

Software Requirements Specification

TruckShare

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Version 1

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1. **Project General Description :**

Truck Share is a platform designed to connect individuals who need to move items but lack the necessary vehicles with those who own trucks and tools and are looking to monetize their assets. The app allows customers to create listings to request trucks, trailers and tools in their area, as well as browse available listings. Providers can list their trucks and tools, specify pricing, and outline liability and insurance requirements. SysAdmins oversee platform moderation, remove inappropriate listings, and resolve conflicts between users.

2. **Product Features**

- Provider Listings: Providers can list their trucks and tools with detailed descriptions and pricing.
- Search and Browse: Users can search for and browse through available listings.
- Booking System: Integrated booking system for reserving trucks and tools.
- Ratings and Reviews: Users can rate and review each other to ensure trust and quality.
- Messaging System: In-app messaging for communication between users and providers.
- Payment Integration: Secure payment gateway for transactions.
- Insurance and Liability Management: Providers can set liability and insurance requirements.
- Moderation Tools: SysAdmins can manage listings, handle disputes, and ensure platform integrity.

3. **Functional Requirements**

- FR0: The website will allow users to create their accounts
 - Username, password, email
- FR1: The website will allow users to modify their account information
 - Credentials, fields that needs to be modified
- FR2: The website will collect payment information
 - Credit/debit card, bank account, name
- FR3: The website will allow users to create, modify, and delete listings

- Unique listing ID/URL, title, description, time, location, media, price, terms
- FR4: The website will provide users a list of listings to browse and filter
 - Region/location, type of equipment, price
- FR5: Users can choose listings to book
 - Time, personal information
- FR6: The website will have a messaging function
 - Unique conversation ID, initiating the conversation, the users between conversation, message content
- FR7: The website will provide moderation tools for moderators
 - Review conversation, review listing, delete listing, initiate conversation with users
- FR8: The website will provide users option to contact support/moderators
 - Unique conversation ID, initiating the conversation, the users between conversation, message content
- FR9: Moderators can be appointed by site owner

FR0: User Account Management

Users (Customers and Providers) can create and manage accounts.
Users can update their profiles, including personal information and payment details.

FR1: Listing Management

Customers can create and manage listings to request truck services.
Providers can create and manage listings for available trucks and tools.
Listings should include details such as dates, times, locations, and specific needs or offerings.

FR2: Search and Filter

Users can search for listings using various filters (e.g., location, date, type of truck).

Search results should be sorted by relevance and availability.

FR3: Booking System

Users can book services directly through the app.

The system should handle scheduling conflicts and notify users of booking status.

FR4: Communication

Users and providers can communicate through in-app messaging.
Notifications should be sent for new messages, bookings, and updates.
FR5: Payment Processing

Secure payment processing for transactions between customers and providers.
The system should handle payment disputes and refunds.
FR6: Review and Rating

Users can leave reviews and ratings after transactions.
Ratings should influence the visibility and credibility of listings.
FR7: Admin Tools

SysAdmins can moderate content, manage user accounts, and handle conflicts.
Admins can generate reports and monitor platform activity.

4. Non-Functional Requirements

- NFR0: Website shall resize appropriately for both desktop and mobile browser environment
- NFR1: Relevant compliance, rules and regulations shall be displayed prominently for users during registration and transaction
- NFR2: Content (text/media), buttons, selections displayed on website should be appropriately sized for ease of reading and navigation
- NFR3: Platform should comply with industry standard data protection regulations.

5. Scenarios

a. Users

i. Registration/Login

- **Initial:** Website prompts user to enter credentials to login or register
- **Normal:** User provides credentials to login/register

- **What Can Go Wrong:** User inputs wrong credentials.
 - **Other Activities:** Forget password, browsing sample listings without registering.
 - **System State on Completion:** User successfully registers/logs in and is directed to the main page.
- ii. Browsing
 - **Initial:** User presented with main page.
 - **Normal:** User uses filter to find specified utility, a list of matching items are displayed to be browsed. User clicks on the specific listing interested to view further information about it.
 - **What Can Go Wrong:** Current filter shows no listing
 - **Other Activities:** Edit profile, log off, open previous conversation, view active and previous bookings
 - **System State on Completion:** User made a choice to view a listing or go on to *Other Activities*
- iii. Initiate conversation
 - **Initial:** User finds listing they like from options presented.
 - **Normal:** User clicks “Contact provider” to open the message interface, and sends a message to inquire.
 - **What Can Go Wrong:** Failure to send after a message is composed due to network error, the user will be prompted to retry. In the event that the provider does not respond, the user can send a follow up message.
 - **Other Activities:** The user can review provider’s rating and reviews while waiting for response.
 - **System State on Completion:** User has sent a message and is waiting for a response.
- iv. Take action on a listing
 - **Initial:** User is in a specific listing page and is confidently set on that listing.
 - **Normal:** User will click “Book now” and confirm details (date, time, price). User proceeds to payment.
 - **What Can Go Wrong:** User requests a date out of range. Payment could fail (funds, details). Will be prompted to retry.
 - **Other Activities:** User can change their mind and cancel the booking
 - **System State on Completion:** Booking is confirmed, confirmation email is sent.
- b. Providers
 - i. Listing
 - **Initial:** Provider is logged in on dashboard.
 - **Normal:** Provider clicks “List Item” and fills in descriptions, pricing and photos.

- **What Can Go Wrong:** Provider could miss mandatory fields or upload incorrect photos. Error message will prompt them to fix it.
 - **Other Activities:** The provider can see a review before listing.
 - **System State on Completion:** The listing is live and visible to users while searching.
 - ii. Reply to a conversation
 - **Initial:** Provider receives message from a user.
 - **Normal:** Provider opens message and replies. Answers questions (additional details, availability).
 - **What Can Go Wrong:** Failure to send after a message is composed due to network error, the user will be prompted to retry. In the event that the provider does not respond, the user can send a follow up message.
 - **Other Activities:** Provider can review users profile and reviews.
 - **System State on Completion:** Provider sends a reply to a user's message.
- c. SysAdmin
 - i. Moderation
 - **Initial:** SysAdmin is logged into the admin dashboard and receives a notification of a flagged or reported listing.
 - **Normal:** SysAdmin reviews said listing, checks for platform guideline compliance, and decides on appropriate actions.
 - **What Can Go Wrong:** SysAdmin could need more information. Accidentally deleting a post, will have the option to undo action.
 - **Other Activities:** SysAdmin can generate platform statistics reports. SysAdmin can warn, suspend, and ban a user if deemed necessary, a record will be archived, and an email will be sent to the affected user.
 - **System State on Completion:** The flagged listing is addressed and dealt with, site is safe for users.
 - ii. Reply to a support request from user or provider
 - **Initial:** SysAdmin is logged into the admin dashboard and receives a notification regarding a support request.
 - **Normal:** SysAdmin reviews the request, then responds to address and fix the issue.
 - **What Can Go Wrong:** SysAdmin might need more info to resolve the issue, requesting further details.
 - **Other Activities:** see <c. i. Other Activities>
 - **System State on Completion:** Support request is responded to and resolved.