E-Masjid System

Final Year Project Report

Project ID:22-KS-BSIT-15

by

Dawood Ahmed	**089264 (2022-KS-158)**
Haris Ehsan	**089301 (2022-KS-190)**

Project Advisor:
Muhammad Kamran

Govt. Graduate College, Civil Lines, Sheikhupura
University of the Punjab, Lahore, Pakistan.

(2022-2026)

E-Masjid System

Executive Summary

The E-Masjid System is a web based system and is built to help mosques to manage their daily activities in a digital way. In many places, mosques are still using manual registers for the records of donations and expenses and announcements are made only through loudspeakers. This creates problems like lack of transparency, difficulties in keeping records, inconvenience for people who want to donate or book services like Nikah. This project was developed in order to fix these problems by developing an online system which will be easy to use. The system allow the mosque admin to control the times of prayers, post announcements and also maintain proper records of donations and expenses. Community members are able to donate online via Stripe, view updates from the mosque, register for events and book Nikah services without physically visiting the mosque. The website is designed simply so people of all ages will be able to use it. This document contains the final project for our Final Year Project which includes the project proposal, software requirements, system design and user interface prototype.

FYDP Overview

FYDP Title : E-Masjid System

Sr. No	Roll Numbers	Name	Signatures
1.	089264	Dawood Ahmed	
2.	089301	Haris Ehsan	

Table 1 Project Proposal Summary

FYDP Goals
To make digital platform for mosque management that make operations easy, give
transparency in donations and make services accessible for community.
FYDP Objectives
Display and manage prayer timings
Create transparent donation tracking system
Organize events and programs in the community
Enable online Nikah service booking
Perform secure user role management
FYDP Success Criteria
This system will be considered as successful if,
It shows records of donations.
It shows records of expenditures
Admin can organize events using the system
People can book nikah registrar using the system
Assumptions:
Mosque will use system
People have internet
Risks & Obstacles
Traditional people may resist new system
People face difficulty with technology
Internet problems
Organization Address: Government Graduate College Civil lines Sheikhupura
Target End Users Mosque administrators, committee members, community members, donors, families needing nikah registrar services
Suggested Project Supervisor: Muhammad Kamran
Approved By: Muhammad Kamran
Date: October 24, 2025

Table of Contents

List of Tables

Tables of Figures

Chapter No 1

Project Proposal

1.1. Introduction

This chapter is an introduction about our Final Year Project E-Masjid System. We explain the reason why we chose this project and what problems will be solved. We also list the tools that we will be using and how our team members will be working together on this project. This chapter gives the complete overview of our project idea.

1.2. Background

In our country, mosques are the place where parent send their children to get Islamic teaching related to our religion. Person of any age can come to mosque and ask questions for which they have doubt in their mind so the person get the answers according to the Islam. Every town has one mosque that handles prayer schedule, organize religious events and collect donations. These days mosques manage their records in registers which become messy and can be destroyed by various causes. Also it is very time consuming process to find the records on urgent bases. So there is a need of digital system where the records will be easily accessible and management of operations become easy.

1.3. Problem Statement

People who donate to the mosque do not know where their donations are used and how they are used. When families need nikah services, they face difficulties finding available nikah registrar quickly. People who are away from their area mosque do not get the updates what announcement and events are going to happen. Another big problem is using paper registers for keeping records. This method is slow and if register get lost or damaged, all important information is gone forever.

1.4. Stakeholders & Interests

Stakeholder	Description	Interest
Mosque Administration	People who manage mosque operations like imam and committee members	Good management of operations and transparent record keeping
Donors	Community people who give money to mosque for different causes	Send their donations and see how funds are being used

Community Members	Local people who regularly visit mosque for prayers and activities	View prayer times, announcements, and events, register for events, request services easily.
Religious Scholars	Qualified Islamic scholars who perform nikah ceremonies and religious duties	Manage availability for Nikah, share special prayer timings, avoid doublebooking.

1.5. Objectives:

1. To make a web based system for mosque management using MERN stack.
2. To manage donations in a clear way and record of where money is spent.
3. To show daily prayer times and special timings for Jummah and Ramadan.
4. To make an event section for Islamic classes, charity and other community programs.
5. To create an online system for booking nikah registrar for marriage.
6. To give different access to admin and normal users for security and management.

1.6. Scope:

In-scope

1. Digital management of prayer times and announcements.
2. Transparent tracking and record keeping of donations.
3. Create an event and registration system.
4. Online booking system for Nikah services.
5. User authentication for admin, religious scholar and community members.
6. Single mosque management system.
7. Responsive web design for mobile and desktop.
8. Online payment gateway integration.

Out-of-scope

1. Multi mosque system
2. Automated SMS/email notification system

1.7. Assumptions

Following are the assumptions of our system:

1. Mosque management know basic computer operations like using a browser and typing.
2. Users have internet connection and email addresses.
3. The mosque has at least one computer or laptop for the admin to use.
4. Religious scholars can use simple websites and click buttons.
5. Community members can use web browsers on their phones or computers.
6. People will use the system honestly and enter correct information.

1.8. Risks

Following are the risks that can occur in the development of our project :

1. **Payment security issues**: Someone may attempt to steal payment information.

   Mitigation: We will use Stripe payment gateway which is very secure and helps to follow international security standards.
2. **System downtime during prayer times:** If system stops working when people need to check prayer times

   Mitigation: We will use a reliable hosting service and will maintain backup of data.
3. **Elderly users finding system difficult:** Old people might not understand how to use website.

   Mitigation: We are going to design simple interface with big buttons and text to be clear.
4. **Data loss due to system crash:** If database gets damaged, all the records can be lost.

   Mitigation: We will setup automatic weekly backup of database to cloud storage.
5. **Internet connection problems**: Without the internet, system can not work.

   Mitigation: We will design system to show cached data in case of offline and sync in connection returns.

1.9. Success Criteria

For the success of our system , the following features must work properly:

Table 2 Project Success Criteria

User Registration and Login of admin , religious scholar and community members
Donation recording and tracking system
Prayer times management and display
Event creation and registration
Nikah booking system
Financial reports depicting income and expenses
Responsive design to work on mobile phones
Safe payment processing using Stripe
Admin Dashboard to manage all the operations
Simple and easy to use interface
Data back up and recovery system
System deployment on live server

1.10. Tools, Libraries & Technologies

Table 3 Tools Technologies and Libraries

Tools, Libraries, And Technologies	**Tools**	**Version**	**Rationale**
	VS Code	Latest	Primary code editor with good extensions
	Libraries	**Version**	**Rationale**
	React.js , Express.js JWT , Mongoose	Latest	For building responsive design and creating APIs and handling server side logic.
	Technology	**Version**	**Rationale**
	React , Nodejs , JS , Mongo DB, Stripe API	Latest	To build a complete web app

1.11. Work Division

Table 4 Project Team Members Work Division

Sr. No	Roll Number	Name	Role Assignment & Work Division
1.	089264	Dawood Ahmed	Backend
2.	089301	Haris Ehsan	Frontend

1.12. Conclusion

In this chapter, we introduced our project idea of E-Masjid System. We explained the issues with the current management of mosques and how our digital solution will help. We specified clear objectives and scope of our project. We also identified stakeholders and discussed tools we will be using.

Chapter No 2

Literature Review

2.1 Literature Survey

We looked at how mosques currently manage their work. We saw that most mosques in Pakistan use paper registers for keeping records. Some mosques use whatsapp groups for announcements. We also checked some mosque websites and found they only show prayer times. We did not find any complete system that does everything a mosque needs.

2.2 Related Work:

There are some systems which are being used for churches that handle donation , events and prayer schedule. In Pakistan most mosque still use old methods like keeping records in register or making announcements on speaker. Some mosques use google forms for event registration or excel sheets for donation tracking but there is no proper system that provide everything in one place. Most existing Islamic applications focus only on prayer times and Qibla direction, they don't help in mosque management.

2.3 Gap Analysis:

After checking existing solutions, we found several important gaps Firstly, we have seen that no system has been made for Pakistani mosque that handle situations like nikah registrar booking. Secondly, the current system do not give the financial transparency that people want. Our project fills these gaps with a cheap and easy to use platform.

2.4 Summary

In this chapter, we have observed how mosques work today. We found that most use old methods that have problems. Our system will solve these problems by giving one platform for all mosque work. This chapter gave us an idea about the features that we need to add in our project.

Chapter No 3

Software Requirements Specification

3.1 Requirements Analysis

This section explains the detailed requirements for the E-Masjid System. The main purpose of this SRS is to explain what our system will do and who will use it and what functions it will perform. We checked what the system needs to do and identify all the users who will interact with it. This analysis helps us to understand that what features to build and how they should work for different types of users.

3.2 User classes and characteristics

Table 5 User classes

User Class	User Characteristics
Mosque Administration	People who manage mosque operations like imam and committee members. They need full control over system and ability to manage all activities.
Donor	People who give donations to the mosque. They can view donation records, reports and transparency details. They may donate online or in person.
Community Members	Local people who visit mosque regularly. They need to see prayer times, announcements, events and request services. They have limited access.
Religious Scholars	Islamic scholars who perform nikah ceremonies. They need to manage their availability and see their booking schedule.

3.3 Requirement Identifying Technique

To find out what our E-Masjid System should do, we used different methods to understand what users really need. First, we talked to mosque committee members and community people to hear about their problems. They told us about manual record keeping, lack of transparency in donations, and how difficult it is to manage events. Then we used the Use Case technique because our system is an interactive website where different users do different things. This helped us understand how community members, mosque admins, and religious scholars will use the system. We made use case diagrams to show all the main features clearly. We also created storyboards to imagine how real users would complete tasks like making donations or booking nikah services. By combining these methods, we made sure we didn't miss any important features and that our system solves real problems people face in mosque management.

3.4 Functional Requirements

We identified 11 main functional requirements for our system. Each feature has specific functional requirements that explain what the system should do. These requirements are written from user’s view to clearly explain the expected behavior.

Functional Requirement 1

Table 6 Functional Requirement 1

Identifier	FR-1
Title	User Registration and Login
Requirement	The system will allow users to register and login with email and password, with different access levels for admin , Religious Scholar and community members.
Source	System security needs
Inputs	Email, password, name, phone number, user role
Destination	User data is stored in database and login result is shown on screen
Outputs	Successful login message or error message
Rationale	To protect sensitive information and manage permissions
Business Rule	Admin users have full access, community users have limited access
Dependencies	None
Priority	High

Functional Requirement 2

Table 7 Functional Requirement 2

Identifier	FR-2
Title	Show Donation Reports

Requirement	The system will show donation records, expense details, and financial reports so people can see both income and spending.
Source	Community trust needs
Inputs	Selection of report date or month
Destination	Displayed on admin and user dashboard
Outputs	List of donations, list of expenses, total income, total expenses
Rationale	People want to see where their money is spent.
Business Rule	Reports should show income vs expenses clearly.
Dependencies	FR-3, FR-10
Priority	High

Functional Requirement 3

Table 8 Functional Requirement 3

Identifier	FR-3
Title	Record Donations
Requirement	The mosque admin will be able to record cash donations with donor name, amount, date, and donation type.
Source	Mosque committee discussion
Inputs	Donor name, amount, date, donation type
Destination	Saved in donations collection in database
Outputs	Donation record created and success message shown
Rationale	To maintain proper records and show transparency
Business Rule	Each donation must have at least donor name and amount
Dependencies	FR-1
Priority	High

Functional Requirement 4

Table 9 Functional Requirement 4

Identifier	FR-4
Title	Event & Announcement Management
Requirement	The admin will be able to add, update, or remove events and announcements such as islamic classes, community programs, and eid prayers. Users can view them on the main page.
Source	Community engagement needs
Inputs	Event title, date, time, description, announcement details
Destination	Stored in database and shown on website homepage
Outputs	Event or announcement published successfully
Rationale	Helps mosque communicate better with community
Business Rule	Events should show date, time and location clearly
Dependencies	FR-1
Priority	Medium

Functional Requirement 5

Table 10 Functional Requirement 5

Identifier	FR-5
Title	Book Nikah Services
Requirement	Community members will be able to book nikah registrar for nikah ceremonies by selecting date and providing contact details
Source	Community service needs
Inputs	Preferred date, time, contact information, ceremony details
Destination	Saved in nikah bookings collection

Outputs	Booking request submitted and confirmation message
Rationale	People need easy way to arrange marriage ceremonies
Business Rule	Booking requests must include confirm date and contact information
Dependencies	FR-1
Priority	Medium

Functional Requirement 6

Table 11 Functional Requirement 6

Identifier	FR-6
Title	Manage Prayer Times
Requirement	The admin will be able to set and update daily prayer times including special timings for Jummah and Ramadan.
Source	Community feedback
Inputs	Fajr, Zuhr, Asr, Maghrib, Isha times, special timings
Destination	Saved in prayer times collection
Outputs	Updated prayer times visible to everyone
Rationale	People need accurate prayer schedules.
Business Rule	Prayer times must be visible without login.
Dependencies	FR-1
Priority	High

Functional Requirement 7

Table 12 Functional Requirement 7

Identifier	FR-7
Title	Online Donation System

Requirement	Community members will be able to make donations online through the website. They will enter the amount and personal details, process payments securely using Stripe, and see a success message on the screen after the payment is processed.
Source	Community needs an easier way to donate
Inputs	Donation amount, card details, donor information
Destination	Saved in donations collection and sent to Stripe for processing
Outputs	Payment success or failure message and donation recorded
Rationale	People want to donate easily without visiting mosque
Business Rule	Each online donation must record donor information and amount
Dependencies	FR-1
Priority	Medium

Functional Requirement 8

Table 13 Functional Requirement 8

Identifier	FR-8
Title	Password Reset via Email
Requirement	If users forget their password, they can reset it using their email address.
Source	Community feedback
Inputs	User email address
Destination	Email sent to user with reset link
Outputs	Password reset email sent and password change successful
Rationale	People often forget passwords and need an easy way to get back into their account
Business Rule	The reset link should work only for 24 hours and can be used one time
Dependencies	FR-1

Priority	High

Functional Requirement 9

Table 14 Functional Requirement 9

Identifier	FR-9
Title	Check Nikah Booking Status
Requirement	Users can see if their Nikah service request is pending, accepted, or rejected
Source	Community feedback
Inputs	User clicks on "My Nikah Bookings"
Destination	Displayed on user my booking page
Outputs	List of bookings with current status
Rationale	People want to know what's happening with their booking request
Business Rule	The status should update automatically when scholar changes it
Dependencies	FR-5
Priority	Medium

Functional Requirement 10

Table 15 Functional Requirement 10

Identifier	FR-10
Title	Record Mosque Expenses
Requirement	Admin can add where mosque money is spend like for repairs, electricity etc.
Source	Community trust issues
Inputs	Expense description, amount, date, category

Destination	Saved in expenses collection
Outputs	Expense record added successfully
Rationale	Community wants to see how their donations are being used
Business Rule	Every expense must have description, amount, and date
Dependencies	FR-1
Priority	High

Functional Requirement 11

Table 16 Functional Requirement 11

Identifier	FR-11
Title	Create Scholar Accounts
Requirement	Admin can create special accounts for religious scholars who perform Nikah
Source	Use Case Analysis
Inputs	Scholar name, email, phone, specialization
Destination	Saved in users collection with "scholar" role
Outputs	Scholar account created and scholar can login
Rationale	Scholars need their own accounts to manage Nikah requests
Business Rule	Only admin can create and manage these special accounts
Dependencies	FR-1
Priority	Medium

3.5 Non-Functional Requirements

This section describes the quality requirements of our system that how it should perform and how easy it should be to use and how secure it should be.

1. Reliability

The system must be reliable in the day to day running of the mosque. It should not crash frequently and should recover quickly if any problems occur.

1. The system should be available 95% of the time during peak hours
2. If system goes down, it should recover within 30 minutes
3. Donation data should not be lost even if system has problems
4. Important data should be automatically backed up after every week

2. Usability

The system must be easy to use and less complex to the mosque admins and ordinary users. All buttons and forms will be clear and labeled properly.

1. Prayer times should be available to new users in 2 clicks
2. Donation recording process should take less than 3 minutes for admin
3. Nikah booking form should be completable within 5 minutes
4. Large fonts and clear buttons should be used by the elderly users in interface
5. Every key feature must be available at home page

3. Performance

When there are several people using the system, it should be fast and easily functioning.

1. Prayer times page should load within 3 seconds
2. Donation reports should generate within 5 seconds
3. System should handle up to 100 users at the same during Friday prayers
4. The registration of the event must take a maximum of 5 seconds

4. Security

The system should protect sensitive information like donor details and maintain privacy.

1. Database should store user passwords in an encrypted format
2. The system must not allow unauthorized access to administrator functions
3. Session should timeout after 1 hour of inactivity
4. All payment transactions must be secured using SSL encryption.

3.6 External Interface Requirements

This section describes how our E-Masjid system will interact with users and other systems. It covers the user interface design, software connections, and communication methods.

1. User Interfaces Requirements

We will have a clean and simple interface on our system which will be effective with the mosque users who are aged, administrators and community members.

Design Guidelines:

1. Use simple colors that are common in Islamic design
2. Large buttons and text for easy reading, especially for older users
3. Consistent navigation menu on all pages
4. Prayer times always visible on the header
5. Mobile friendly design that works on smartphones and tablets
6. Use common icons that people can easily understand
7. Error messages in simple language, not technical terms

Layout Standards:

1. Homepage shows prayer times, announcements, and quick access to main features
2. Admin dashboard with clear sections for donations, events, and services
3. Forms should be simple with clear labels and instructions
4. Use responsive design that adjusts to different screen sizes

2. Software Interfaces

The system will use the following software tools.

Frontend:

1. React.js web application running in modern browsers
2. Compatible with mobile browsers on iOS and Android

Backend:

1. Node.js server with Express.js framework
2. MongoDB database for storing all data
3. JWT tokens for user authentication

External Services:

1. Stripe payment gateway will be used for real online donations
2. Email service for sending password reset links.

3. Hardware Interfaces

The system will run on any normal computer or smartphone that has an internet connection and a browser. No special hardware is required, but a basic server will host the system.

4. Communications Interfaces

Our system will use web communication:

Network Requirements:

1. Web access via Standard HTTP/HTTPS
2. Internet connection needed to operate the system
3. No special network configuration needed

Communication Features:

1. Basic website notifications for new announcements
2. No SMS integration initially
3. No email marketing system
4. Simple contact forms for communication

3.7 Use case Analysis

Community User Use Cases

Use Case #1 – Register User

Table 17 Use Case 1

UC Identifier	UC1
Use Case Name	Register User
Requirements Traceability	FR-1
Purpose	To allow new users to register in the system using email and password.
Priority	High
Preconditions	User is not already registered.
Post conditions	New user account created.
Actors	Community Member
Extends	None
Main Success Scenario	1. User opens registration page. 2. Enters name, email, password. 3. System validates input. 4. Account created successfully.

	5. User can now login to the system
Alternate Flows	User already exists then system shows “Email already registered.”
Exceptions	Invalid input fields or server error.
Includes	None

Use Case #2 – Login User

Table 18 Use Case 2

UC Identifier	UC2
Use Case Name	Login User
Requirements Traceability	FR-1
Purpose	To let registered users log in using email and password.
Priority	High
Preconditions	User must be registered.
Post conditions	User successfully logged in
Actors	Community Member
Extends	None
Main Success Scenario	1. User enters email and password. 2. System checks credentials. 3. If correct, login successful. 4. If correct, user is logged in and taken to homepage.
Alternate Flows	If wrong password then system show “Invalid email or password.”
Exceptions	Server not responding
Includes	User Authentication

Use Case #3 – Forgot Password

Table 19 Use Case 3

UC Identifier	UC3
Use Case Name	Forgot Password
Requirements Traceability	FR-8
Purpose	To help users who forgot their password
Priority	High
Preconditions	User must be registered with valid email
Post conditions	User can set new password and login
Actors	Community Member
Extends	Login User

Main Success Scenario	1. User clicks "Forgot Password" on login page 2. Enters email address 3. System sends password reset link to email 4. User clicks link in email 5. Enters new password 6. System updates password 7. User can now login with new password
Alternate Flows	If email not found, system still shows "If email exists, reset link sent" for security
Exceptions	If email service is not working
Includes	User authentication

Use Case #4 – View Prayer Times

Table 20 Use Case 4

UC Identifier	UC4
Use Case Name	View Prayer Times
Requirements Traceability	FR-6
Purpose	To let users see daily prayer timings
Priority	High
Preconditions	None
Post conditions	User can see all prayer times
Actors	Community Member
Extends	None
Main Success Scenario	1. User visits website homepage 2. Prayer times are displayed on top of page 3. User can see Fajr, Zuhr, Asr, Maghrib, Isha times 4. Special timings for Jummah are also shown
Alternate Flows	User can view weekly prayer schedule
Exceptions	If admin hasn't updated times, show default times
Includes	None

Use Case #5 – View Events & Register

Table 21 Use Case 5

UC Identifier	UC5
Use Case Name	View Events & Register

Requirements Traceability	FR-4
Purpose	To see mosque events and register for them
Priority	Medium
Preconditions	User must be logged in to register
Post conditions	User registered for event
Actors	Community Member
Extends	None
Main Success Scenario	1. User goes to Events page 2. Views list of upcoming events 3. Clicks on event to see details 4. Clicks "Register for Event" 5. System confirms registration 6. User gets confirmation message
Alternate Flows	User can view events without login, but needs login to register
Exceptions	If system cannot register user due to server issue
Includes	Login User

Use Case #6 – View Donation Records

Table 22 Use Case 6

UC Identifier	UC6
Use Case Name	View Donation Records
Requirements Traceability	FR-2
Purpose	To see donation reports and where money is spent
Priority	High
Preconditions	User must be logged in to view reports
Post conditions	User can see financial reports
Actors	Community Member
Extends	None
Main Success Scenario	1. User goes to donation report page 2. Views donation records and amounts 3. Sees expense details like "5000 for new fans" 4. Builds trust in mosque management
Alternate Flows	User can filter reports by date filter
Exceptions	If no data available, show "No records yet"
Includes	Login User

Use Case #7 – View Announcements

Table 23 Use Case 7

UC Identifier	UC7
Use Case Name	View Announcements
Requirements Traceability	FR-4
Purpose	To read important mosque announcements
Priority	Medium
Preconditions	None
Post conditions	User reads announcements
Actors	Community Member
Extends	None
Main Success Scenario	1. User visits website homepage 2. Announcements are shown in main section 3. User reads important updates 4. Urgent announcements are highlighted in red
Alternate Flows	User can see old announcements
Exceptions	If no announcements, show "No current announcements"
Includes	None

Use Case #8 – Make Donation

Table 24 Use Case 8

UC Identifier	UC8
Use Case Name	Make Donation
Requirements Traceability	FR-7
Purpose	To donate money to mosque online using real payments
Priority	Medium
Preconditions	User must be logged in
Post conditions	Donation processed and recorded
Actors	Community Member, Donor
Extends	None
Main Success Scenario	1. User clicks "Donate Online" 2. Selects donation type 3. Enters amount in rupees 4. Enters card details for Stripe payment 5. Clicks "Donate Now" 6. Stripe processes payment 7. System shows "Donation Successful"
Alternate Flows	If user is not logged in, system redirects user to Login page before allowing donation.

Exceptions	If payment fails then show "Payment failed try again"
Includes	Login User

Use Case #9 – Book Nikah Services

Table 25 Use Case 9

UC Identifier	UC9
Use Case Name	Book Nikah Services
Requirements Traceability	FR-5
Purpose	To book religious scholar for marriage ceremony
Priority	Medium
Preconditions	User must be logged in
Post conditions	Nikah booking request submitted
Actors	Community Member
Extends	None
Main Success Scenario	1. User goes to Nikah Services page 2. Selects preferred date and time 3. Fills contact details and ceremony information 4. Submits the request 5. System sends confirmation "Request Submitted"
Alternate Flows	User can view their previous bookings
Exceptions	If date not available, show "Please select another date"
Includes	Login User

Use Case #10 – View Booking Status

Table 26 Use Case 10

UC Identifier	UC10
Use Case Name	View Booking Status
Requirements Traceability	FR-9
Purpose	To check if Nikah booking is accepted or pending
Priority	Medium
Preconditions	User must be logged in and have booking request
Post conditions	User sees current status of their request
Actors	Community Member
Extends	Book Nikah Services
Main Success Scenario	1. User goes to My Bookings page 2. Views list of their Nikah requests 3. See status like Pending, Accepted, or Rejected 4. If accepted, sees confirmed date and time

	5. If rejected, sees reason if provided
Alternate Flows	User can cancel pending requests
Exceptions	If no bookings, show "No booking requests yet"
Includes	Login User

Admin Use Cases

Use Case #11 – Admin Login

Table 27 Use Case 11

UC Identifier	UC11
Use Case Name	Admin Login
Requirements Traceability	FR-1
Purpose	To let mosque admin access the admin dashboard
Priority	High
Preconditions	Admin must have admin account credentials
Post conditions	Admin gains access to admin dashboard
Actors	Mosque Admin
Extends	None
Main Success Scenario	1. Admin goes to special /admin login URL 2. Enters admin username and password 3. Clicks "Admin Login" 4. System verifies admin details 5. Admin dashboard opens with all management options
Alternate Flows	If wrong details, show "Invalid admin login"
Exceptions	If admin account not set up yet
Includes	User Authentication

Use Case #12 – Manage Donations & Expenses

Table 28 Use Case 12

UC Identifier	UC12
Use Case Name	Manage Donations & Expenses
Requirements Traceability	FR-3, FR-10
Purpose	To handle all money records like donations and expenses
Priority	High

Preconditions	Admin must be logged in
Post conditions	Financial records updated
Actors	Mosque Admin
Extends	None
Main Success Scenario	1. Admin goes to Manage Donations & Expenses section 2. Can add new cash donations with donor details 3. Can record expenses like "5000 for mosque repairs" 4. Can edit or delete existing records 5. System updates financial reports automatically
Alternate Flows	Admin can generate monthly financial reports
Exceptions	If invalid data entered, show appropriate error messages
Includes	Admin Login

Use Case #13 – Manage Prayer Times

Table 29 Use Case 13

UC Identifier	UC13
Use Case Name	Manage Prayer Times
Requirements Traceability	FR-6
Purpose	To set and update daily prayer timings for community
Priority	High
Preconditions	Admin must be logged in
Post conditions	New prayer times displayed on website
Actors	Mosque Admin
Extends	None
Main Success Scenario	1. Admin goes to Prayer Times section 2. Updates all five daily prayer times 3. Sets special Jummah prayer timings 4. Clicks "Save Times" 5. New times immediately show on website for everyone
Alternate Flows	Admin can set weekly schedule instead of daily updates
Exceptions	If invalid time format, show "Please use correct time format"
Includes	Admin Login

Use Case #14 – Manage Events

Table 30 Use Case 14

UC Identifier	UC14
Use Case Name	Manage Events

Requirements Traceability	FR-4
Purpose	To create, update, and manage mosque events
Priority	Medium
Preconditions	Admin must be logged in
Post conditions	Events published and visible to community
Actors	Mosque Admin
Extends	None
Main Success Scenario	1. Admin goes to Events Management section 2. Creates new events with details and registration options 3. Updates existing event information 4. Deletes or cancels events when needed 5. Events appear on website for community registration
Alternate Flows	Admin can save events as drafts before publishing
Exceptions	If past date entered, show "Event date cannot be in past"
Includes	Admin Login

Use Case #15 – Manage Announcements

Table 31 Use Case 15

UC Identifier	UC15
Use Case Name	Manage Announcements
Requirements Traceability	FR-4
Purpose	To post and manage important mosque announcements
Priority	Medium
Preconditions	Admin must be logged in
Post conditions	Announcements visible on website
Actors	Mosque Admin
Extends	None
Main Success Scenario	1. Admin goes to Announcements section 2. Creates new announcements with titles and details 3. Updates existing announcements if information changes 4. Deletes old or incorrect announcements 5. Marks announcements as urgent if important 6. Announcements show on website immediately
Alternate Flows	Admin can schedule announcements for future dates
Exceptions	If announcement too long, show "Please shorten announcement"
Includes	Admin Login

Use Case #16 – Manage Religious Scholar Account

Table 32 Use Case 16

UC Identifier	UC16
Use Case Name	Manage Religious Scholar Account
Requirements Traceability	FR-11
Purpose	To create and manage account for Nikah service scholars
Priority	Medium
Preconditions	Admin must be logged in
Post conditions	Scholar accounts created and activated for Nikah management
Actors	Mosque Admin
Extends	None
Main Success Scenario	1. Admin goes to Scholar Management section 2. Creates new scholar accounts with login credentials 3. Updates scholar account details if needed 4. Deletes or deactivates scholar accounts 5. Scholars receive login details and can manage Nikah requests
Alternate Flows	Admin can reset scholar passwords if forgotten
Exceptions	If email already used, show "Email already registered"
Includes	Admin Login

Religious Scholar Use Case

Use Case #17 – Check Nikah Requests

Table 33 Use Case 17

UC Identifier	UC17
Use Case Name	Check Nikah Requests
Requirements Traceability	FR-5
Purpose	To allow religious scholars to check new nikah booking requests and update their status as accepted or rejected.
Priority	Medium
Preconditions	The religious scholar account must already be created by the mosque admin, and the scholar must be logged into the system.
Post conditions	The nikah request status is updated to either “Accepted” or “Declined,” and the request status is updated in the admin dashboard.
Actors	Religious Scholar, Mosque Admin
Extends	None

Main Success Scenario	1.Religious scholar logs into system 2.Goes to "Nikah Requests" page 3.Views list of pending booking requests 4.Clicks on a request to see details 5.Clicks "Accept" or "Decline" button 6.System updates request status 7.Admin sees updated status in dashboard
Alternate Flows	If no requests available, system shows "No pending requests" If scholar tries to accept conflicting time, system shows "Time not available"
Exceptions	If system error occurs, shows "Unable to update request"
Includes	User authentication

Use Case Diagram

These diagrams shows all the users and features of our E-Masjid system. It helps show how different users interact with different parts of the system.

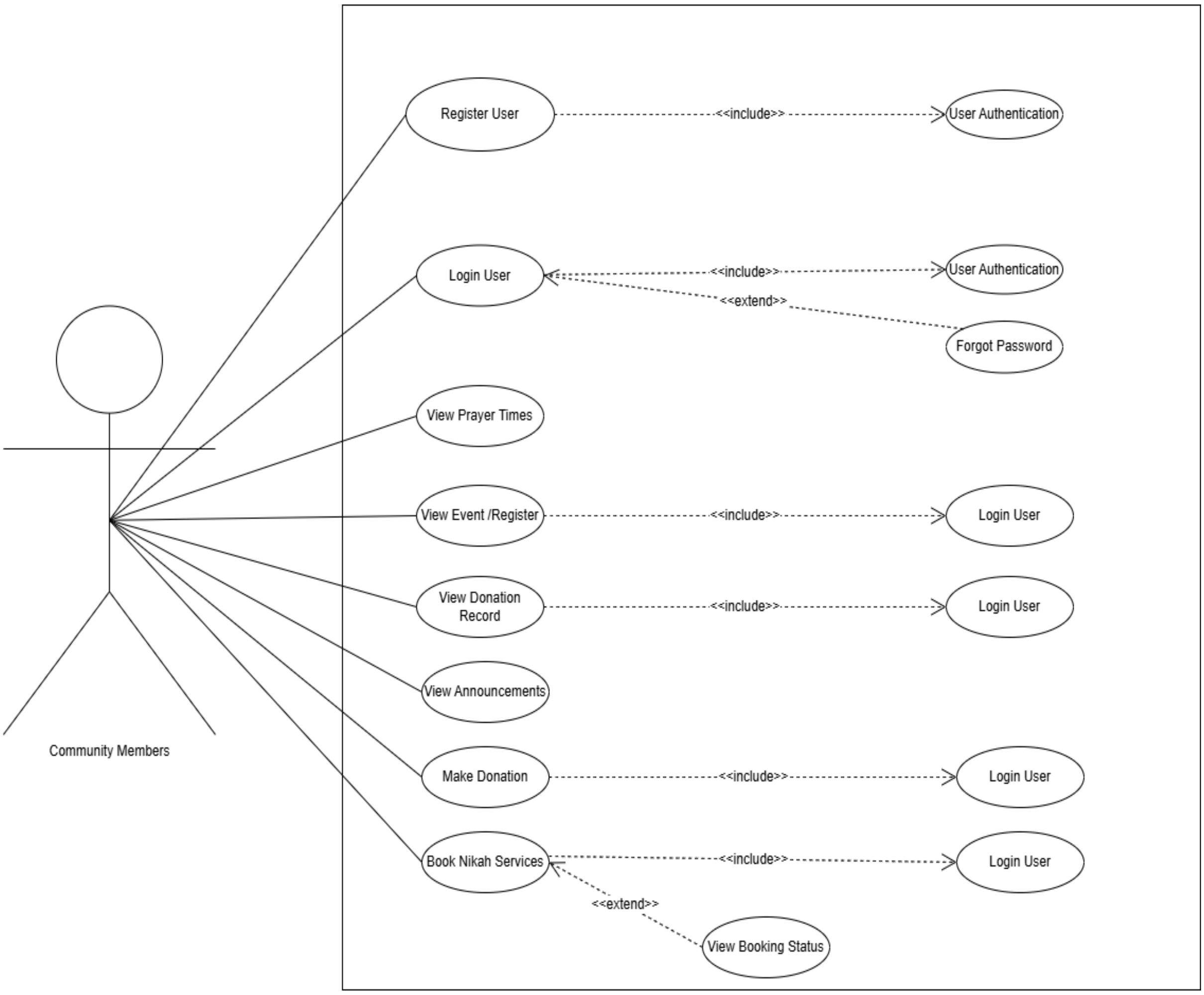


Figure 1 Use Case diagram of Community members

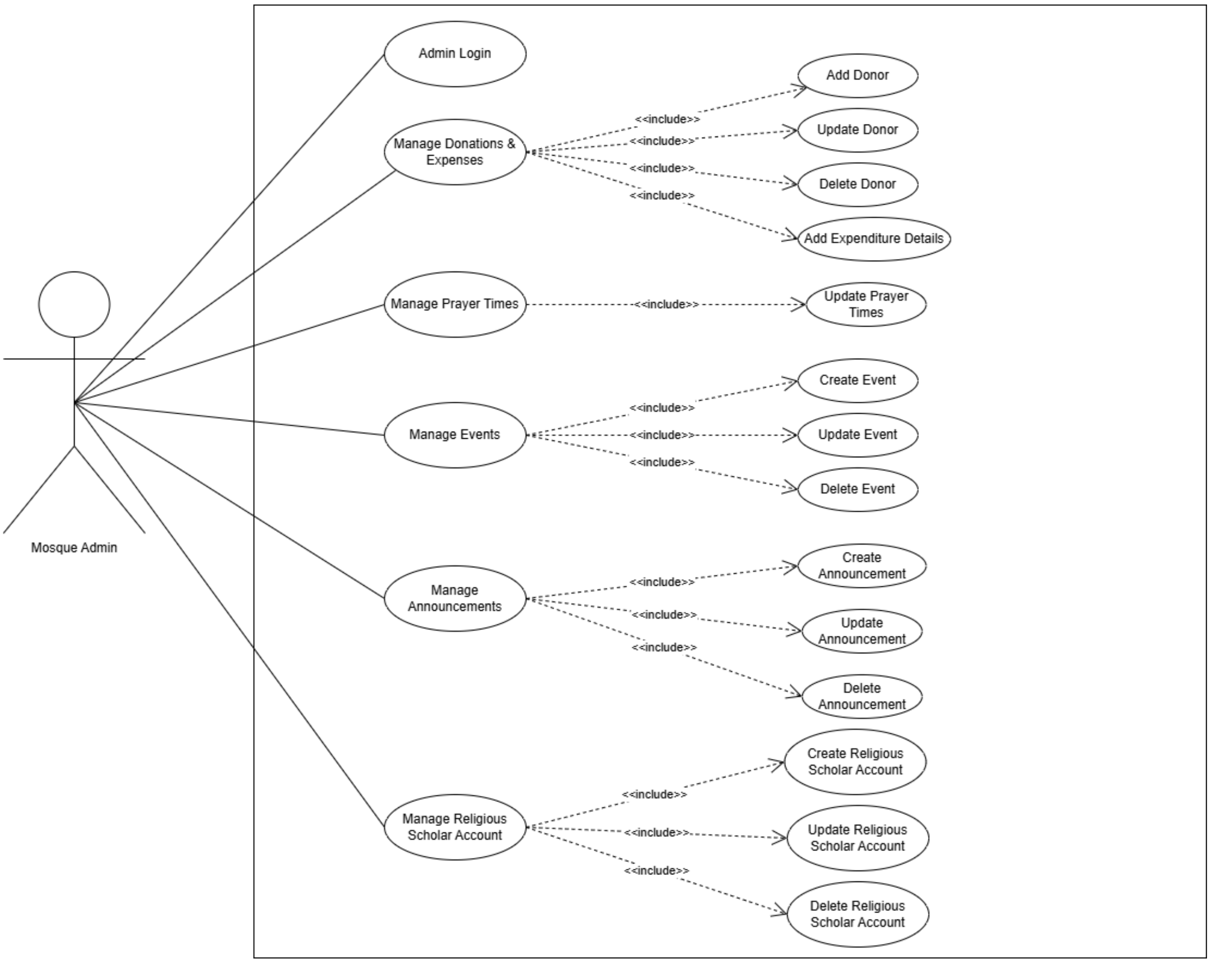


Figure 2 Use Case diagram of Mosque Admin

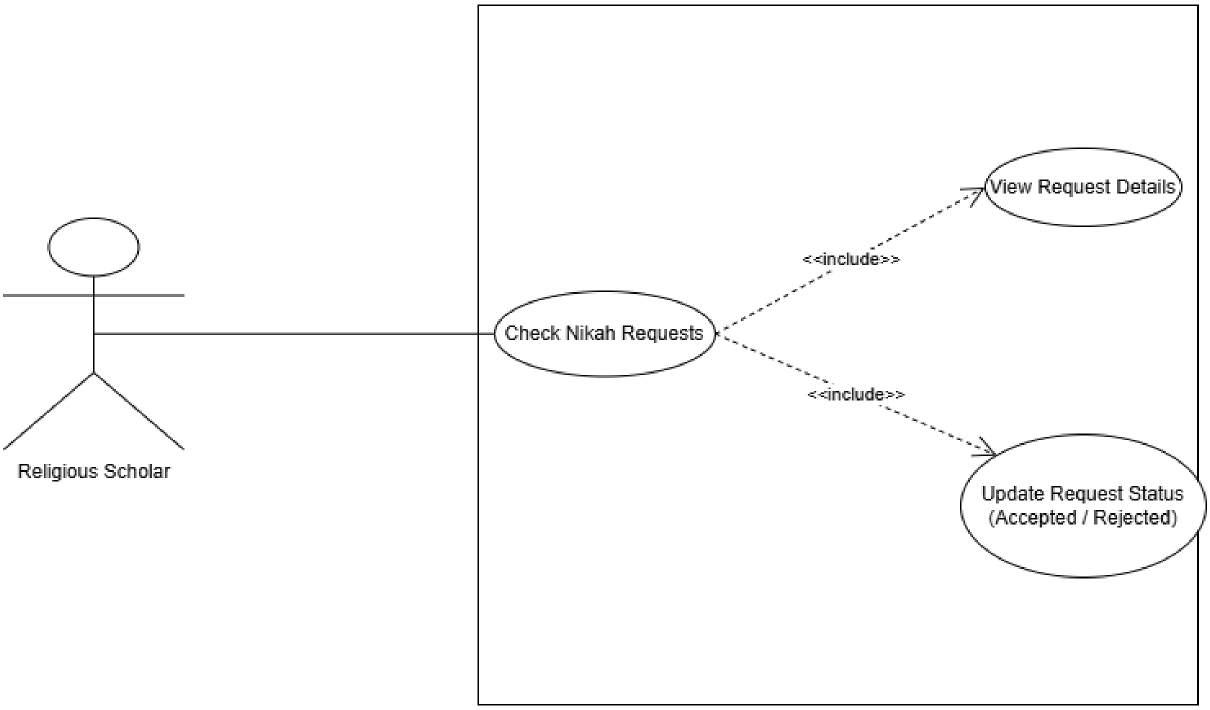


Figure 3 Use Case diagram of Religious Scholar

3.8 Storyboards

This section shows how users will use our system in real life. Each storyboard explains one main feature that happen on screen.

Storyboard 1 – Online Donation System

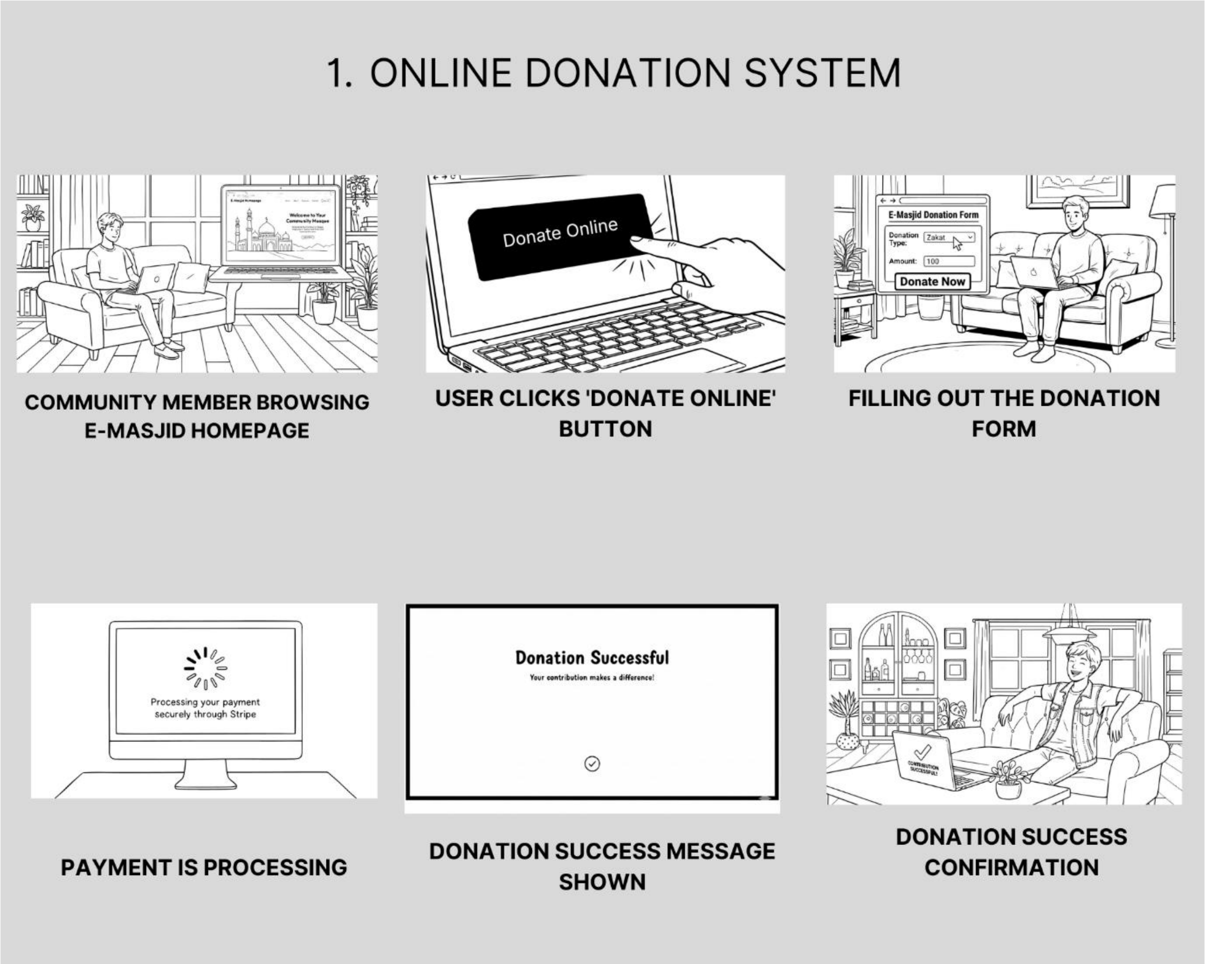

1. ONLINE DONATION SYSTEM
Welcome to Your Community Masjid
COMMUNITY MEMBER BROWSING E-MASJID HOMEPAGE
Donate Online
USER CLICKS 'DONATE ONLINE' BUTTON
E-Masjid Donation Form
Donation Type: Zakat
Amount: 100
Donate Now
FILLING OUT THE DONATION FORM
Processing your payment securely through Stripe
PAYMENT IS PROCESSING
Donation Successful
Your contribution makes a difference!
DONATION SUCCESS MESSAGE SHOWN
CONTRIBUTION SUCCESSFUL
DONATION SUCCESS CONFIRMATION

Figure 4 Online Donation Storyboard

Storyboard 2 – Event Management

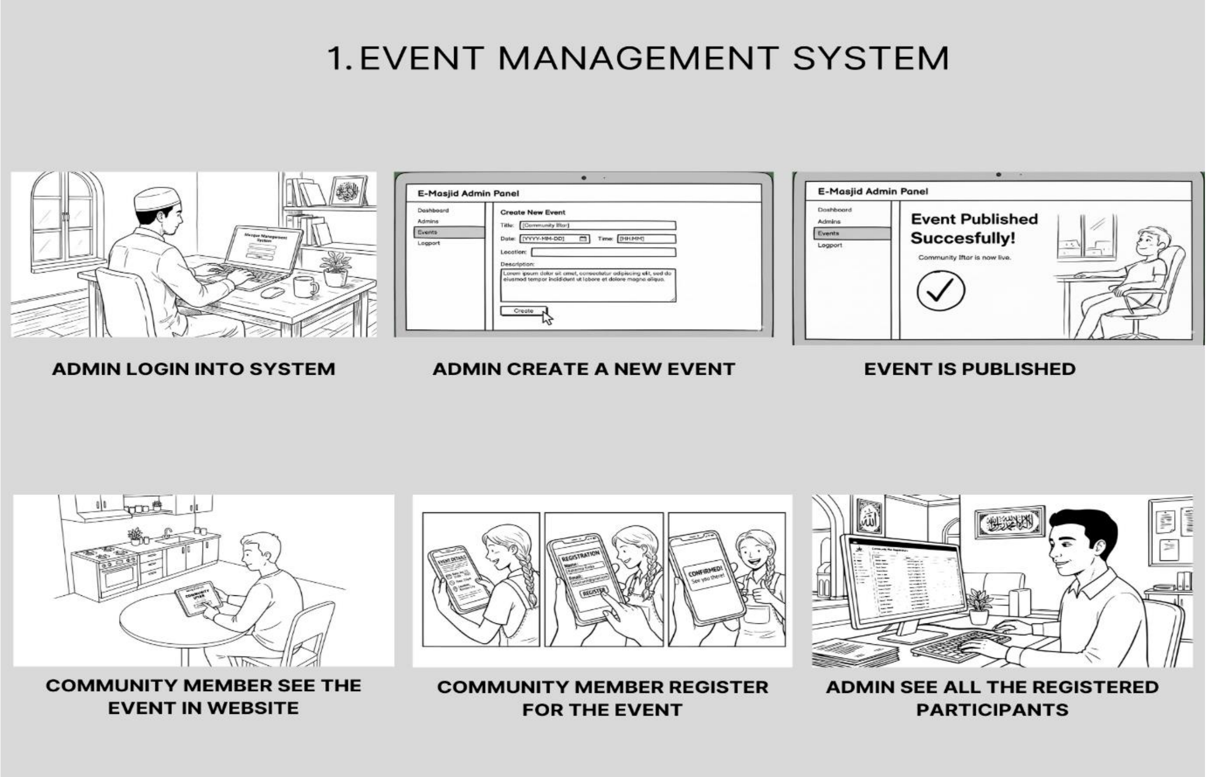

1. EVENT MANAGEMENT SYSTEM
E-Masjid Admin Panel
Dashboard
Admins
Events
Logout
Create New Event
Title:
Date:
Time:
Location:
Description:
Create
Event Published Succesfully!
Community Iftar is now live.
ADMIN LOGIN INTO SYSTEM
ADMIN CREATE A NEW EVENT
EVENT IS PUBLISHED
COMMUNITY MEMBER SEE THE EVENT IN WEBSITE
COMMUNITY MEMBER REGISTER FOR THE EVENT
ADMIN SEE ALL THE REGISTERED PARTICIPANTS

Figure 5 Event Management Storyboard

Storyboard 3 – Nikah Booking

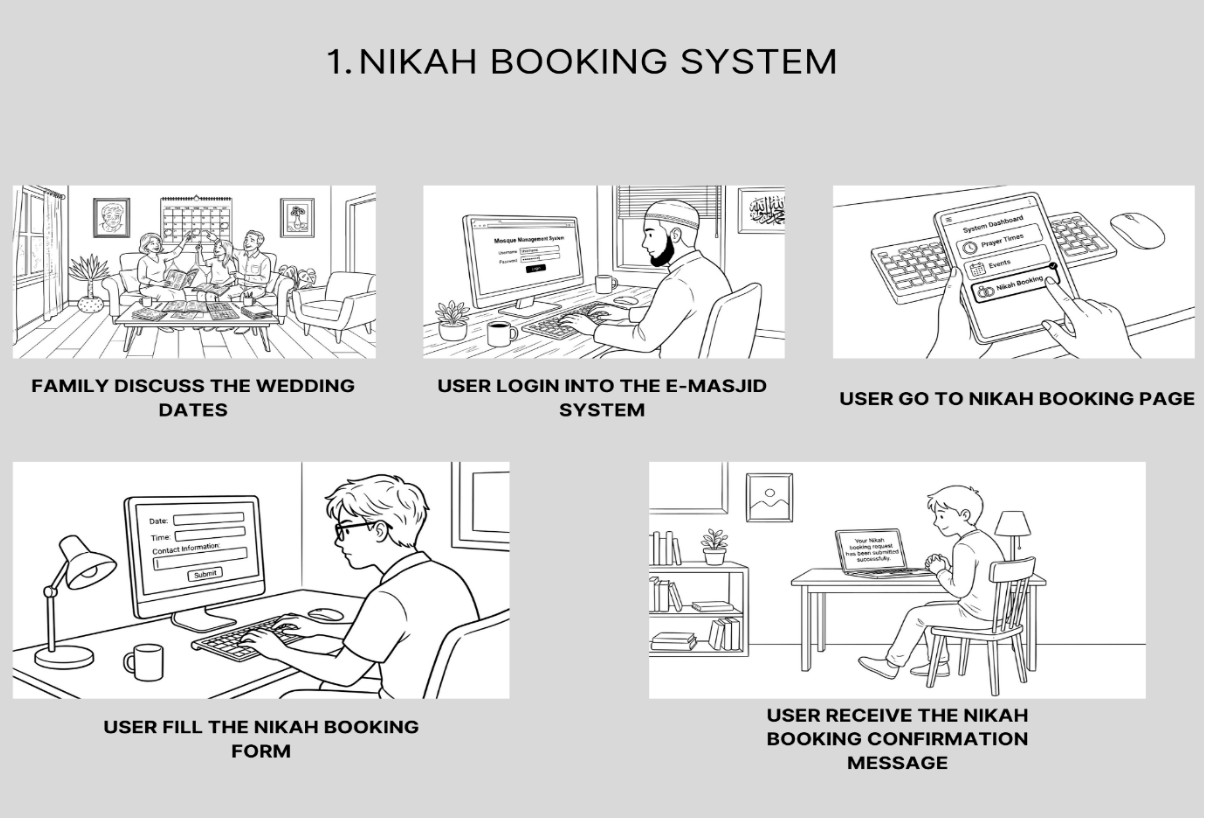

1. NIKAH BOOKING SYSTEM
Mosque Management System
Username
Password
System Dashboard
Prayer Times
Events
Nikah Booking
Date:
Time:
Contact Information:
Submit
Your Nikah booking request has been submitted successfully.
FAMILY DISCUSS THE WEDDING DATES
USER LOGIN INTO THE E-MASJID SYSTEM
USER GO TO NIKAH BOOKING PAGE
USER FILL THE NIKAH BOOKING FORM
USER RECEIVE THE NIKAH BOOKING CONFIRMATION MESSAGE

Figure 6 Nikah booking Storyboard

3.9 Summary

In this SRS document, we explained all the main requirements and features of our E-Masjid System. We started by understanding the problems faced by mosque committees and community members, then used use cases and storyboards to identify the real needs of the system. We listed both functional and non-functional requirements like donation management, prayer time setup, service requests, and security. This document helped us to understand what our system will do, who will use it and how each feature will work. It will also help us in the next steps like design and development because all features and requirements are already clear. Overall this SRS gives a complete picture of the system before we start coding.

Chapter No 4

Software Design Specification

4.1 System Design

Our E-Masjid System is a complete web based platform that will be accessible through any modern web browser. The system is designed to serve mosque administration for managing operations and community members can use these services.

Dependencies

1. Stable internet connection for all users.
2. Stripe service availability for payment processing.
3. Modern web browsers supporting React.js features.
4. MongoDB database server for data storage.

Interaction with Other Systems

1. **Stripe Payment Gateway:** It is used for making online donations securely.
2. **Email Service:** It is used for sending password reset links.
3. **Internet Connection:** It is required for all users to access the system.

Design Constraints

1. **Performance Requirements:** Prayer times page loads within 3 seconds, handles 100+ users during Friday prayers.
2. **Usability Requirements:** Simple interface with large buttons, works on mobile and computer, elderly friendly design.
3. **Security Requirements:** Encrypted passwords, secure payments through Stripe, admin access protection.
4. **Technical Constraints:** MERN stack technology, responsive design, automatic weekly backups.

4.2 Design Considerations

Assumptions

Following are the assumptions:

1. Mosque administrators have basic computer knowledge.
2. Users have internet access and email accounts.
3. The mosque has at least one computer for admin use.
4. Religious scholars can use basic web applications.
5. Community members can use web browsers on phones or computers.

Dependencies

Following are the dependencies:

1. Stable internet connection for all users.
2. Stripe payment service available at any time.
3. Web browsers supporting modern JavaScript.
4. MongoDB database running properly.

Limitations

Following are the limitations:

1. Cannot work without internet connection.
2. No SMS notifications for announcements.
3. No mobile app version.
4. Payment system requires card payments only.
5. Cannot handle offline data entry.

Risks

Following are the risks:

1. Payment security issues.
2. System downtime during prayer times.
3. Elderly users finding the system difficult.
4. Data loss from system crashes

4.3 Requirements Traceability Matrix

Table 34 Requirements Traceability Matrix

Requirement ID	Scope	Requirement Description	Design Specification
FR-1	User Management	The system will allow users to register and login with email and password, with different access levels for admin, religious scholar and community members	Component "User Authentication Module"
FR-2	Financial Reports	The system will show donation records, expense details, and financial reports so people can see both income and spending	Component "Financial Reporting Module"
FR-3	Donation Management	The mosque admin will be able to record cash donations with donor name, amount, date, and donation type	Component "Donation Management Module"
FR-4	Event Management	The admin will be able to add, update, or remove events and announcements such as islamic classes, community programs, and eid prayers. Users can view them on the main page	Component "Event & Announcement Manager"
FR-5	Nikah Services	Community members will be able to book nikah registrar for nikah ceremonies by selecting date and providing contact details	Component "Nikah Booking Module"
FR-6	Prayer Times	The admin will be able to set and update daily prayer times including special timings for Jummah and Ramadan	Component "Prayer Times Manager"
FR-7	Online Payments	Community members will be able to make donations online through the website by entering amount and personal details and process real payments using Stripe and see payment success message	Component "Online Payment Processor"

FR-8	Account Security	If users forget their password, they can reset it using their email address	Component "Password Recovery Module"
FR-9	Booking Status	Users can see if their Nikah service request is pending, accepted, or rejected	Component "Booking Status Tracker"
FR-10	Expense Tracking	Admin can add where mosque money is spend like for repairs, electricity etc	Component "Expense Management Module"
FR-11	User Role Management	Admin can create special accounts for religious scholars who perform Nikah	Component "User Account Manager"

4.4 Design Models

In this section, we show how we designed the E-Masjid System. We made different diagrams to explain the system structure, how data is organized, and how different parts of the system work together. These pictures make the design easy to understand for everyone.

1. Design Class Diagram

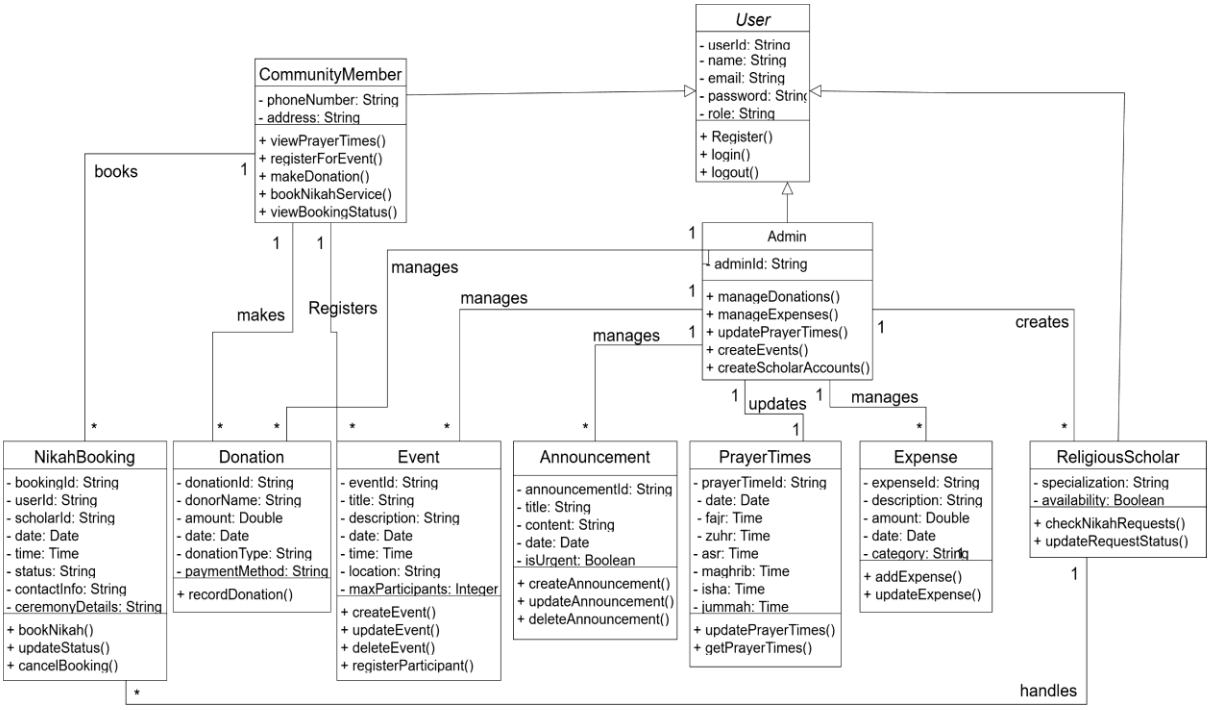


Figure 7 Class diagram

2. Sequence Diagram

User Login Sequence Diagram

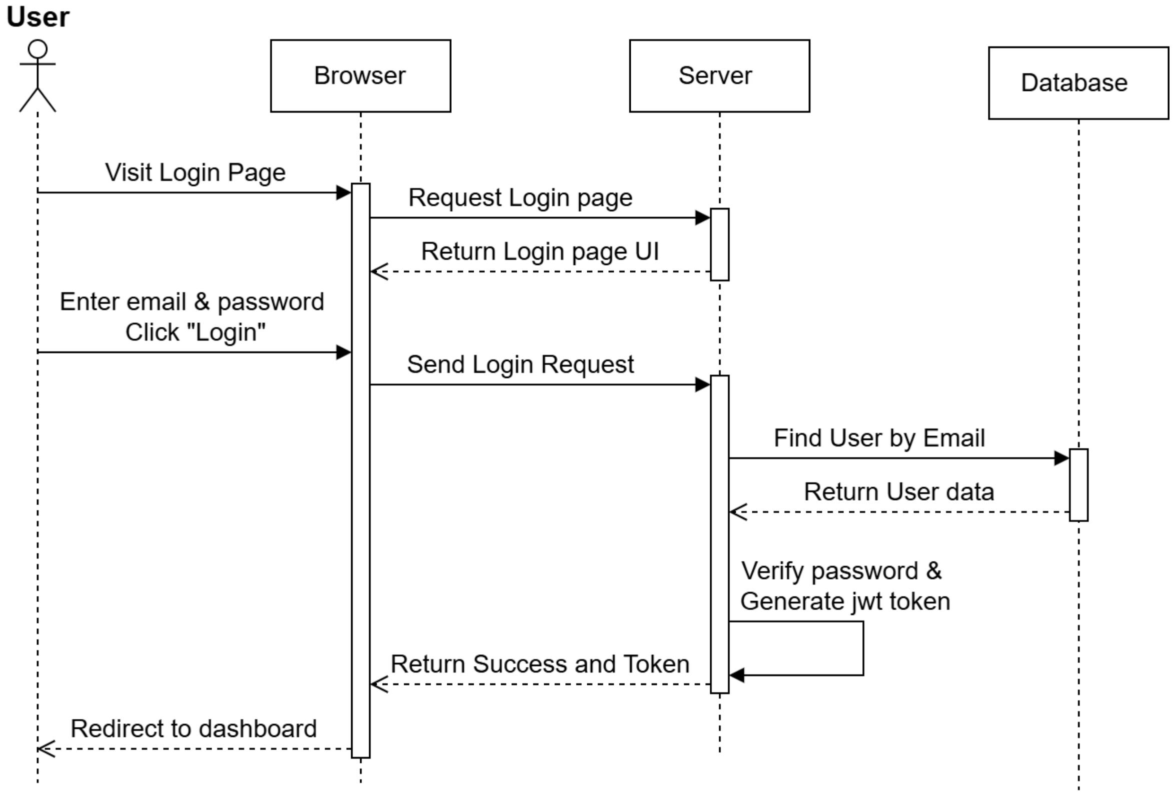


Figure 8 Login Sequence Diagram

This diagram shows the steps that happen when a user logs into the E-Masjid system. It explains how the system checks the user's details to ensure security.

Key Steps:

1. User enters email and password, clicks "Login".
2. Browser sends details to server.
3. Server checks database for the email.
4. Database finds user and sends info back.
5. Server checks if password is correct.
6. If correct, server creates security token.
7. Token sent to browser, user taken to dashboard.
8. If wrong, error message shown to use.

Online Donation Sequence Diagram

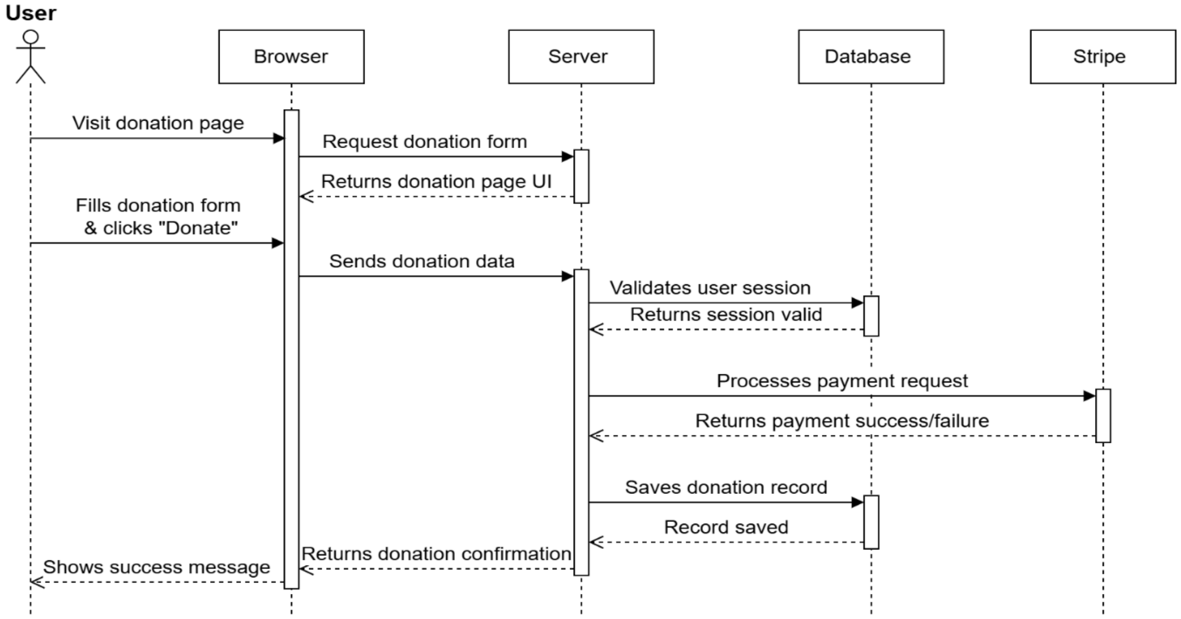


Figure 9 Online Donation Sequence Diagram

This diagram shows the complete flow when a community member makes an online donation. The process involves the user interface, backend server, database, and Stripe payment gateway working together to process the payment and record the transaction.

Key Steps:

1. User submits donation form.
2. Backend validates and processes payment via Stripe.
3. Payment result recorded in database and confirmation displayed to user.

Nikah Booking Sequence Diagram

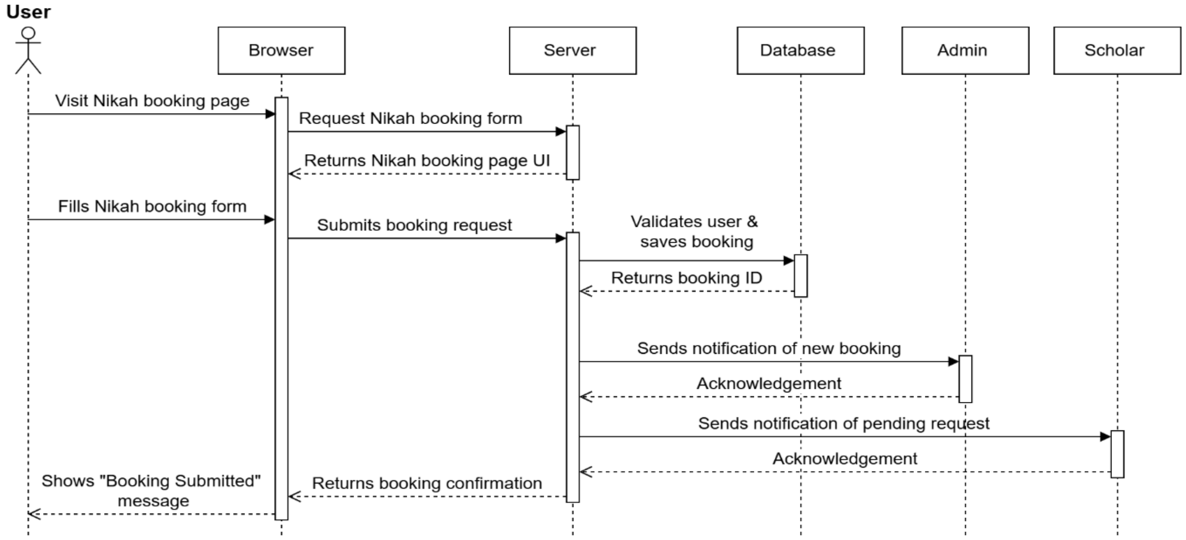

User
Browser
Server
Database
Admin
Scholar
Visit Nikah booking page
Request Nikah booking form
Returns Nikah booking page UI
Fills Nikah booking form
Submits booking request
Validates user & saves booking
Returns booking ID
Sends notification of new booking
Acknowledgement
Sends notification of pending request
Acknowledgement
Shows "Booking Submitted" message
Returns booking confirmation

Figure 10 Nikah Booking Sequence Diagram

This diagram display all the steps of the process when a user books Nikah services. The booking request goes through validation, storage, and notification to both admin and religious scholar.

Key Steps:

1. User submits booking request.
2. System validates and stores the request.
3. Notifications sent to admin and scholar.
4. User receives booking confirmation.
5. Scholar can later update booking status.

Prayer Times Update Sequence Diagram

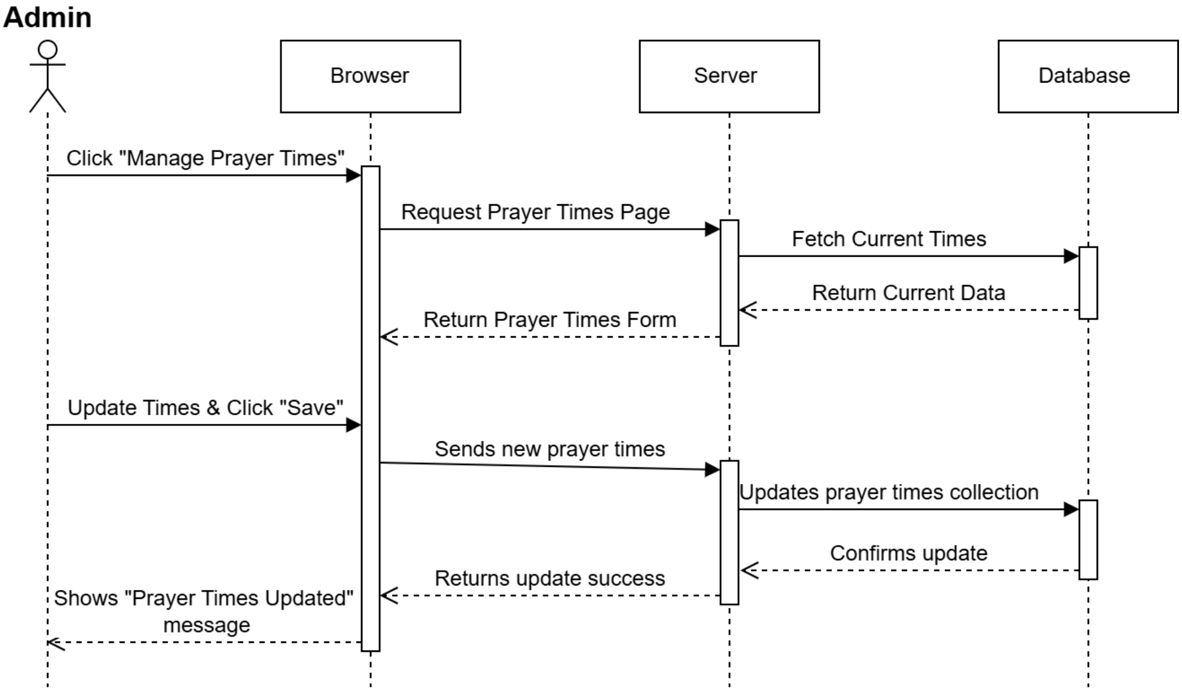


Figure 11 Admin Update Prayer Times Sequence Diagram

This diagram shows how mosque admin updates prayer times.

Key Steps:

1. Admin updates times.
2. Changes saved to database.
3. Admin receives confirmation.

3. State Transition Diagram

These diagrams show how the system status changes when a user performs different actions.

They show how entities transition between states in response to user actions and system events.

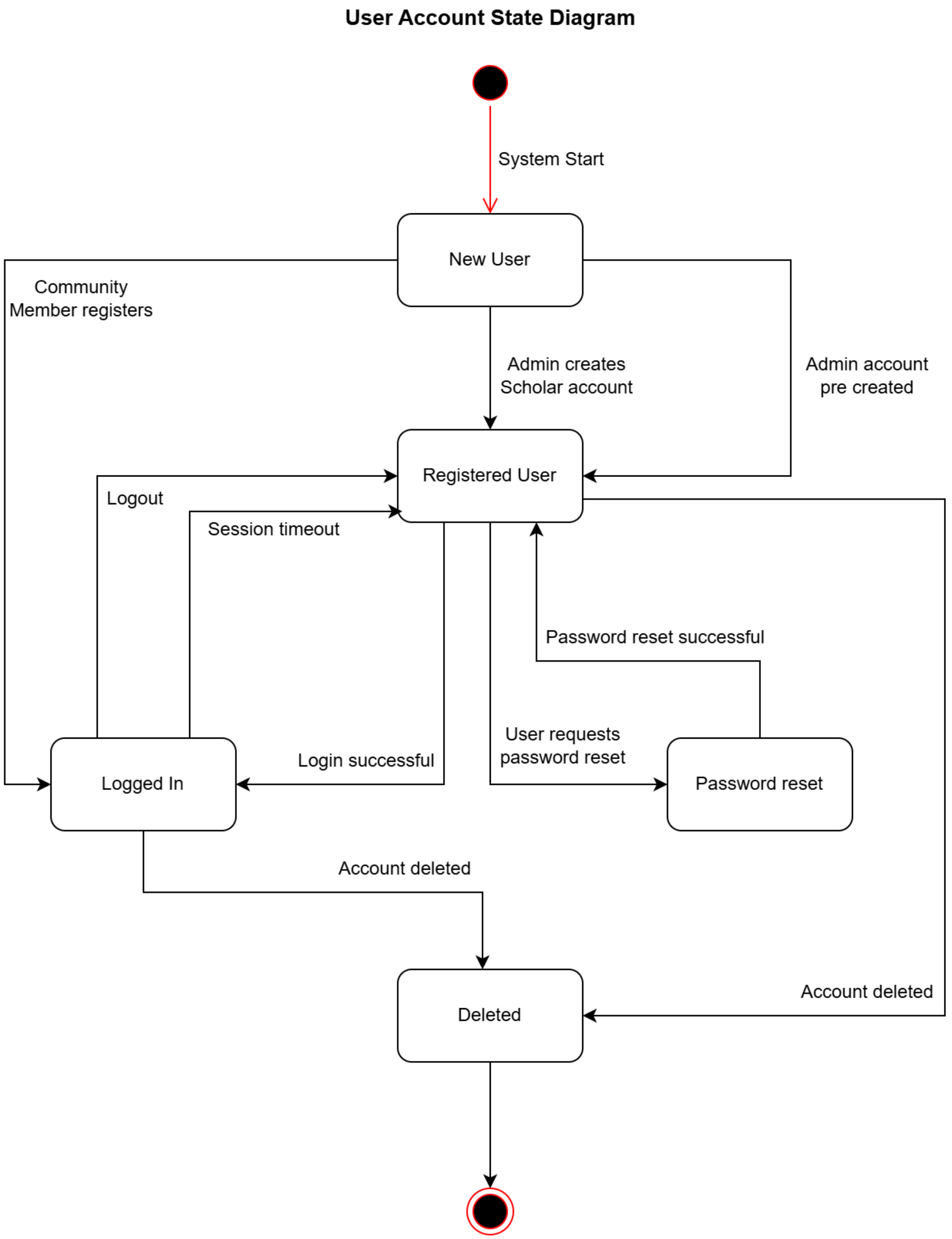

User Account State Diagram
System Start
New User
Community Member registers
Admin creates Scholar account
Admin account pre created
Registered User
Logout
Session timeout
Password reset successful
User requests password reset
Login successful
Logged In
Password reset
Account deleted
Deleted
Account deleted

Figure 12 User Account State Diagram

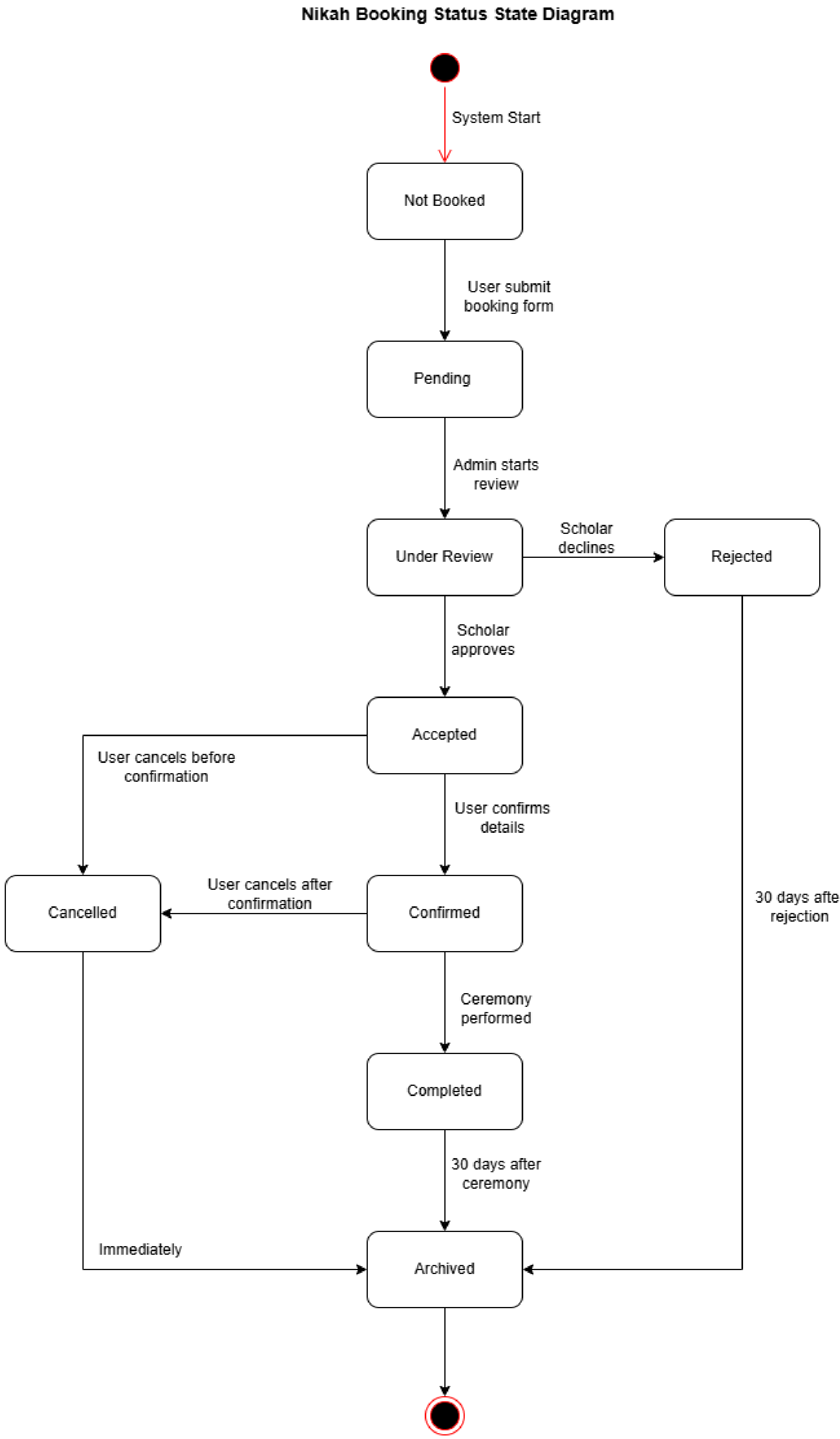


Figure 13 Nikah Booking Status State Diagram

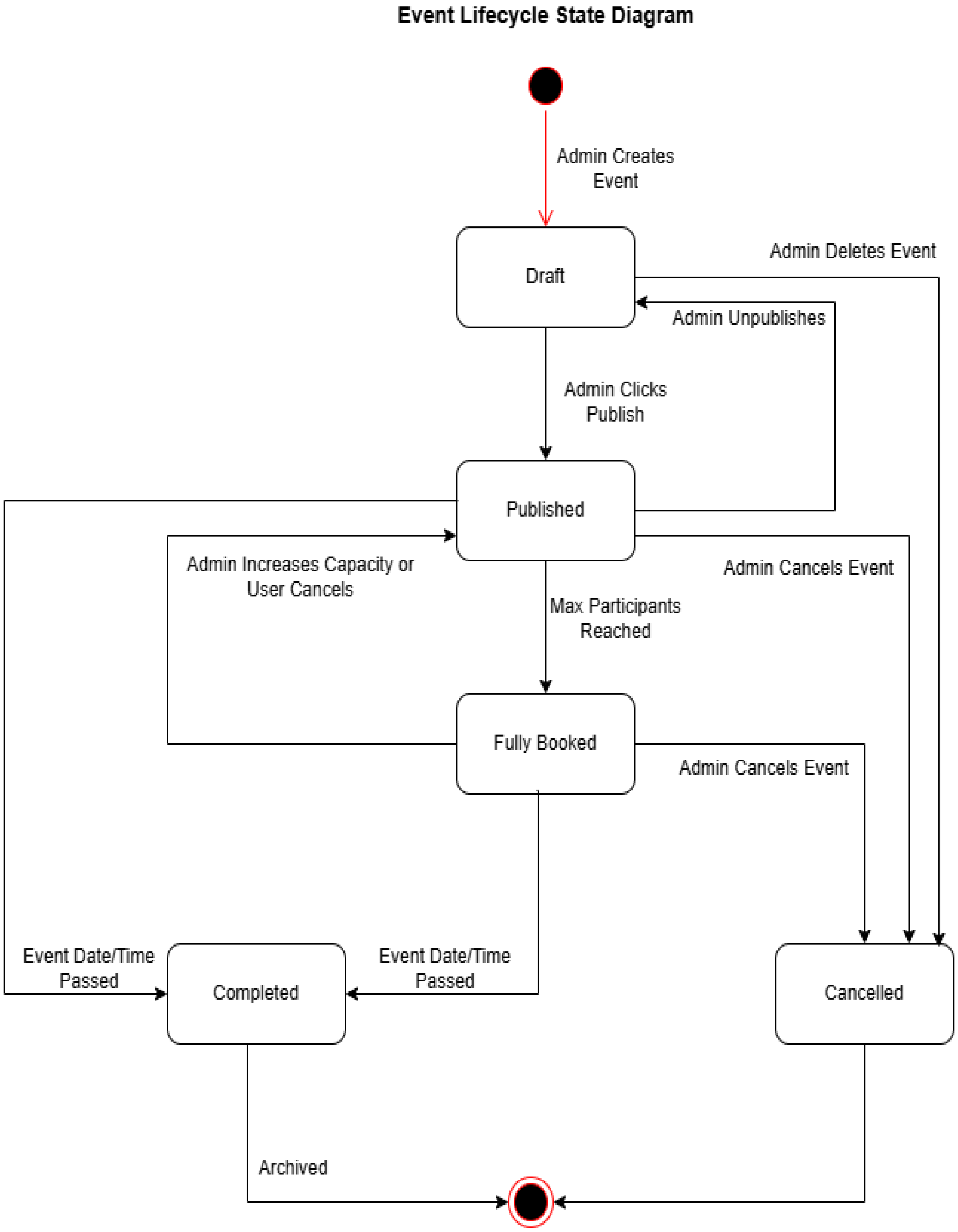


Figure 14 Event State Diagram

4.5 Architectural Design

Our E-Masjid System follows the MVC architecture pattern. This separates the system into three main parts.

1. **Model:** Handles data and business logic.
2. **View:** User interface that users see.
3. **Controller:** Processes user requests and connect Model and View.

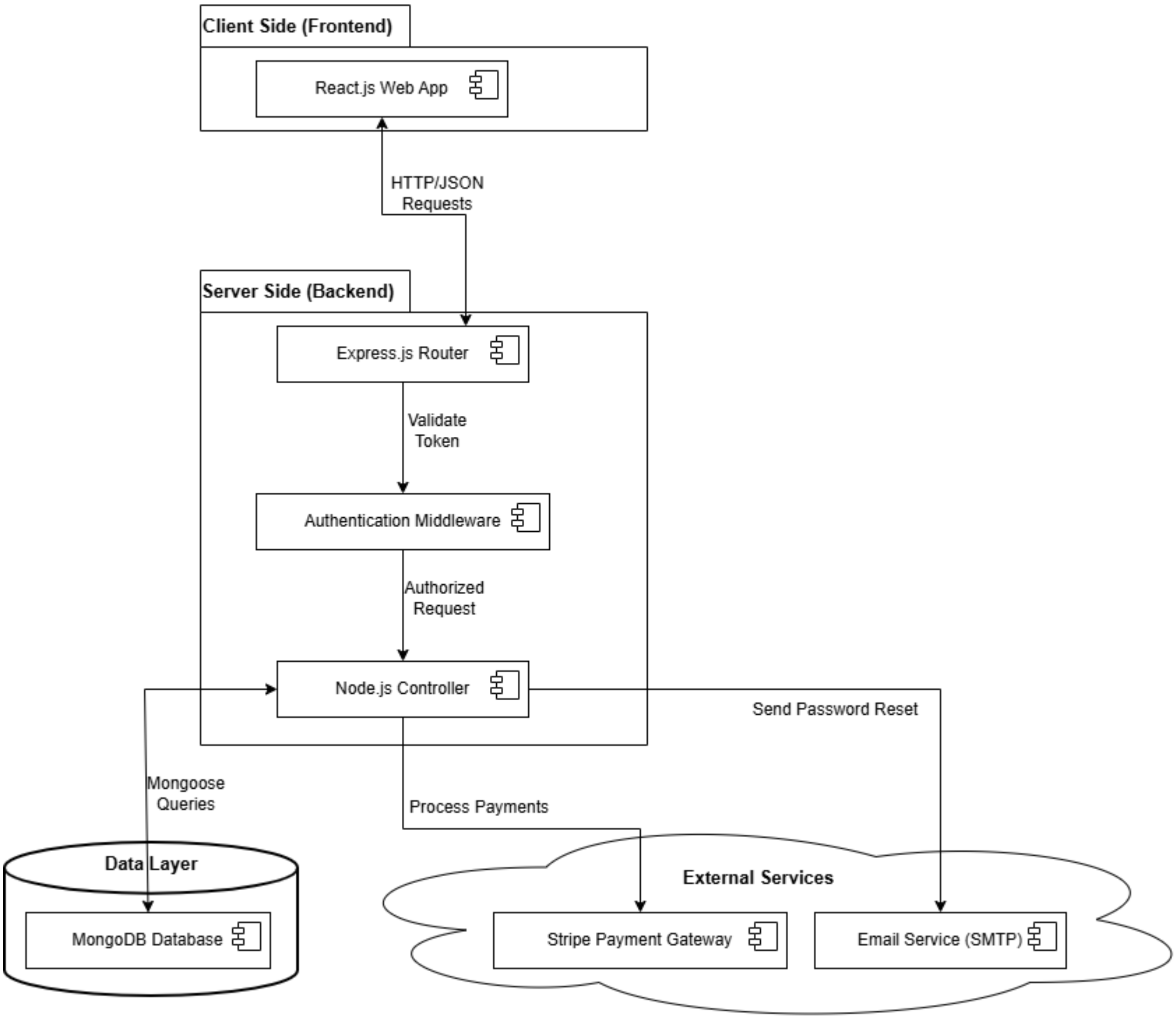


Figure 15 High-Level System Architecture

System Architecture Components

Frontend Layer:

1. User Interface Components.
2. Mobile-responsive design.
3. Client side validation.
4. Real-time updates.

Backend Layer:

1. API routes and controllers.
2. Business logic processing.
3. Authentication and authorization.
4. Payment processing.

Data Layer:

1. User data and profiles.
2. Donation and expense records.
3. Prayer time schedules.
4. Event and announcement data.
5. Nikah booking requests.

External Services:

1. Stripe Payment Gateway.
2. Email Service for password resets.

1. UML Component diagram

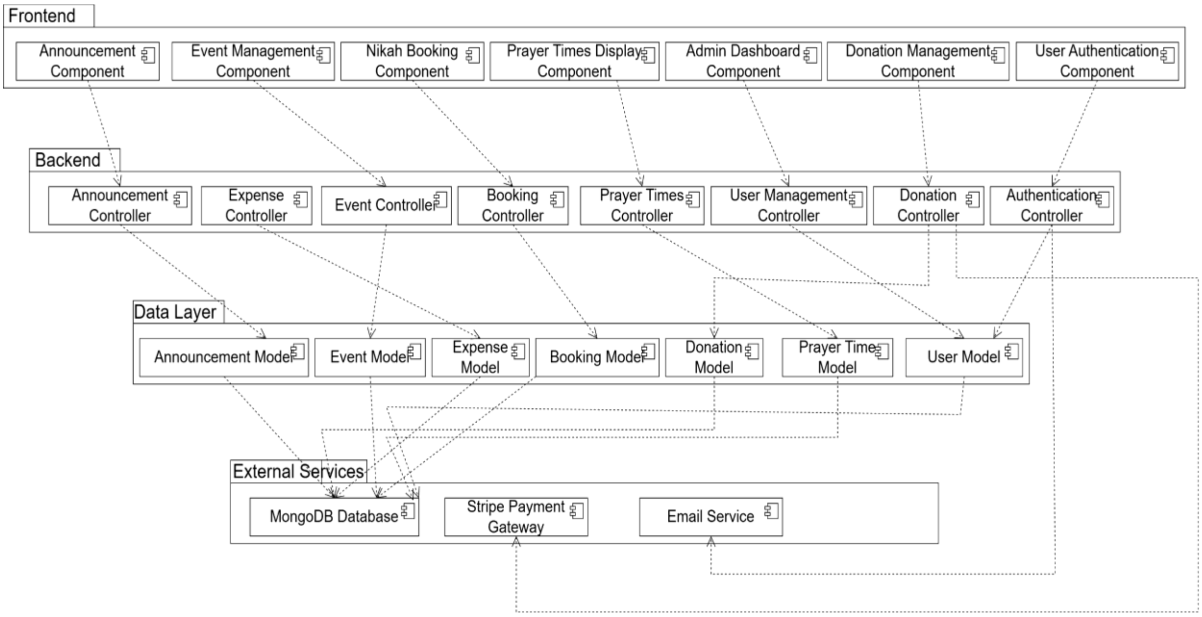


Figure 16 Component diagram

4.6 Data Design

Our system uses MongoDB database to store information. We have separate collections for different things like users, donations, and events. Each collection keeps related information together. Admin and religious scholars are both in the users collection, with different role values.

Database Collections Structure:

1. **Users Collection**
   1.1. Stores all user information including admin, community members, and religious scholars.
   1.2. Uses role based access control.
   1.3. Fields: userId, name, email, password, role, phone, address, specialization.
2. **Donations Collection**
   2.1 Records all donation transactions.
   2.2 Links to donor information for transparency.
   2.3 Fields: donationId, donorId, amount, date, type , paymentMethod.
3. **Expenses Collection**
   3.1. Tracks mosque expenditure for financial transparency.
   3.2. Categorized expenses for better reporting.
   3.3. Fields: expenseId, description, amount, date, category.
4. **Events Collection**
   4.1. Manages mosque events and programs.
   4.2. Supports online registration.
   4.3. Fields: eventId, title, description, date, time, location, maxParticipants, registeredUsers[ ].
5. **Announcements Collection**
   5.1. Stores important mosque announcements.
   5.2. Supports urgent flag for important updates.
   5.3. Fields: announcementId, title, content, date, isUrgent, publishedBy.
6. **Prayer Times Collection**
   6.1. Stores daily prayer schedules.
   6.2. Special entries for Jummah and Ramadan.
   6.3. Fields: prayerTimeId, date, fajr, zuhr, asr, maghrib, isha, jummah, isSpecial.

7. **Nikah Bookings Collection**

   7.1. Manages marriage service requests.

   7.2. Tracks booking status.

   7.3. Fields: bookingId, userId, scholarId, date, time, status, contactInfo, ceremonyDetails.

Data Relationships:

1. One-to-many: One user can make multiple donations.
2. One-to-many: One admin can create multiple events.
3. Many-to-many: Many users can register for many events.
4. One-to-one: Each day has one prayer time schedule.

1. Data Dictionary

Table 35 Data Dictionary Table

Terminology	**Description**
Users Collection	Stores all system user accounts
userId	String, Primary key for user identification
name	String, Full name of the user
email	String, User email address
password	String, Encrypted password for security
role	String, User role (admin/community/scholar)
phone	String, Contact phone number.
address	String, User residential address
specialization	String, For scholars area of expertise
Donations Collection	Records all financial donations
donationId	String, Unique donation identifier
donorId	String, Reference to user who donated
Amount	Number, Donation amount in rupees

Date	Date, When donation was made
Type	String, Donation type (Zakat/Sadaqah/Mosque Fund)
paymentMethod	String, Cash or Card payment
Expenses Collection	Tracks mosque spending
expenseId	String, Unique expense identifier
Description	String, What the money was spent on
Amount	Number, Expense amount in rupees
Date	Date, When expense occurred
Category	String, Expense category
Events Collection	Manages mosque events
eventId	String, Unique event identifier
Title	String, Event name/title
Description	String, Detailed event information
Date	Date, Event date
Time	Time, Event time
Location	String, Where event will be held
maxParticipants	Number, Maximum allowed attendees
registeredUsers	Array, List of user IDs who registered
Announcements Collection	Stores mosque announcements
announcementId	String, Unique announcement identifier
Title	String, Announcement headline
Content	String, Full announcement text
Date	Date, When announcement was posted
isUrgent	Boolean, Marks urgent announcements

publishedBy	String, Admin who posted the announcement
PrayerTimes Collection	Stores prayer schedules
prayerTimeId	String, Unique prayer time identifier
Date	Date, Date for prayer times
Fajr	Time, Fajr prayer time
Zuhr	Time, Zuhr prayer time
Asr	Time, Asr prayer time
Maghrib	Time, Maghrib prayer time
Isha	Time, Isha prayer time
Jummah	Time, Jummah prayer time
NikahBookings Collection	Manages marriage service requests
bookingId	String, Unique booking identifier
userId	String, Reference to user who booked
scholarId	String, Reference to assigned scholar
Date	Date, Requested ceremony date
Time	Time, Requested ceremony time
Status	String, Current status (Pending/Accepted/Rejected)
contactInfo	String, User contact details for ceremony
ceremonyDetails	String, Additional ceremony information

4.7 User Interface Design

The E-Masjid System will have a clean, simple, and easy to use interface designed for all types of users, including elderly people who may not be comfortable with complex technology.

User Experience

1. **Homepage:** Shows current prayer times, recent announcements, and quick access buttons for main features.
2. **Navigation:** Simple menu at the top with clear labels.
3. **Mobile Friendly:** All screens work perfectly on mobile phones and tablets.
4. **Elderly Friendly:** Large buttons, clear text, and simple forms.

How Different Users Will Use the System:

For Community Members:

1. Prayer times always visible on top of home page.
2. Simple donation form with card payment option.
3. One click registration for events.
4. Easy booking form for nikah.
5. View booking status in mybooking page.

For Mosque Admin:

1. Special admin panel accessible through /admin URL.
2. Simple forms to add/update donations, expenses, events, announcements.
3. Financial reports showing income and expenses.
4. Create and manage religious scholar accounts.

For Religious Scholars:

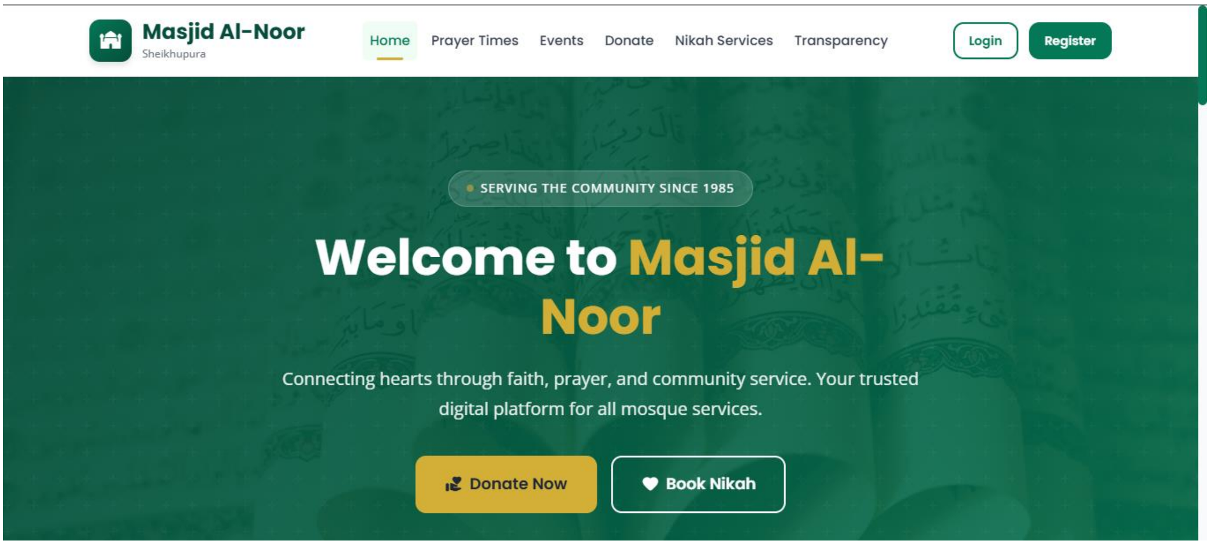
1. View pending requests in simple list format.
2. One click buttons to accept or reject bookings.
3. See their booked ceremonies in calendar view.

Feedback and Messages:

1. Green popup messages for successful actions.
2. Red popup messages with simple explanations.
3. "Are you sure?" prompts for important actions.

1. Screen Images

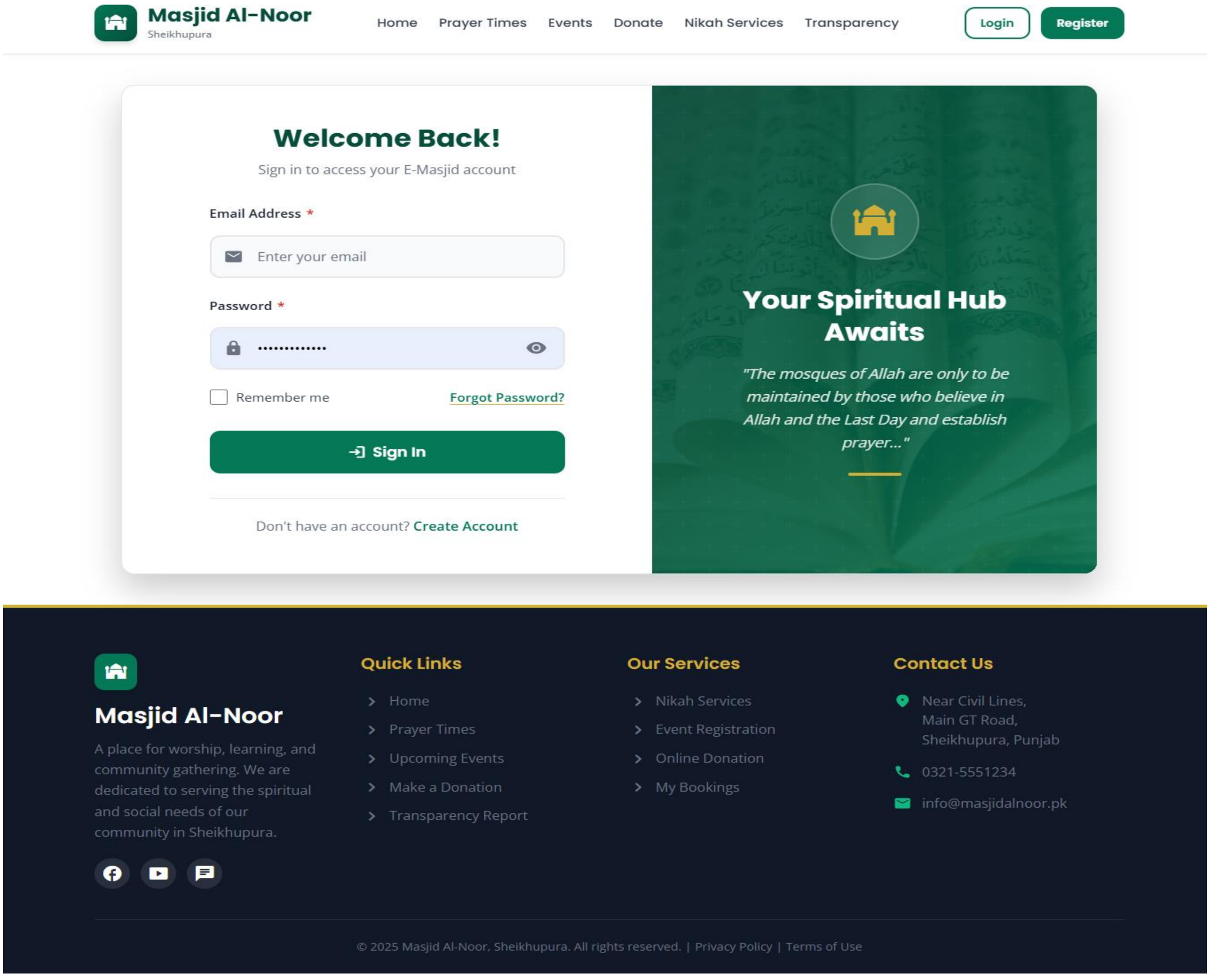
We have created basic screen designs to show how the interface will look. These designs follow our guidelines of simplicity and ease of use.



Welcome to Masjid Al-Noor

Connecting hearts through faith, prayer, and community service. Your trusted digital platform for all mosque services.

Figure 17 Home page design



Welcome Back!

Sign in to access your E-Masjid account

Email Address *

Enter your email

Password *

•••••••••••••

□ Remember me Forgot Password?

Don't have an account? Create Account

Your Spiritual Hub Awaits

"The mosques of Allah are only to be maintained by those who believe in Allah and the Last Day and establish prayer..."

Masjid Al-Noor

A place for worship, learning, and community gathering. We are dedicated to serving the spiritual and social needs of our community in Sheikhupura.

Contact Us

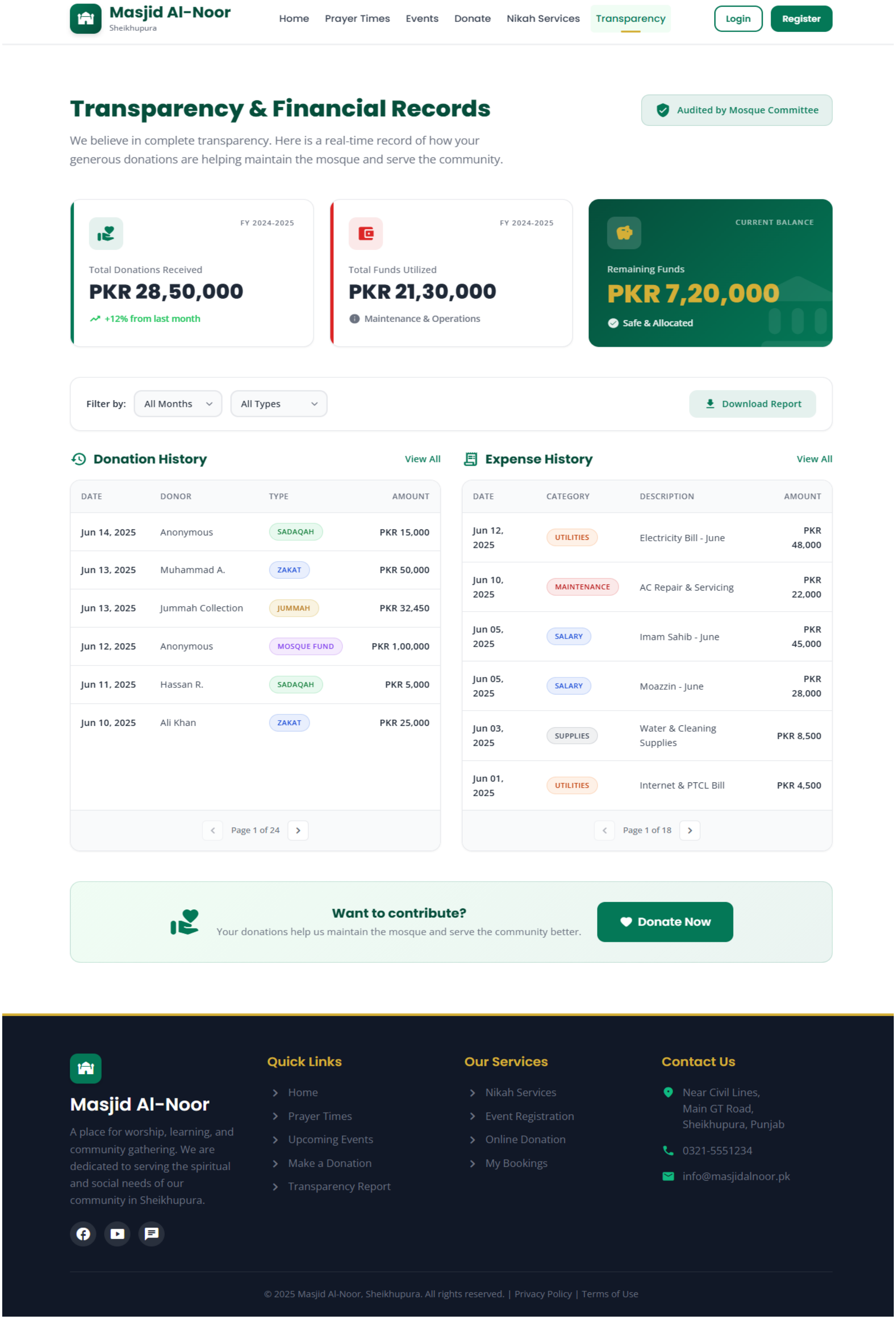
Near Civil Lines,
Main GT Road,
Sheikhupura, Punjab

0321-5551234

info@masjidalnoor.pk

© 2025 Masjid Al-Noor, Sheikhupura. All rights reserved. | Privacy Policy | Terms of Use

Figure 18 Login page design



Transparency & Financial Records

Audited by Mosque Committee

We believe in complete transparency. Here is a real-time record of how your generous donations are helping maintain the mosque and serve the community.

FY 2024-2025
Total Donations Received
PKR 28,50,000
+12% from last month

FY 2024-2025
Total Funds Utilized
PKR 21,30,000
Maintenance & Operations

CURRENT BALANCE
Remaining Funds
PKR 7,20,000
Safe & Allocated

Filter by: All Months | All Types | Download Report

Donation History | View All

DATE	DONOR	TYPE	AMOUNT
Jun 14, 2025	Anonymous	SADAQAH	PKR 15,000
Jun 13, 2025	Muhammad A.	ZAKAT	PKR 50,000
Jun 13, 2025	Jummah Collection	JUMMAH	PKR 32,450
Jun 12, 2025	Anonymous	MOSQUE FUND	PKR 1,00,000
Jun 11, 2025	Hassan R.	SADAQAH	PKR 5,000
Jun 10, 2025	Ali Khan	ZAKAT	PKR 25,000

Page 1 of 24

Expense History | View All

DATE	CATEGORY	DESCRIPTION	AMOUNT
Jun 12, 2025	UTILITIES	Electricity Bill - June	PKR 48,000
Jun 10, 2025	MAINTENANCE	AC Repair & Servicing	PKR 22,000
Jun 05, 2025	SALARY	Imam Sahib - June	PKR 45,000
Jun 05, 2025	SALARY	Moazzin - June	PKR 28,000
Jun 03, 2025	SUPPLIES	Water & Cleaning Supplies	PKR 8,500
Jun 01, 2025	UTILITIES	Internet & PTCL Bill	PKR 4,500

Page 1 of 18

Want to contribute?
Your donations help us maintain the mosque and serve the community better.
Donate Now

Masjid Al-Noor

A place for worship, learning, and community gathering. We are dedicated to serving the spiritual and social needs of our community in Sheikhupura.

Quick Links
- Home
- Prayer Times
- Upcoming Events
- Make a Donation
- Transparency Report

Our Services
- Nikah Services
- Event Registration
- Online Donation
- My Bookings

Contact Us

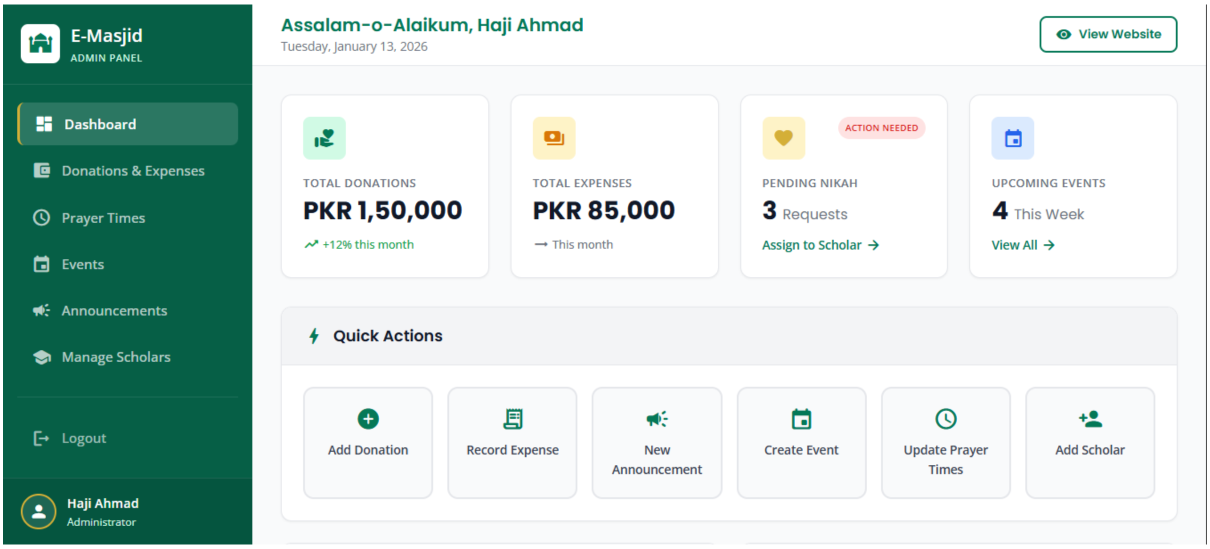
Near Civil Lines,
Main GT Road,
Sheikhupura, Punjab

☎ 0321-5551234

info@masjidalnoor.pk

© 2025 Masjid Al-Noor, Sheikhupura. All rights reserved. | Privacy Policy | Terms of Use

Figure 19 Donation Transparency page design



E-Masjid
ADMIN PANEL

- Dashboard
- Donations & Expenses
- Prayer Times
- Events
- Announcements
- Manage Scholars
- Logout

Haji Ahmad
Administrator

Assalam-o-Alaikum, Haji Ahmad
Tuesday, January 13, 2026

View Website

TOTAL DONATIONS
PKR 1,50,000
+12% this month

TOTAL EXPENSES
PKR 85,000
→ This month

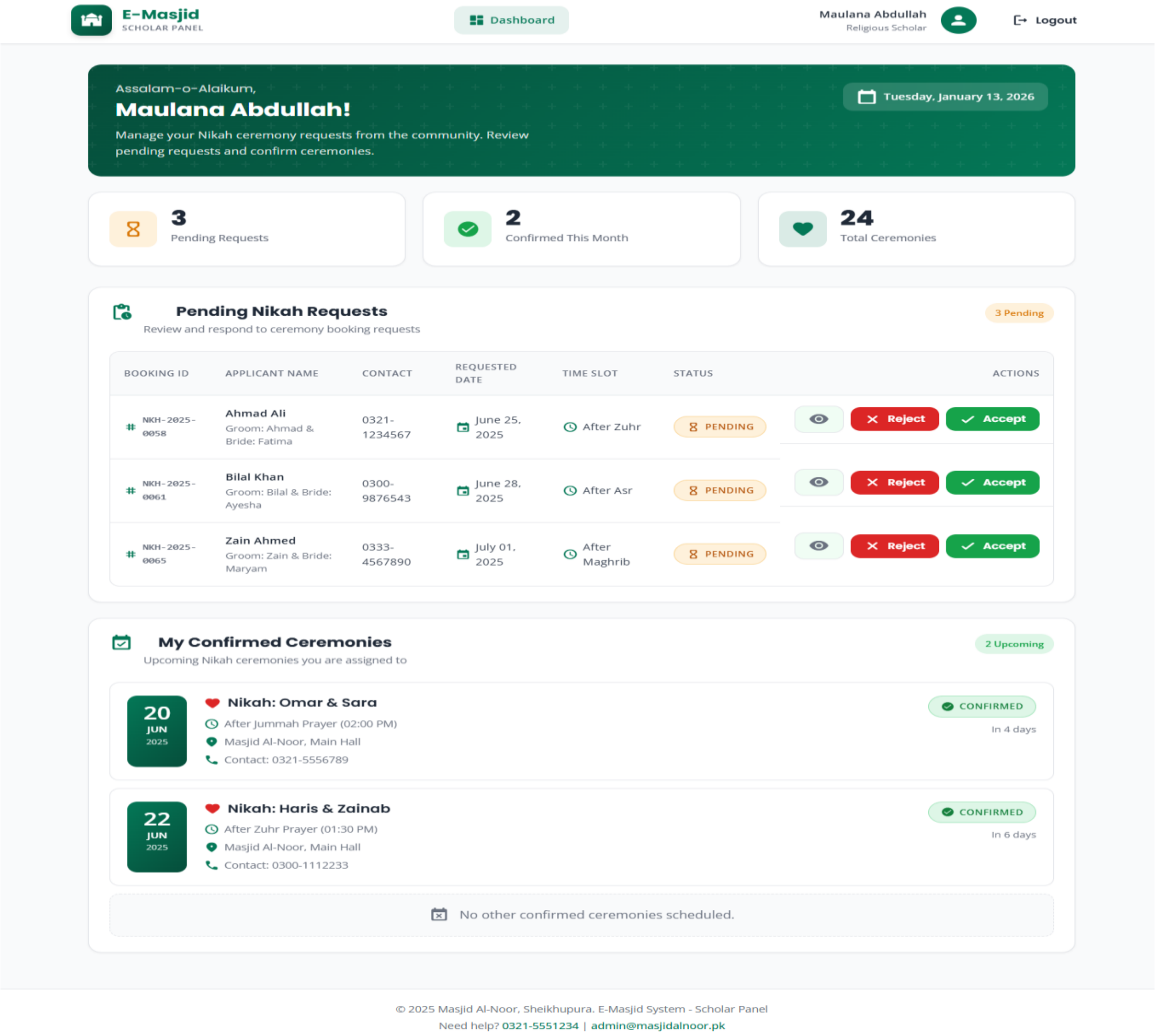
ACTION NEEDED
PENDING NIKAH
3 Requests
Assign to Scholar →

UPCOMING EVENTS
4 This Week
View All →

Quick Actions

Add Donation | Record Expense | New Announcement | Create Event | Update Prayer Times | Add Scholar

Figure 20 Admin Dashboard design



E-Masjid
SCHOLAR PANEL

Dashboard

Maulana Abdullah
Religious Scholar

Logout

Assalam-o-Alaikum,
Maulana Abdullah!
Manage your Nikah ceremony requests from the community. Review pending requests and confirm ceremonies.

Tuesday, January 13, 2026

3 Pending Requests

2 Confirmed This Month

24 Total Ceremonies

Pending Nikah Requests
Review and respond to ceremony booking requests

3 Pending

BOOKING ID	APPLICANT NAME	CONTACT	REQUESTED DATE	TIME SLOT	STATUS	ACTIONS
# NKH-2025-0058	Ahmad Ali Groom: Ahmad & Bride: Fatima	0321-1234567	June 25, 2025	After Zuhr	PENDING	Reject Accept
# NKH-2025-0061	Bilal Khan Groom: Bilal & Bride: Ayesha	0300-9876543	June 28, 2025	After Asr	PENDING	Reject Accept
# NKH-2025-0065	Zain Ahmed Groom: Zain & Bride: Maryam	0333-4567890	July 01, 2025	After Maghrib	PENDING	Reject Accept

My Confirmed Ceremonies
Upcoming Nikah ceremonies you are assigned to

2 Upcoming

20 JUN 2025
Nikah: Omar & Sara
After Jummah Prayer (02:00 PM)
Masjid Al-Noor, Main Hall
Contact: 0321-5556789
CONFIRMED
In 4 days

22 JUN 2025
Nikah: Haris & Zainab
After Zuhr Prayer (01:30 PM)
Masjid Al-Noor, Main Hall
Contact: 0300-1112233
CONFIRMED
In 6 days

No other confirmed ceremonies scheduled.

© 2025 Masjid Al-Noor, Sheikhupura. E-Masjid System - Scholar Panel
Need help? 0321-5551234 | admin@masjidalnoor.pk

Figure 21 Scholar page design

2. Screen Objects and Actions

Use Case 1: Making an Online Donation

Screen Objects:

1. **Donation Amount Field**: Text box to enter donation amount.
2. **Donation Type Dropdown**: Select Zakat, Sadaqah, or Mosque Fund.
3. **Card Details Form**: Fields for card number, expiry, CVC.
4. **Donate Now Button**: Green button to submit donation.

Actions:

1. **User enters amount**: System validates it's a positive number.
2. **User selects donation type**: System shows description of that type.
3. **User enters card details**: System validates card format.
4. **User clicks Donate Now**: System processes payment via Stripe.
5. **Payment successful**: Shows green "Donation Successful" message on the dashboard.
6. **Payment failed**: Shows red "Payment Failed" message with retry option.

Use Case 2: Admin Creating an Event

Screen Objects:

1. **Event Title Field**: Text box for event name.
2. **Date and Time Pickers**: Calendar and time selectors.
3. **Description Box**: Large text area for event details.
4. **Location Field**: Text box for event location.
5. **Max Participants Field**: Number field for attendance limit.
6. **Publish Button**: Blue button to publish event.
7. **Save Draft Button**: Gray button to save for later.

Actions:

1. **Admin enters event details**: System validates all required fields.
2. **Admin sets date/time**: System checks date is not in past.
3. **Admin sets max participants**: System validates positive number.
4. **Admin clicks Publish**: System creates event and shows on website.
5. **Event published**: Shows green "Event Published Successfully".
6. **Validation error**: Shows red message next to incorrect field.

4.8 Design Decisions

This section explains the main design choices we made for the E-Masjid System and why we chose them.

Architecture Pattern Selection

We decided to use the MVC pattern for our system. This means we separate our code into three main parts which is model, view and controller. This makes our code cleaner and easier to fix if something goes wrong.

Technology Stack MERN

We are using the MERN stack for our project. We chose this because all parts use JavaScript, which makes development faster. React helps us create reusable components, and Node.js can handle many users at once.

Database System

We picked MongoDB instead of traditional SQL databases because it works naturally with JavaScript and Node.js. It can handle lots of data when many people use the system and it is free to use for our project size. We tried MySQL first but found MongoDB easier for our type of data.

Pay Gateway Integration

We chose Stripe for online donations because it is very secure and handles card details safely and many other projects use it successfully. Stripe has good documentation that helped us learn and it is reliable and processes payments quickly.

Deployment Strategy

We plan to deploy the system on cloud services because it is more reliable than our own computers and can handle more users during busy times. It automatically backs up data and it is affordable for a mosque budget.

4.9 Summary

This Software Design Specification show the complete technical plan for our E-Masjid System. We have explained the MVC architecture, MERN technology, database design, and user interfaces. The design describes all functional requirements and provides clear guidance for development. Following this document we will ensure to build a reliable system that meets the mosque needs.

References

References

1. Article in a Journal

[1] M. Ahmad, A. Hassan, and S. Khan, "Trust and Transparency in Religious Charitable Organizations in Pakistan," *Journal of Islamic Management Studies*, vol. 12, no. 3, pp. 45-62, 2019.

[2] F. Khan, "Digital Transformation of Religious Institutions: A Case Study of Mosques in Urban Pakistan," *Pakistan Journal of Information Technology*, vol. 8, no. 2, pp. 112-128, 2020.

2. World Wide Web

[3] Meta Platforms Inc., "React Documentation," *React*. [Online]. Available: https://react.dev/. [Accessed: Sep 18, 2025].

[4] OpenJS Foundation, "Node.js Documentation," *Node.js*. [Online]. Available: https://nodejs.org/en/docs/. [Accessed: Oct. 15, 2025].

[5] MongoDB Inc., "MongoDB Manual," *MongoDB*. [Online]. Available: https://www.mongodb.com/docs/manual/. [Accessed: Nov 1, 2025].

[6] Automattic Inc., "Mongoose Documentation," *Mongoose*. [Online]. Available: https://mongoosejs.com/docs/. [Accessed: Nov 10, 2025].

[7] Stripe Inc., "Stripe API Reference," *Stripe*. [Online]. Available: https://stripe.com/docs/api. [Accessed: Dec 17, 2025].

[9] Auth0, "Introduction to JSON Web Tokens," *JWT.io*. [Online]. Available: https://jwt.io/introduction. [Accessed: Jan. 02, 2026].

[10] Draw.io User Manual for UML Diagrams. [Online].
Available: https://www.drawio.com/. [Accessed: Dec 2025].