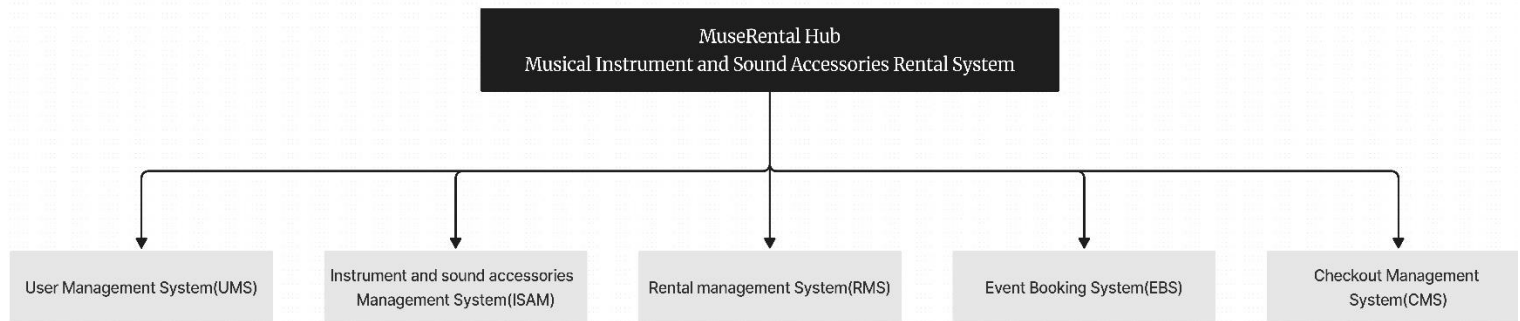


# FDD

## FDD – Functional Decomposition Diagram



## Legend

UMS-F-1.0

numbering

### Sub systems

UMS : User Management System  
ISAM : Instrument And Sound accessories  
management system  
RMS : Rental Management System  
EBS : Event Booking System  
CMS : Checkout Management System

### Types of Requirements:

F : Functional Requirements  
NF : Non-Functional Requirements  
UR : Usability Requirements

## User Management System (UMS)

Req. Code	Req. Desc
UMS-F-1.0	Users, including both owner and customers, can register by providing their name, email, and password.
UMS-F-1.1	Create user account after successful registration.
UMS-NF-1.0	Submitting the registration form, the registration data shall be stored securely.
UMS-NF-1.1	The password for the registration must be a combination of alphabets, numbers, and special characters.
UMS-NF-1.2	The system shall validate email addresses to ensure uniqueness.
UMS-UR-1.0	Clear error messages shall be displayed for incorrect and invalid data
UMS-UR-1.1	While registering the password field should have an option to hide or unhide password.
UMS-UR-1.2	User registration should include user-friendly form with clear instructions.
UMS-F-2.0	The system should allow the customer to register by providing email, name, and password.
UMS-F-2.1	The system shall authenticate user credentials securely.
UMS-NF-2.0	User login data should match with the data used while registering to successfully access the system.
UMS-UR-2.1	Clear error messages shall be displayed for incorrect login attempts.
UMS-F-3.0	Users should be able to reset their passwords.
UMS-NF-3.1	The system shall validate the user's identity before allowing a password reset.
UMS-UR-3.0	Successful information shall be provided after resetting password.
UMS-F-4.0	Users can update their validate personal information, including name, contact details, and profile picture.
UMS-F-4.1	Users can modify personal information.
UMS-F-5.0	Users can logout .

## Instrument and Sound accessories Management System (ISAM)

Req. Code	Req. Desc
ISAM-F-1.0	Users can add new musical instruments and sound accessories
ISAM-F-1.1	User's instrument shall include fields for instrument descriptions less than 50 words, rental fees, rental time options and quality image.
ISAM-F-1.2	Users can edit existing listings to update information or make corrections.
ISAM-F-1.3	Users can remove existing listings
ISAM-NF-1.0	Listing data shall be stored securely and efficiently
ISAM-UR-1.0	User shall be provided clear options for updating information.
ISAM-F-2.0	Owner can add and customize rental packages
ISAM-F-2.1	Users can search for specific musical instruments and sound accessories based on keywords, categories, or tags.
ISAM-NF-2.0	Customized rental packages and pricing calculations shall be accurate and efficient.
ISAM-NF-2.1	The search and filtering system shall provide quick and accurate results.
ISAM-UR-2.0	The search and filtering interface shall be user-friendly and responsive.

## Rental Management System (RMS)

Req. Code	Req. Desc
RMS-F-1.0	Develop a booking system for customers to select rental periods and make secure payments.
RMS-F-1.1	Provide renters with a dashboard to manage rental schedules, including rental dates and return dates.
RMS-F-1.2	Implement a notification system to Owners.
RMS-NF-1.0	Enhance user experience with available products.
RMS-UR-1.0	Create a user-friendly booking interface with a step-by-step process.
RMS-UR-1.1	Enhance user experience with informative notifications.
RMS-F-2.0	Users can view and proceed to payment after instrument or sound accessories are added to cart.

## Event Booking System (EBS)

Req. Code	Req. Desc
EBS-F-1.0	Admin can add, edit and remove available events
EBS-F-1.1	Users can view event details, such as event name, date, time, venue, and ticket availability including artist information, event description, and event images.
EBS-F-1.3	Users shall have the ability to book tickets for music events.
EBS-NF-1.0	Event listings and details shall be retrieved and displayed in real-time, ensuring up-to-date information.
EBS-UR-1.0	Users shall receive clear confirmation messages upon successful event ticket booking.

## Checkout Management System (CMS)

Req. Code	Req. Desc
CMS-F-1.0	User is Ensured for secure payment processing using a reputable payment gateway.
CMS-F-1..1	Enable User to remove or proceed to payment after renting events
CMS-F-1.2	Provide order summaries, payment confirmation
CMS-UR-1.0	Create an easy-to-follow checkout interface.
CMS-UR-1.1	Display clear payment options and security assurances.
CMS-UR-1.2	Display clear payment options and security assurances.