View all scheduled trip, price and by option (small trailer, van, truck, road and flight) Admin(seller): Inter and schedule a trip from point to point with list number of horses available and price.	2.1 In Stable Horses Emergency Client: Choose from Fixed emergency optional Collis, Downed horse, cut/bleeding and Others Optional comment box to write there about the case. Admin(seller): All nearby available doctor can use the notification and reserve the case.	3.1 Feeding Products Client: Browse and select from variety of available products to purchase. Admin(seller): add and sell products	3.1 Book Farrier visit Client: Select from registered Farrier list and book available timing and date + Showing the Prices Admin(seller): can create their account and enter their availability and services with prices.	5.1 Stable Management Services Client: find companies for stable, Centre and event management Admin(seller): Inter the services provided by them and contact details.
1.2 Private transportation booking Client: Can check prices for local private transportation from point to point with price and car self/estimated trailer, van, truck(IA/NO A/C) Admin(seller): Inter from from point to point with options and fixed prices.	2.2 Book Vet visit Client: Check from list of doctors and see their availability time and date and choose from fixed services or other along with the price. Admin(seller): Doctors can create their account and enter their availability and services with prices.	3.2 Horse equipment Client: Browse from variety of equestrian products to purchase. Admin(seller): add and sell products	3.2 Hire Farrier Client: Browse List of Farriers looking for jobs Admin(seller): add and delete their profile for looking for a job.	5.2 Stable Design & Implementation Client: Find companies for stable, Centre and event master planning along with implementation of the project. Admin(seller): Inter the services provided by them and contact details.
1.3 GCC & International Transportation company Client: Can check GCC and international company, coordinator to help them with transfer their horses. Admin(seller): Inter transportation and services provided by them and their contact.	2.3 Horses Pharmacy Client: Browse from medicine and product to buy. Admin(seller): Add and sell medicines and product.	3.3 Supplements Products Client: Browse supplement and choose to your cart to complete your purchase. Admin(seller): add and sell supplements		5.3 Hire Professionals Client: Browse list of professionals looking for jobs or part time jobs. Admin(seller): add and delete their profile for looking for a job.
	2.4 Book clinic appointment Client: Check from list of clinic and see their availability time and date and choose from fixed services or other along with the price. Admin(seller): clinic can create their account and enter their availability and services with prices.	3.4 Stable equipment & Yard Tools Client: Browse from variety of equipment to buy and install in your stables. Admin(seller): add and sell stables equipment		
	2.5 Breeding Services Client: Browse available Breeding services and buy or book them. Admin(seller): Create account to show their services.			

FIGURE 1: Quick view to the overall scope envisioned

1.2 Intended Audience

This document is intended to use by any of the individuals or groups who have an interest or stake in the project's outcome. I.e. Project managers, team members, sponsors, technical architects, individuals who are developing and testing this software product, including front-end and back-end developers, testers, and quality assurance personnel, end users, any relevant customer personnel, and the technical writers who creates user manuals, and documentations for the project

1.3 Phase 1 Scope (MVP)

The scope of this document only limited to describing the functional and non-functional requirements of the features to be developed and deployed as a part of phase-1 implementation of the solution.

As a part of the MVP, this document will focus on the scheduled transportation and private transportation related features.

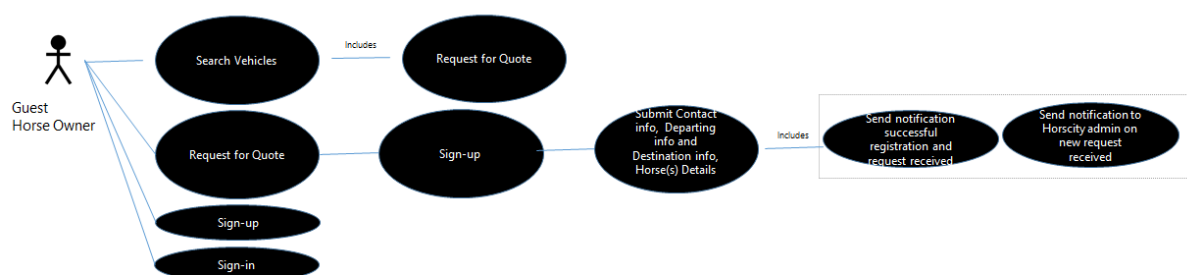
2. Overall Description

2.1 User Classes and Product Features

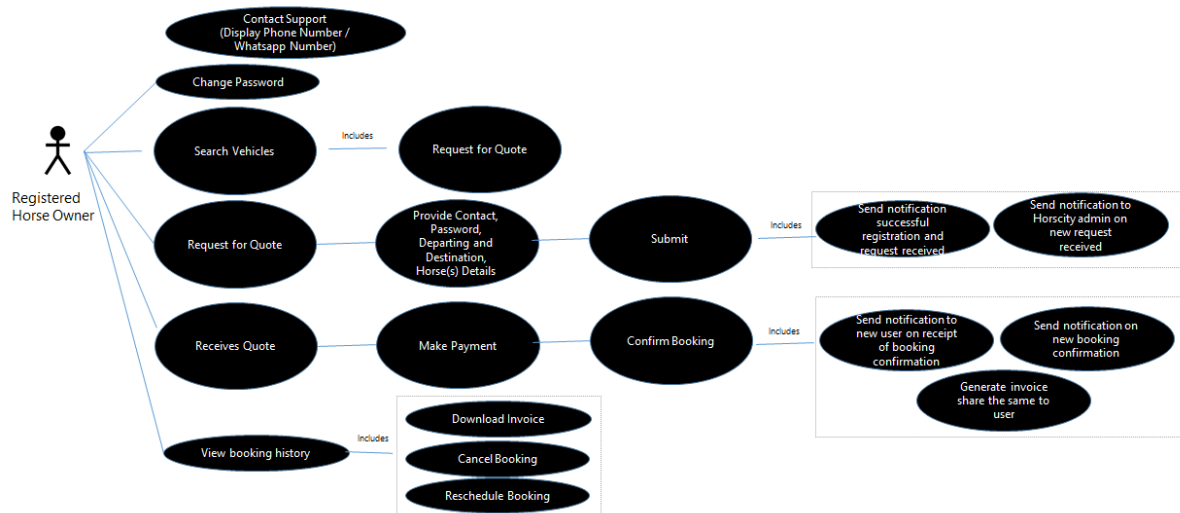
The application shall have below listed user classes or actors of this horse transportation services application

1. Horse Owners (Guest Users) – Any public user who accesses the website or mobile applications, but not registered to the application as a user.
2. Horse Owners (Registered Customers) - Any public user who accesses the website or mobile applications, and already registered in the application as its user.
3. HORSCITY Administrator – users of SBT
4. Service Provider User – users of the vehicle service provider. SBT users manages the users for any service provider by creating the credentials at the time of service provider onboarding

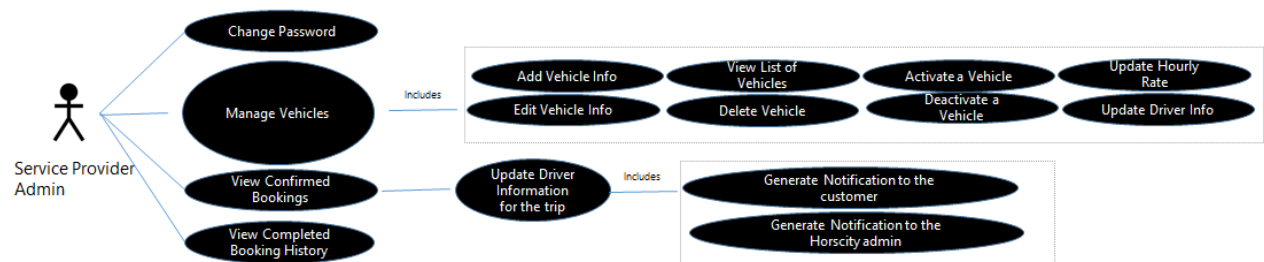
2.1.1 Features for Guest Horse Owners



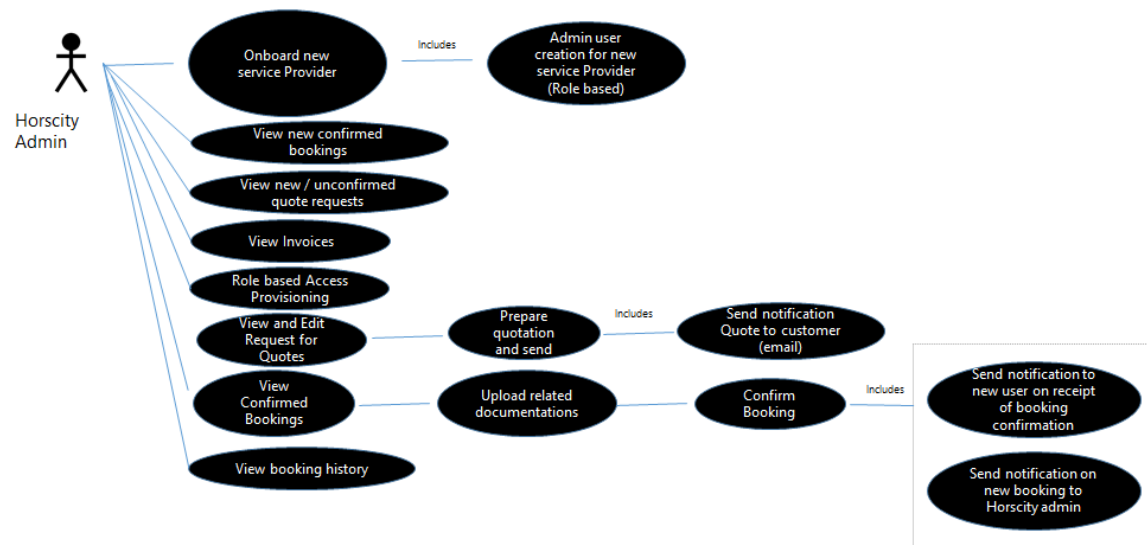
2.1.2 Features for Registered Horse Owners



2.1.3 Features for Vehicle Service Provider Admin



2.1.4 Features for HORSCITY Admin



2.2 Operating Environment

- HORSCITY Web Application shall be deployed in AWS hosted in Ras al Khaimah (UAE) location.
- The mobile applications for android users and IOS users shall be deployed in Google play store and Apple App Store respectively

2.3 User Documentation

Below listed documentations are expected to deliver for meeting the final delivery milestone for the project

- User documentation for end-users with instructions on how to use the website or mobile application, including user manuals, help files, and FAQs for performing each functionalities of different user classes mentioned in [section 2.1](#)
- High level architecture documentation which details the high level design of the solution, approved user interfaces, and specific details like how the application implements the audit trail, session handling, secured data transfer etc.

3. System Features

This section list down different features to be developed in website and mobile applications. User interface designs for implementing these features should contain different user inputs required. It shall be reviewed and approved by the client before starting the development

3.1 Sign-in

Mobile and web applications should facilitate sign-in functionality for any registered users in the system

3.2 Change Password

Mobile and web applications should facilitate the signed-in horse owners and service provider users to change their password at any point of time.

3.3 User Sign up for guest horse owners

Both mobile and web applications should facilitate signing up a new horse owner

3.4 HORSCITY Admin User Creation

System shall facilitate creating these type of users from the backend

3.5 Features for Horse Owners

3.5.1 Search Vehicles

This feature enables searching and viewing all the vehicles available with HORSCITY. The filters required for search functionality shall be finalized during the design phase of the application

This feature shall be available for guest and registered horse owner users

3.5.2 Request Quote by Horse Owner

Request for quote functionality should enable horse owners to furnish the inputs like their contact information (auto populate relevant fields from the user profile info submitted during sign-up), departing information, Destination information, and the horse details before submitting the request. Relevant notifications should be generated by the application on successful submission of the request.

3.5.3 Receive Quote and Make payment by Horse Owner

Application should provide the quotation to Horse owner. Horse owner shall confirm booking and make payment against the quotation. Once user successfully paid, an invoice should be generated and mailed to the horse owner. Relevant notifications should be generated by the application on successful submission of the request.

Sharing Tracking link is limited to sharing the CCTV link provided by the service provider; i.e. if there is a CCTV link provided by the vehicle service provider for the selected vehicle, it shall be sent to the customer as tracking link as a part of the notification email.

3.5.4 Contact Support

Application shall display SBT support phone number and WhatsApp number to the user. On Clicking on WhatsApp number, user should be navigate to the WhatsApp application if he accesses from his mobile.

3.5.5 View booking history by Horse owners

System shall provide ability to view booking history of any signed in horse owner.

3.5.6 Download Invoice

System shall provide ability to download any previous invoices from the booking history page.

3.5.7 Cancel Booking

System shall provide ability to cancel any pending transportation booking from the booking history page. System should collect the reason for cancellation and kept in records.

3.5.8 Reschedule Booking

System shall provide ability to reschedule any pending transportation booking from the booking history page. System should collect the reason for rescheduling and kept in records. System should mark the booking as cancelled and rescheduled. User shall be navigated to search vehicle to check availability on a different date, and then confirm the booking to a new desired date.

3.6 Features for HORSCITY Admin Users

3.6.1 Update Quote by HORSCITY admin and send to the requester

Application should provide options to allow any HORSCITY admin users to prepare and submit the quotation against any request received. The application has to support only a consolidated cost for all the services availed by the horse owner. Relevant notifications should be generated by the application on successful submission of the request.

3.6.2 Onboarding of new Vehicle Service Provider and creating the users for them

System should facilitate onboarding of new service provider to the system and managing the users for them. Application should enable edit, activate and de-active any existing user information

This functionality shall be only available for the HORSCITY Admin users

3.6.3 Upload documentations for confirmed bookings

System should facilitate uploading of any scanned documentations associated with the transportation trip for future reference

This functionality shall be only available for the HORSCITY Admin users

3.6.4 View Booking History

System shall provide ability to view all confirmed bookings with relevant filters. System shall also support export of the data as PDF

3.6.5 View Pending Requests for Quotes

System shall provide ability to view all request for quotes with relevant filters

3.6.6 View Invoices

System shall provide ability to view all invoiced generated by the system with relevant filters. System shall enable downloading the invoices.

3.7 Features for Service provider Users

3.7.1 Manage Vehicles (CRUD, Activate, Deactivate the vehicle records)

Delete is not required

3.7.2 List Vehicles

System shall provide ability to view all vehicles with relevant filters

3.7.3 View confirmed bookings and update driver information

System should facilitate updating driver information against a pending confirmed trip. Once the driver information is updated, both customer and HORSCITY admin users shall be notified.

3.7.4 View Booking History

System shall provide ability to view all confirmed bookings with relevant filters. System shall also support export of the data as PDF

3.8 Role based Access Provisioning

System shall provide ability to assign role based access to different set of users

3.9 Audit Trail – (can be viewed by HORSCITY Admin users)

- Detailed audit trail shall be provided by the application - Action based logs and audit trail is required (Add/Edit/Delete/Activate/Inactivate/Approve/Reject).
- System shall enable detailed logging of different events such as sign-in/ sign-out / failures etc.
- System shall enable log of notifications generated with timestamp and recipients information
- System shall support export of the selected data as PDF

3.10 Notifications

Email notifications shall be implemented for notifying relevant users on events mentioned below

1. On Successful registration of any horse owners – Notify new user registered, and HORSCITY users
2. On Successful onboarding of new service providers - Notify users added for the new service provider, and HORSCITY users
3. On Successful submission of request for quote - Notify the submitted user, and HORSCITY users
4. On update on quote by HORCITY admin – Notify to the requested horse owner

5. On Successful payment and booking confirmation – Notify the horse owner, HORSCITY Admin users and Service provider users
6. On Successful cancellation of a booking – Email to the horse owner, HORSCITY Admin users and Service provider users
7. On Successful rescheduling of a booking – Email to the horse owner about new schedule, and HORSCITY Admin users and Service provider users on this change

4. External Interface Requirements

4.1 User Interfaces

- The system should implement all the user interfaces for performing different workflows associated with each features listed in [section 3.0](#)
- All the user interfaces designs should be shared for client approval before developing the same

4.2 Hardware interfaces

There are no hardware components to be delivered as a part of the scope.

4.3 Software Interfaces

Payment gateway implementation should be developed for enabling customers to make the payments along with 5% VAT which will be shown separately in the invoices generated by the application

4.4 Communication Interfaces

Email notifications shall be implemented for notifying relevant users on events mentioned in [section 3.0](#)

5. Nonfunctional requirements

5.1 Performance requirements

- The application should respond to user inputs within 1 second.
- The application should load in less than 3 seconds.
- The application should use network resources efficiently and minimize data usage, by compressing images and using caching.
- In first 2 years, maximum of 2000 users are expected to use the mobile and web applications. The application should be able to handle few hundreds of concurrent users. It should be able to handle concurrent user sessions without any degradation in performance or stability.

5.2 Reliability requirements

- The application should be able to handle a large number of users simultaneously without crashing or slowing down.
- The application should be able to recover quickly from any errors or crashes that may occur. The application should be able to maintain data integrity and prevent data loss, even in the event of a system failure.
- The application should be able to handle network interruptions or delays gracefully and continue to function normally.
- The application should have a robust backup and recovery mechanism in place to ensure that user data is not lost in the event of a disaster or system failure.
- The application should have a comprehensive logging and error reporting mechanism that captures all errors and exceptions and allows developers to quickly diagnose and fix issues.

5.3 Security requirements

- The application should have access controls in place to limit access to sensitive data based on user roles and permissions.
- The application should have secure session management to ensure users are logged out after a period of inactivity or when they close the application.
- The application should use secure network communication protocols such as HTTPS, SSL or TLS to ensure that all data is encrypted when transmitted over a network.
- The application should validate all user input to prevent injection attacks, such as SQL injection or cross-site scripting (XSS).
- The application's code should follow secure coding practices such as avoiding hard-coded passwords and using libraries with strong security credentials.

5.4 Usability requirements

- The application should have clear and consistent navigation throughout, making it easy for users to find the information or features they need.
- The application should be intuitive and easy to use, with minimal learning required for new users. Users should be able to complete tasks without confusion or frustration.
- The application should be consistent in its design, layout, and behaviour, following established mobile design conventions. It should use the minimal colours like the background colour of HORSCITY logo, black and white.
- The application should provide clear feedback to users when they perform an action, such as completing a task or submitting a form.

5.5 Compatibility requirements

- The mobile application should be compatible with the latest versions of android, iOS. Compatibility should also be maintained with previous versions of these operating systems to ensure a wide user base.
- The application should be compatible with a wide range of mobile devices, including smartphones and tablets, with different screen sizes, resolutions, and hardware

specifications. This compatibility should be tested on both high-end and low-end devices.

- Website should be compatible with popular mobile browsers like Safari, Chrome, and Firefox.

5.6 Availability requirements

- The application should be available 24/7, with minimal downtime for maintenance or updates.

5.7 Localization requirements

- The application should support English and Arabic languages and have the ability to switch between languages seamlessly. The languages supported should be based on the target market or region where the application is being used.
- The application shall only support AED for displaying prices and quote calculations
- The application should support different text direction and alignment based on the user's language. When user chooses Arabic application should support RTL.
- For the data stored in the database, no language conversion need to be implemented

6. Other requirements

There are no requirements other than mentioned in above sections as a part of the phase-1 scope of the application

7. Out of scope

- GEO tracking is kept out of scope for the phase-1.
- Tracking link is limited to sharing the CCTV link provided by the service provider; i.e. If there is a CCTV link provided by the vehicle service provider for the selected vehicle, it shall be sent to the customer as tracking link as a part of the notification email. Any other status tracking of a confirmed booking is out of scope for phase-1
- Chat Feature is out of scope