

Spiritual Deval

Submitted by:

Andree Ramirez

Andrea Diaz

Kevin Flannery

Eastern Washington University

November 6th, 2024

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Project Description

Spiritual Deval is an all-encompassing web application created to improve the operational and community management processes for spiritual temples. The platform is designed to serve as a communication hub, donation portal, and event management system, all in one user-friendly interface. For temple members, Spiritual Deval provides real-time updates on upcoming spiritual activities, events, and programs, while also offering a space to share spiritual content and engage with other members.

The platform includes a robust donation system, enabling users to make secure one-time or recurring contributions to support the temple. Administrators are empowered with an efficient backend system to manage user data, track donations, plan events, and oversee the temple's financial health, all within an integrated environment. By centralizing these functions, the application enhances both the member experience and administrative efficiency, ensuring that the temple can continue to grow its community and resources in a sustainable manner.

Spiritual Deval is designed to streamline the administrative workload while fostering a sense of connection among the temple's members, allowing for smoother operations and deeper engagement within the spiritual community.

User Stories and Scenarios

User Story 1: Member Registration

U1: As a temple member, I want to register for an account so that I can access temple updates and make donations.

Feature: Member Registration

Scenario: Successful registration

- Given I am on the registration page
- When I enter my name, email, and a valid password
- And I click the "Register" button
- Then I should receive a confirmation email
- And I should be redirected to the login page

Scenario: Unsuccessful registration due to missing information

- Given I am on the registration page
- When I leave the password field blank
- And I click the "Register" button
- Then I should see an error message "Password is required"
- And I should remain on the registration page

User Story 2: Donation Submission

U2: As a potential donor, I want to submit a one-time donation so that I can contribute to the temple's cause.

Feature: Donation Submission

Scenario: Successful one-time donation

- Given I am on the donation page
- When I select "One-time donation" and enter my payment details
- And I click the "Donate" button
- Then I should see a confirmation message "Thank you for your donation!"
- And I should receive a receipt in my email

Scenario: Unsuccessful donation due to invalid payment details

- Given I am on the donation page
- When I enter an invalid credit card number
- And I click the "Donate" button
- Then I should see an error message "Invalid payment information"
- And the payment should not be processed

User Story 2.1: Recurring Donation Submission

U2.1: As a potential donor, I want to submit a recurring donation so that I can contribute to the temple's cause periodically.

Feature: Recurring Donation Submission

Scenario: Successful recurring donation

- Given I am on the donation page
- When I select "Recurring donation", enter my payment details, and select how frequently I would like to donate (Monthly, Quarterly, Yearly)
- And I click the "Set Recurring Donation" button
- Then I should see a confirmation message "Thank you for your donation!"
- And I should receive a receipt in my email

Scenario: Unsuccessful recurring donation due to invalid payment details

- Given I am on the donation page

- When I select "Recurring donation", enter invalid payment details, and select how frequently I would like to donate
- And I click the "Set Recurring Donation" button
- Then I should see an error message "Invalid payment information"
- And the payment should not be processed

Scenario: Unsuccessful recurring donation due to not specifying donation frequency

- Given I am on the donation page
- When I select “Recurring donation”, enter valid CC information, but do not select the donation frequency
- And I click the “Set Recurring Donation” button
- Then I should see an error message “Please Specify Donation Frequency”
- And the payment should not be processed

User Story 3: Event Participation

U3: As a temple member, I want to register for upcoming events so that I can participate in temple activities.

Feature: Event Registration

Scenario: Successful event registration

- Given I am logged in as a temple member
- When I view the event calendar or home page
- And I select an event and click "Register"
- Then I should see a message "You have successfully registered for this event"
- And the event should appear in my profile’s upcoming events list

Scenario: Event registration failure due to no login

- Given I am not logged in
- When I attempt to register for an event

- Then I should be prompted to log in
- And I should be redirected to the login page

User Story 4: Administrator Donation Management

U4: As an administrator, I want to track all user donations so that I can manage temple contributions efficiently.

Feature: Donation Management

Scenario: View donations report

- Given I am logged in as an administrator
- When I access the "Donations" tab
- Then I should see a list of all user donations
- And I should be able to filter donations by date, amount, and donor name

Scenario: Failure to access donation records without admin privileges

- Given I am logged in as a regular temple member
- When I try to access the "Donations" tab
- Then I should receive an error message "Access restricted to administrators"

User Story 5: Content Sharing

U5: As a temple member, I want to share spiritual content so that I can contribute to the temple's online community.

Feature: Content Sharing

Scenario: Successful content sharing

- Given I am logged in as a temple member
- When I navigate to the "Share Content" page
- And I upload an image or write a post

- Then I should see a confirmation message "Your content has been shared"
- And the content should appear in the community feed

Scenario: Failed content sharing due to file size limit

- Given I am logged in as a temple member
- When I try to upload a file larger than the allowed size
- Then I should see an error message "File size exceeds the limit"
- And the content should not be uploaded

User Story 6: Admin Event Creation

U6: As a temple admin, I want to create a temple event to be displayed

Feature: Event Creation

Scenario: Successful Event Creation

- Given I am signed in as an Admin on the Home Page
- When I click "Add New Event"
- When I fill in the Title, Description, and date of the event (with the option of adding a photo) and click "Publish"
- That event should be displayed on the home page/calendar page of the site

Scenario: Unsuccessful Event Creation due to missing information

- Given I am signed in as an Admin on the Home Page
- When I click "Add New Event"
- When I fill in the Title and leave the Description of the event blank (or vice versa) and click "Publish"
- I will get an error message prompting me to fill in whichever field I left blank (Title or Description or both)

User Story 7: Admin Event Registration Viewing

U7: As a temple admin, I want to view all registrations to events in one place

Feature: Event Registration Viewing

Scenario: Successful Event Registration Viewing

- Given I am signed in as an Admin
- When I click on the ‘View Registrations’ tab
- When I click on the Event that I want to view
- I should have a list of links to all member profiles that have registered for that event

User Story 8: User Change Password

U8: As a user, I want to be able to change my password if I forget it.

Feature: Change Password

Scenario: Successful Password Change

- Given I have forgotten my password
- When I click on the ‘Forgot Password?’ link and enter the email associated with my account
- I will receive an email with a link to reset my password
- When I click the link, I will be prompted to enter a new password in two separate fields
- If the passwords match, I will be able to login with my new password
- If the passwords don’t match, I’ll be prompted to make them match

User Story 9: Volunteer Event Registration

U?????: As a volunteer, I want to be able to register for events based on my availability and skillset.

Feature: Volunteer Event Registration

Scenario: Successful Volunteer Event Registration

- Given I am logged in as a user
- When I view a list of upcoming events
- And I can select an event to volunteer for based on my availability and skillset
- When I click the ‘volunteer’ button, then I will be registered for that event
- I should receive a confirmation of my registration for the event, and be asked if I want to receive updates on that event and future volunteer opportunities.
-

Scenario: Event Full – Cannot Register

- Given I am logged in as a user
- When I view a list of upcoming events
- And I can select an event to volunteer for based on my availability and skillset
- When I click the ‘volunteer’ button, then I will be notified that the event has reached its maximum number of volunteers
- And I will be unable to register for that event
- I should be presented with alternative events that still have available volunteer spots and be asked if I want to receive updates on that event and future opportunities.

Functional Requirements

User Management

Functional Requirement	Description / Specification
[FR-1(U1)] User Registration and Authentication	There will be a feature that allows users to register and log in using valid credentials.
Priority	Level 0
[FR-2(U8)] User Profile Management	There will be a feature which allows users to change their password if needed.
Priority	Level 0
[FR-3(U1, U3)] User Event Registration	There will be a feature which allows logged in users to register for events
Priority	Level 0

Admin Management

Functional Requirement	Description / Specification
[FR-4(U4)] Donation Statistic Viewing	There will be a feature which allows administrators to view donation statistics.
Priority	Level 0
[FR-5(U7)] Event Registration Statistics Viewing	There will be a feature which allows administrators to view event registration information.
Priority	Level 0
[FR-6(U6)] Event Creation	There will be a feature that allows administrators to create events that temple members logged in may register to.
Priority	Level 0

Donation Management

Functional Requirement	Description / Specification
[FR-7(U2, U2.1)] Donation Placement	There will be a feature where users can make donations (one-time or recurring).
Priority	Level 0

Volunteer Management

Functional Requirement	Description / Specification
[FR-8(U9)] Volunteer Management	There will be a feature to register for event volunteering opportunities based on availability and skillsets.
Priority	Level 0
[FR-9(U9)] Event Subscription and Updates	There will be a feature that allows volunteers when they register to volunteer to be updated about changes to that event, and also ask if

	they want to receive info about more opportunities.
Priority	Level 0

Diagrams and Use Cases

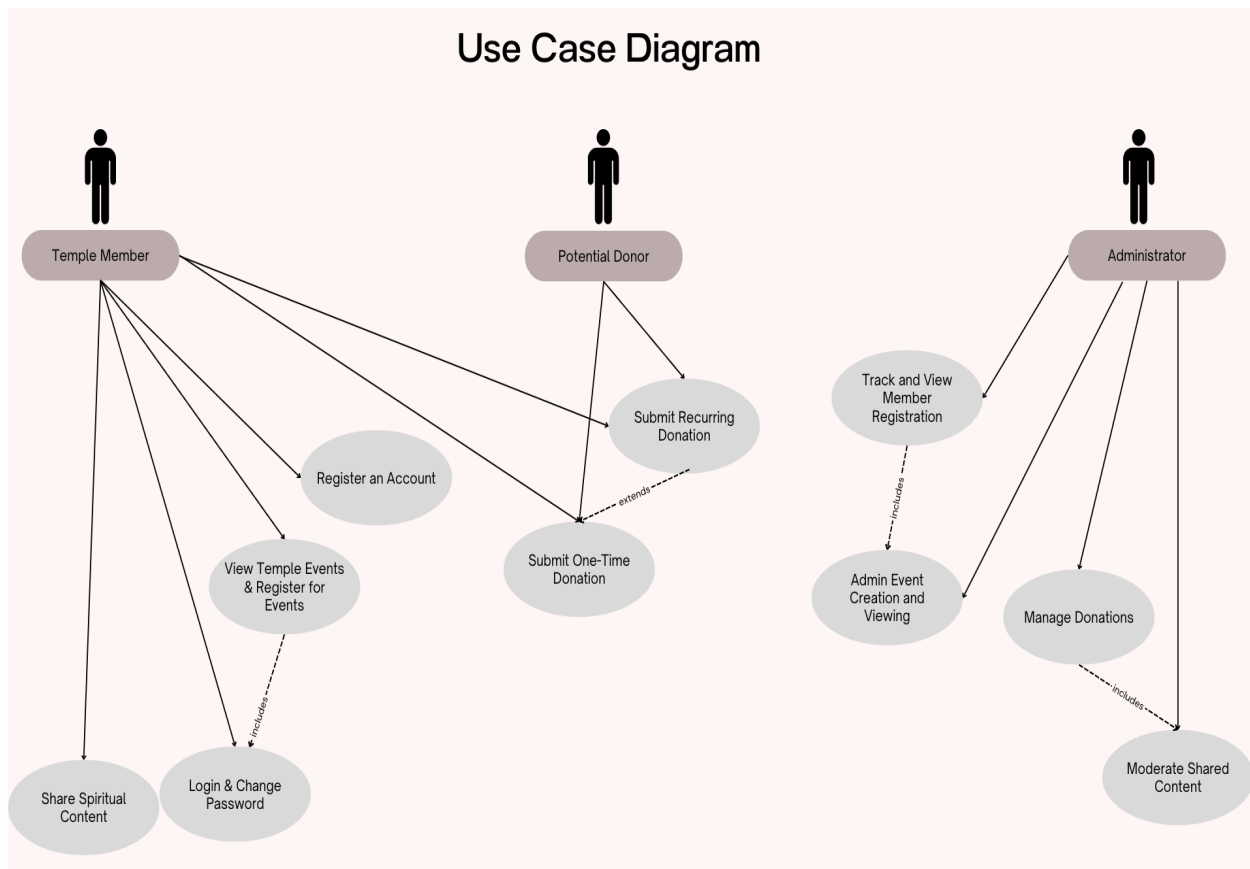


Figure 1: Spiritual Deval System Use Case Diagram

Use Case 1: Make a Donation

- Actors: Temple Donor
- Preconditions: User is on the temple website
- Postconditions: Donation is processed, and a confirmation email is sent to the customer.
- Main Flow:
 - * User navigates to the Donation Page.
 - * Selects kind of donation (One-time or Recurring)
 - * Enters payment and details.
 - * Confirms the donation via email.

- Alternative Flow: If payment fails, the user retries payment with a different method.

- Related Requirements: FR-7, FR-8

Use Case 2: Register for Account

- Actors: Temple Member

- Preconditions: User is on the temple website

- Postconditions: User has valid login credentials.

- Main Flow:

- * User navigates to the Log in page and clicks ‘Create Account’

- * Enters name, email, and password and clicks ‘Create Account’

- * Confirms account creation via email.

- Alternative Flow: If account creation fails, the user retries with a different email.

- Related Requirements: FR-1

Use Case 3: Register for Event

- Actors: Temple Member

- Preconditions: User is logged in on the temple website

- Postconditions: User is registered for event and a confirmation email is sent to the customer.

- Main Flow:

- * User navigates to the Home Page.

- * Selects ‘Register for Event’ button

- * The button changes color and displays ‘Registered!’

- Alternative Flow: If user isn’t logged in, they are redirected to the login screen.

- Related Requirements: FR-1, FR-3

Use Case 4: Manage Event Registrations

- Actors: Administrator

- Preconditions: User is logged into the administrator account on the temple website.

- Postconditions: Administrator can view, approve, or cancel event registrations.

- Main Flow:

- * Administrator clicks on the ‘View Registrations’ tab.
- * Views a list of all upcoming events with their registration counts
- * Selects an event to view detailed registration information.
- * Sees a list of links to all member profiles that have registered for that event.
- Alternative Flow: If the administrator cannot access the registrations, an error message is displayed.
- Related Requirements: FR-3, FR-5, FR-6

Use Case 5: View Donation Information

- Actors: Administrator
- Preconditions: User is logged into the administrator account on the temple website.
- Postconditions: Admin can view donation statistics
- Main Flow:
 - * User navigates to the ‘Donation Information’ tab.
 - * Sees list of one-time donations accompanied by user profiles and list of active recurring donors.
 - * There are different ways of viewing the donation data (inquire with sponsor about specifics)
- Alternative Flow: If user isn’t logged in as an admin, they can’t find this page.
- Related Requirements: FR-7, FR-8, FR-4

Use Case 6: Create Event

- Actors: Administrator
- Preconditions: User is logged into the administrator account on the temple website.
- Postconditions: Event is created and displayed on the home page/calendar page of the site
- Main Flow:
 - * The administrator navigates to the “Event Management” section of the platform.
 - * The administrator selects the option to “Add New Event.”
 - * The administrator fills in the required fields, including the event title, description, date, and optional image.
 - * The administrator clicks the “Publish” button.

- * The system confirms the event creation and displays the event on the calendar and home page.
- Alternative Flow: If the administrator fails to provide required details (e.g., missing title or description), an error message prompts the administrator to fill in the missing information.
- Related Requirements: FR-6

Use Case 7: Change Password

- Actors: User
- Preconditions: User has forgotten their password.
- Postconditions: User has a new password and can log in.
- Main Flow:
 - * The user clicks ‘Forgot Password’
 - * The user enters their email address, and an email is sent to them
 - * The user clicks the reset password link in the email and enters their new password twice, ensuring that they match
 - * The user clicks the “Save New Password” button and can login with their new password.
- Alternative Flow: If the passwords don't match, a message displays in red stating so until they do match
- Related Requirements: FR-2

Use Case 8: Register for Volunteer Event

- Actors: Volunteer (User)
- Preconditions: Volunteer is logged in and can access a list of upcoming events.
- Postconditions: Volunteer is registered for the selected event and has the option to subscribe to event updates.
- Main Flow:
 - *The volunteer navigates to the list of upcoming events.
 - *The system displays the list of events with full details.
 - *The volunteer selects an event and clicks the “Volunteer” button.
 - *The system registers the volunteer for the event.
 - *The system sends a confirmation of successful registration.

*The system asks if the volunteer wants to receive updates about the event and future opportunities.

– Alternative Flow: If the event is already full or the volunteer doesn't meet the required skills, the system notifies the volunteer and provides alternative events.

– Related Requirements: FR-8

Non-Functional Requirements

Non-Functional Requirement	Description
[NFR-1] Security	The system shall ensure secure payment processing using encryption.
[NFR-2] Performance	The system should respond quickly to user interactions.
[NFR-3] Scalability	The system should be capable of accommodating an increasing number of users and transactions without compromising performance or functionality.
[NFR-4] Usability	The system will be easy to use for anyone visiting.
[NFR-5] Availability	The system will have an uptime of 99%.

Traceability Matrix

Functional Requirement	Use Case	User Story	Priority
FR-1: User Registration and Authentication	UC-2: Register for Account UC-3: Register for Event	US1: As a temple member, I want to register for an account	Level 0
FR-2: User Profile Management	UC-7: Change Password	US8: As a user, I want to be able to change my password	Level 0
FR-3: User Event Registration	UC-3: Register for Event	US1: As a temple member, I want to register for an account US3: As a temple member, I want to register for upcoming events	Level 0
FR-4: Donation Statistic Viewing	UC-5: View Donation Information	US4: As a temple admin, I want to track all user donations so that I can manage temple contributions	Level 0
FR-5: Event Registration Statistics Viewing	UC-4: Manage Event Registrations	US6: As a temple admin, I want to create a temple event to be displayed.	Level 0
FR-6: Event Creation for Admins	UC-4: Mange Event Registrations	US6: As a temple admin, I want to create a temple event to be displayed	Level 0
FR-7: Donation Placement (One-time and Recurring)	UC-1: Make a Donation	US2, US2.1: As a potential donor, I want to submit a one-time donation so that I can contribute to the temple's cause. Also, as a potential donor, I want to submit a recurring donation so that I can contribute to the temple's cause periodically.	Level 0

FR-8: Volunteer Management	UC-8: Register for Volunteer Event	US9: As a volunteer, I want to register for events based on my availability and skillset.	Level 0
FR-9: Event Subscription and Updates	UC-8: Register for Volunteer Event	US9: As a volunteer, I want to register for events based on my availability and skillset.	Level 0

Evaluation of Existing Solution

As our project is being developed from scratch, we currently have no existing codebase or client platform. However, we plan to address key areas to ensure a robust foundation:

1. Setup Steps

Dependencies: We will choose modern languages and frameworks such as C# and Blazor, and document setup procedures for consistency.

Configuration: A detailed configuration guide will be created to assist developers.

2. Anticipated Limitations

Outdated Technologies: We will avoid using obsolete technologies by selecting up to date options.

Modularity: Our architecture will prioritize modular design for easier maintenance.

3. Proposed Enhancements

Modern Frameworks: Adopting frameworks like Blazor will enhance development efficiency.

Automated Testing: We will implement a robust testing strategy to ensure reliability and facilitate refactoring.

4. User Experience

Scalability: The architecture will be designed for scalability to accommodate future growth.

User Centered Design: We will conduct user research to ensure a seamless user experience.

By focusing on these areas, we aim to create a maintainable and efficient project from the outset.

Individual Contributions Summary

Andrea: Contributed to user stories, functional requirements, visuals for use case diagram, and traceability matrix.

Andree: Team leader, coordinated meetings with our mentor, contributed to project description, non-functional requirements, use cases, and traceability matrix.

Kevin: Contributed to functional requirements, use cases, non-functional requirements, and traceability matrix.