

Project Assignment 1

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1. Functional Requirements (FRs)

- **FR-01:** Provide a readable calendar that allows staff to add and update events.
- **FR-02:** Allow each calendar event to link to a dedicated event detail page.
- **FR-03:** Allow event detail pages to include ticket purchase links via Zeffy (or other approved payment methods).
- **FR-04:** Support embedding the SBYEC Facebook feed on the homepage.
- **FR-05:** Enable staff to create structured subpages for different lesson types (Rising Stars, Private Lessons, Group Lessons).
- **FR-06:** Enable staff to update About/Team pages and Sponsor/Partner pages with minimal technical knowledge.
- **FR-07:** Allow visitors to submit inquiries through contact forms, with submissions delivered to SBYEC's email.
- **FR-08:** Enable staff to publish a newsletter signup form for visitors.
- **FR-09:** Allow administrators to manage website content using WordPress admin accounts.
- **FR-10:** Provide an AI chatbot that responds to common visitor questions

2. Non-Functional Requirements (NFRs)

- **NFR-01:** The website shall load the homepage within 3 seconds under normal broadband conditions.
- **NFR-02:** The website shall maintain 99% uptime during the semester of project delivery.
- **NFR-03:** The website shall be responsive, displaying correctly on desktop, tablet, and mobile devices.
- **NFR-04:** The AI chatbot shall answer 90% of basic user questions with correct predefined responses.
- **NFR-05:** The website shall allow staff with minimal training to update pages via WordPress.
- **NFR-06-Added after GenAI:** The website shall ensure that all forms and admin logins use HTTPS encryption.

- **NFR-07-Added after GenAI:** The website shall follow WCAG 2.2 AA accessibility guidelines

3. User Stories with Acceptance Scenarios

- **US-01:**

As a customer, I want to view a calendar of events so that I can see upcoming activities at SBYEC.

Scenario 1: Positive

Given I am on the homepage

When I click on “Calendar”

Then I should see a readable monthly view of events

Scenario 2: Negative

Given I am on the calendar page

When no events are scheduled for the month

Then I should see the message “No events scheduled this month”

- **US-02:**

As a customer, I want to click on a calendar event and see its details so that I can decide whether to attend.

Scenario 1: Positive

Given I am viewing the calendar

When I click on the “Halloween Event”

Then I should see an event detail page with time, description, and ticket link

Scenario 2: Negative

Given I am viewing the calendar

When I click on an event that has no details

Then I should see the message “Event details coming soon”

- **US-03:**

As an SBYEC staff member, I want to update the About page so that the site shows the correct staff team.

Scenario 1: Positive

Given I am logged in as an admin

When I edit the About page and click “Save”

Then the updated staff information should appear on the live website

Scenario 2: Negative

Given I am logged in as an admin

When I leave required fields blank and click “Save”

Then I should see an error message “Please complete all required fields.”

● US-04:

As a customer, I want to ask simple questions on the website so that I can quickly get answers without calling or emailing.

Scenario 1: Positive

Given I am on the homepage

When I type “What time do lessons start?” into the chatbot

Then the chatbot should respond with the stored answer: “Lessons typically start at 10 AM.”

Scenario 2: Negative

Given I am on the homepage

When I ask the chatbot a question outside its knowledge base

Then the chatbot should respond: “I’m not sure, please contact us by email.”

● US-05:

As a customer, I want to see SBYEC’s latest Facebook posts on the homepage so that I can stay updated without leaving the website.

Scenario 1: Positive

Given I am on the homepage

When SBYEC posts a new update on Facebook

Then I should see the same post displayed in the homepage feed

Scenario 2: Negative

Given I am on the homepage

When there are no recent Facebook posts

Then I should see the message “No recent updates available”

● **US-06:**

As a customer, I want to sign up for the newsletter so that I can receive updates about events and programs by email.

Scenario 1: Positive

Given I am on the homepage

When I enter a valid email in the newsletter form

And I click “Subscribe”

Then I should see a confirmation message “Subscription successful”

Scenario 2: Negative

Given I am on the homepage

When I enter an invalid email in the newsletter form

And I click “Subscribe”

Then I should see an error message “Please enter a valid email address”

● **US-07:**

As a customer, I want to view detailed pages for different lesson types so that I can choose the program that best fits my needs.

Scenario 1: Positive

Given I am on the “Lessons” page

When I click on “Rising Stars”

Then I should be taken to a dedicated page with details about the Rising Stars program

Scenario 2: Negative

Given I am on the “Lessons” page

When I click on a lesson type that has no content yet

Then I should see the message “Details coming soon”

● **US-08:**

As a customer, I want to submit an inquiry through a contact form so that I can ask questions without calling or visiting in person.

Scenario 1: Positive

Given I am on the “Contact Us” page

When I enter a valid name, email, and message

And I click “Submit”

Then my inquiry should be delivered to SBYEC’s email, and I should see a confirmation message.

Scenario 2: Negative

Given I am on the “Contact Us” page

When I leave the email field blank

And I click “Submit”

Then I should see the error message “Email is required”

● **US-09:**

As an administrator, I want to log in to WordPress and update website content so that I can keep the site accurate and up to date.

Scenario 1: Positive

Given I am on the WordPress login page

When I enter valid admin credentials

Then I should be redirected to the dashboard and see the content editing options

Scenario 2: Negative

Given I am on the WordPress login page

When I enter invalid credentials

Then I should see the error message “Invalid username or password”

● **US-10:**

As a customer, I want to buy tickets through a secure link on the event page so that I can register for events conveniently.

Scenario 1: Positive

Given I am on an event detail page

When I click “Buy Tickets” and complete payment through Zeffy

Then I should receive a confirmation that my purchase is successful

Scenario 2: Negative

Given I am on an event detail page

When I click “Buy Tickets,” but the payment fails

Then I should see an error message “Payment could not be processed, please try again”

4. Brainstorming and GenAI Reflection

Step A: Team Brainstorming

- Decision Point 1: A clear and staff-driven calendar with event detail pages.
- Decision Point 2: Linking event detail pages to Zeffy for purchasing tickets.
- Decision Point 3: Embedding the Facebook feed on the homepage and keeping the website easy to manage through WordPress.
- Decision Point 4: Making it easy for staff to update About, Team, and Sponsor pages.

Step B: GenAI-Assisted Brainstorming

- GenAI Suggestion 1: Require all forms and admin logins to use HTTPS encryption.
- GenAI Suggestion 2: Adopt WCAG 2.2 AA compliance to ensure the website is accessible to users with disabilities.
- GenAI Suggestion 3: Define measurable targets such as homepage loading time and overall responsiveness.

Step C: Refined Requirements & Stories

After reviewing the AI’s suggestions, we incorporated two new non-functional requirements into our list:

- **NFR-06:** All forms and admin logins must use HTTPS encryption.
- **NFR-07:** The website must follow WCAG 2.2 AA accessibility guidelines.

Step D: Reflection

In this exercise, we utilized ChatGPT. We experienced the powerful enabling capabilities of AI, whose suggestions were highly logical and whose responses appeared remarkably authentic.

Based on our experience, the AI's answers were exceptionally clear, comprehending nearly all our requirements and generating a beautifully formatted response. Simultaneously, the coverage was comprehensive, leaving no detail unaddressed. While some minor imperfections remained, it delivered an excellent response to our questions. However, in terms of creativity, we found the AI to be somewhat lacking. For instance, regarding functional requirements, it did not propose any implementable suggestions beyond our expectations. If prompted to “be creative,” its responses became impractical. Nevertheless, the AI effectively refined our non-functional requirements by identifying security concerns and standards we had overlooked. It suggested HTTPS encryption and WCAG 2.2 AA accessibility standards—areas our team members hadn't previously explored, so we adopted these recommendations. Overall, the AI functions more like an experienced programmer: it refines incomplete plans, offers suggestions, and proposes viable solutions. Yet it cannot generate groundbreaking ideas.