

# GREEN FIELD MACHINERY

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## Revision History

Date	Version	Description	Author
01/03/24	1.0	Software Requirement Specification Document Initial Release	Sujal Patel

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## **Software Requirements Specification (SRS) for GFM Website**

### **1. Introduction:**

#### **1.1 User Story:**

As a farmer, Mr. Patel faces challenges in accessing and affording farming equipment necessary for his agricultural activities. With limited resources and the need for specialized machinery, he struggles to find cost-effective solutions to support his farming endeavors. To address these challenges, we are developing "GFM", a comprehensive website offering a wide range of farming equipment for rent to farmers like Mr. Patel. GFM aims to provide a user-friendly platform where farmers can easily browse, compare, and rent the equipment they need for various agricultural tasks, such as tractors, harvesters, and irrigation systems. By leveraging GFM, Mr. Patel and other farmers will have access to high-quality machinery at affordable rates, enabling them to optimize their farming operations and increase productivity. Through seamless transactions, transparent pricing, and reliable customer support, GFM strives to empower farmers and contribute to the growth and sustainability of the agricultural sector.

#### **1.2 Purpose:**

The purpose of this Software Requirements Specification (SRS) document is to define the functional and non-functional requirements for the development of "GFM," a website facilitating the rental of farming equipment to farmers. It aims to create a user-friendly platform that simplifies equipment browsing, booking, and rental processes.

#### **1.3 Scope:**

- User Registration/Login
- Equipment Listing and Description
- Equipment Rental Booking
- Rental Payment Processing

- Availability Calendar
- User Profile Management
- Communication Platform (Messages/Notifications)
- Rating and Review System
- Help/Support Section
- Search and Filter Functionality
- Terms of Service and Privacy Policy

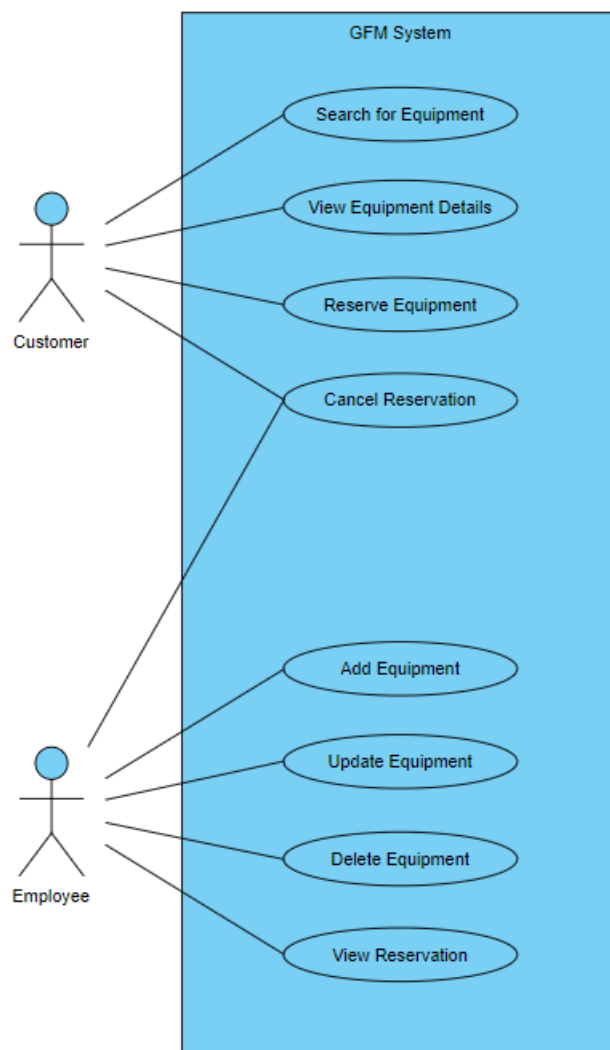
#### **1.4 System Overview:**

The "GFM" website is a web-based platform facilitating the rental of farming equipment to farmers. It offers a user-friendly interface for farmers to browse, book, and rent various agricultural machines. Administrators can manage equipment listings, user accounts, bookings, payments, and communication channels, ensuring seamless operations for both equipment owners and renters.

## 2. Overall Description

### 2.1 Product Perspective

The GFM website is designed to address the needs of farmers seeking access to farming equipment for rent. It serves as a centralized platform for farmers to browse, book, and rent agricultural machinery, aiming to streamline the rental process and improve accessibility to essential equipment.



## 2.2 Product Functions

Product Functions for GFM website:

1. User Registration/Login
2. Browse and Search Farming Equipment
3. View Equipment Details and Specifications
4. Rental Booking for Farming Equipment
5. Rental Payment Processing
6. Availability Calendar for Equipment
7. User Profile Management
8. Communication Platform (Messages/Notifications)
9. Rating and Review System for Equipment
10. Help/Support Section
11. Search and Filter Functionality for Equipment
12. Terms of Service and Privacy Policy
13. Equipment Pickup and Return Process
14. Equipment Maintenance and Quality Assurance
15. Feedback Mechanism for User Experience
16. Featured Equipment or Promotions Section
17. Integration with Social Media Platforms
18. Notification System for Equipment Availability or Special Offers
19. Secure Payment Gateway Integration
20. Responsive Design for Mobile Compatibility.

## 2.3 User Characteristics

Users of GFM include farmers with varying levels of technological proficiency, from tech-savvy individuals to those with limited computer literacy. The system will offer an intuitive interface, clear instructions, and online support to accommodate users of all backgrounds and ensure efficient utilization of the platform.

## 2.4 Constraints

1. All information pertaining to farming equipment rentals must be stored in a secure and accessible database.
2. The GFM platform must be installed on administrator's computers for management purposes.
3. Users must have internet connectivity to access the GFM platform from any device.
4. Access to GFM requires the use of correct credentials to maintain security and privacy.

## 2.5 Assumptions and Dependencies

1. Administrators possess basic computer literacy.
2. Admin computers are connected to the internet.
3. Users accessing the website also have an internet connection.

## 3. Specific Requirements

### 3.1 Functional Requirements

#### F1: Admin Login

- Input: Admin Username and Password.
- Output: Admin Dashboard granting access to administrative features.



- Processing: Validate admin credentials against the database for
- authorization.

## **F2: Equipment Listing Management by Admin**

- Input: Details of farming equipment to be listed for rent.
- Output: Confirmation of successful equipment listing.
- Processing: Validate and store equipment information in database.

## **F3: Equipment Rental Booking by User**

- Input: Farmer's request for specific equipment rental.
- Output: Confirmation of successful booking.
- Processing: Check equipment availability and process rental transactions.

## **F4: Rental Payment Processing by User**

- Input: Payment details for equipment rental.
- Output: Confirmation of successful payment.
- Processing: Securely handle payment transactions.

## **F5: Availability Status Checking by User**

- Input: Details or criteria for checking equipment availability.
- Output: Display of equipment availability status.
- Processing: Retrieve and present real-time availability information.

## **F6: User Registration/Login**

- Input: User login/registration details.
- Output: User Dashboard or Admin Dashboard based on role.
- Processing: Manage user authentication and registration processes.

## **F7: Search and Filter Functionality by User**

- Input: User's criteria for searching and filtering equipment.

- Output: Filtered list of equipment matching selected criteria.
- Processing: Implement efficient search and filter algorithms.

### **F8: Rating and Review Submission by User**

- Input: User's feedback and ratings for rented equipment.
- Output: Confirmation of successful submission.
- Processing: Store and display user-generated reviews and ratings.

### **F9: Communication Platform**

- Input: Messages and announcements.
- Output: Communication logs and displayed messages.
- Processing: Facilitate communication between users and administrators.

### **F10: Help/Support Section**

- Input: User inquiries or issues.
- Output: Assistance with queries and problems.
- Processing: Provide relevant information and support to users.

### **F11: Terms of Service and Privacy Policy Display**

- Output: Display of terms and policies for user agreement.
- Processing: Ensure compliance with legal requirement and user consent.

## **3.2 Non-Functional Requirements**

### **3.2.1 Usability**

- The system must feature a user-friendly interface, facilitating tasks without extensive assistance.

### **3.2.2 Reliability**

- Database updates must be reversible in case of failure, ensuring data integrity.

### **3.2.3 Performance**

- Front-page load time should not surpass 5 seconds for smooth user interaction.

### **3.2.4 Security**

- Access controls must prevent unauthorized logins, safeguarding data privacy.

## **3.3 Design Constraints**

### **3.3.1 Cost Efficiency**

- The system should be developed without incurring additional expenses for cloud services.

### **3.3.2 Software Independence and Lightweight**

- Ensure the system is self-reliant and lightweight to optimize performance across diverse platforms.