SENG2021 Deliverable 2

1 Introduction

"The Launch" is a platform to discover local music events. From festivals, concerts, to lives and fans meetings. It allows anyone to find, schedule and share music events that fuel their passions and enrich their lives.

2. Software Architecture

2.1 Server Side

"The Launch" will be hosted on a Linux virtual machine in Microsoft Azure Stack Hub. The server-side web application uses Python 3.x and Flask framework, it runs in a virtual environment on an Nginx server. MySQL will be used as the central database server. All communication with clients has to comply with public HTTPS, TCP/IP communication protocol standards.

2.2 Client Side

Users/Clients will be able to access "The Launch" only online. Being a web based application, the underlying client OS can be any PC operating system(Windows, Linux, MacOS, etc). Users/Clients are expected to use a modern ES5-compliant web browser such as Google Chrome, Mozilla Firefox, Safari or Internet Explorer 10 or newer to get full user experience.

As for the client-side programming, a combination of HTML, JavaScript and CSS will be used to create the logic of the website and generate dynamic web pages with the support of VueJS framework.

2.3 External Data Sources

Since the project highly relies on external information archives, the team has applied for access to many third-party APIs, the use of each API is listed below:

Google Calendar API - For adding events and notifications to a user's personal
Google Calendar
Bandsintown API - For obtaining details of events, artists, and links to ticket agents
Songkick API - For obtaining details of events and artists by a list of filters such as
venue, time or metro are.
Eventbrite API - This API has similar use as Songkick API but provides a more
extensive range of data. It also has an integrated checkout system.

2.4 Summary

In order to minimize the amount of time the team members have to spend on self-learning, the team decided the above web stacks as one of the team members had development experience based on these tools. Microsoft Azure is open for free to UNSW students, it also has a detailed documentation and instructions to help developers put their hands on. Hence that it makes the deployment easier and cheaper.

3. Initial Software Design

3.1 Updated Use Cases

Below are the updated list of user stories / use cases:

1. **Requirement:** There is no comment section for users to share their opinions about an event

Feature: Write comments

As a: User

So that: I can share my personal thoughts and opinions about an upcoming event

I want to comment about an event

GIVEN that I'm on a particular event page

WHEN I scroll down to the bottom of the page

THEN there is an input bar and a "Post" button to the right

WHEN I type in my comment

AND click the "Post" button

THEN I should see my comment appear in the list of comments

Feature: View comments

As a: User

So that: I can read what others think about the event **I want to** view previous comments by other users

GIVEN that I'm on a particular event page

WHEN I scroll down to the bottom of the page

THEN I can see comments posted by other users

Feature: Reply to comments

As a: User

So that: I can share my personal thoughts and opinions about an existing comment

I want to reply to the comment

GIVEN that I'm on a particular event page

WHEN I scroll down to the bottom of the page

THEN I can see comments posted by other users

WHEN I click on "Reply" under the comment

THEN then a new input field will appear

WHEN I type in my comment and click on the enter key

THEN I should see my reply under the original comment

2. Requirement: Event recommendations are not personalized or interactive

Feature: Recommend events based on user's music preference

As a: User

So that: I can see events that I am interested in

I want to see a personalized list of recommended events based on my music preferences

GIVEN that I sign up with a new account, and a pop-up window shows up prompting me to tick the music genres that I am interested in

WHEN I tick the Rock and Pop box and click save

AND I click on 'Events for you' button on the left sidebar

THEN I will be redirected to a page that lists all the events tagged under Rock and Pop.

Feature: Follow artists I'm interested in

As a: User

So that: I won't miss the events of particular artists **I want to** follow an artist that I am interested in

GIVEN that I am on a particular artist's page

WHEN I click on the 'Follow' button

AND I click on 'Events for you' button on the left sidebar

THEN I will be redirected to a page that lists all the events I may be interested in

WHEN I scroll down to the 'By Artists I Follow' subsection

THEN I will see all the events by artists I follow

Feature: View nearby events clearly on a map

As a: User

So that: I can visually and interactively see events that are nearby me

I want to see nearby events on an interactive map

GIVEN that I am on the home page

WHEN I scroll down to the bottom of the page

THEN Then there will be a map showing all the events that are held within 50km of my current location (by default)

WHEN I move around and readjust the map

THEN I will see all the events that are held within the parameters of the map

3. Requirement: Layout and design of the home page is unclear and not user-friendly

Feature: Display main events on the home page

As a: User

So that: I can see the most popular upcoming events

I want to have the main/popular events displaying on the home page

GIVEN that I am on the home page

THEN I will see a big display picture of the most popular event

WHEN I click on the right (or left) arrow

THEN I will see a picture of another popular event

Feature: Display short description of event

As a: User

So that: I can quickly have an idea of what an event will be about without having to click on

the event

I want to be able to see a brief description of the event when I put my cursor over it

GIVEN that I am on the 'Shows' page

WHEN I click scroll down to an event and put my cursor over it

THEN a short description of the event will appear

4. Requirement: Users cannot modify or update personal information after signing up

Feature: Edit user information on the profile page

As a: User

So that I can update information and reflect changes in my music interests

I want to edit my personal and profile information

GIVEN that I log in

WHEN I put my cursor over <my name> on the top right hand corner

AND I click on the 'My account' button

THEN then I will be redirected to a page where I can edit my name, phone number and email address

WHEN I change my name and click on the 'Update Info' button

THEN my name will be updated

5. Requirement: There is no music player

Feature: Play music on artist page

As a: User

So that: I can determine whether or not I will be interested in going to the artist's

event/concert

I want to be able to listen to the artists' music

GIVEN that I am on an artist page

WHEN I click on the "Preview Songs" button under the artist's photo

THEN the music from the artist's playlist will start playing

AND I will see the floating music player at the left bottom corner shows the track name and artist name

WHEN I click the pause button on the music player

THEN the music will stop playing

Feature: Automatically play music throughout the website

As a: User

So that: I can have a more immersive experience when I'm on the website **I want to** be able to listen to music while navigating through the website

GIVEN that I am on the home page

THEN music will start to play automatically from a random playlist

WHEN I click on the 'Shows' button on the top bar and I am redirected to the 'Shows' page

THEN the music will continue to play

WHEN I click the pause button on the music player

THEN the music will stop playing

6. **Requirement:** Users cannot save events onto their personal calendars and be notified before the event

Feature: Save events on Google Calendar

As a: User

So that: I can integrate the events that I am attending into my personal calendar

I want to save events on my personal calendar

GIVEN that I am on the 'Calendar' page where I can see all the upcoming events on a calendar

WHEN I click on an event

AND click the 'Add to Google Calendar' button

THEN I will be redirected to a page where I can save the event on Google calendar (Google Calendar API)

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Feature: Get notified before the event

As a: User

So that: I won't miss the event

I want to automatically set an alarm of the event time

GIVEN that I added an event to my personal calendar

THEN I will be given the option to set an alarm (a desired amount of time) before an event

WHEN I set the alarm 1 hour before the event

THEN the alarm will ring 1 hour before the event

7. **Requirement:** Sold out events are not labeled 'sold out'

Feature: Label sold-out events

As a: User

So that: I know if tickets for an event are still available

I want to see events marked as 'SOLD-OUT' if the tickets are not available

GIVEN that I am on an event page for an event that is sold out

THEN I will see a 'SOLD-OUT' sticker/label next to the name of the event

GIVEN that I am on the 'Shows' page

WHEN I come across a sold-out event

THEN I will see a 'SOLD-OUT' label on the thumbnail picture of the event

8. **Requirement:** Users cannot ask questions regarding any difficulties they've encountered while browsing the website

Feature: Submit enquiry form

As a: User

So that: I can let them know my concerns and ask them for help

I want to submit an enquiry

GIVEN that I am on the "Contact Us" page

THEN I will see an enquiry form

WHEN I fill in the fields and click "Submit"

THEN my enquiry will be sent to the customer service team

Feature: Receive email notification

As a: User

So that: I know if my enquiry has been answered

I want to receive email notification when my enquiry has been responded to

GIVEN that I have submitted an enquiry form and I receive a response

THEN I will receive an email notification with a preview of the response

WHEN I click on "See full response"

THEN I will be redirected to a page where I can read my original enquiry and the full response.

Feature: View enquiry response

As a: User

So that: I know how to fix the problem, or ask additional questions for more help

I want to read the response to my enquiry

GIVEN that I am on my profile page

WHEN I click on "My Enquiries"

THEN I will see any open enquiries and a short preview of the latest reply

WHEN I click on an open enquiry

THEN I will see the full conversation regarding my enquiry (original enquiry, replies.. etc)

Feature: Mark enquiry as resolved

As a: User

So that: I can indicate whether my enquiry has been resolved or not

I want to mark my enquiries as resolved

GIVEN that I am on "My Enquiries" page

WHEN I click on an open requiry

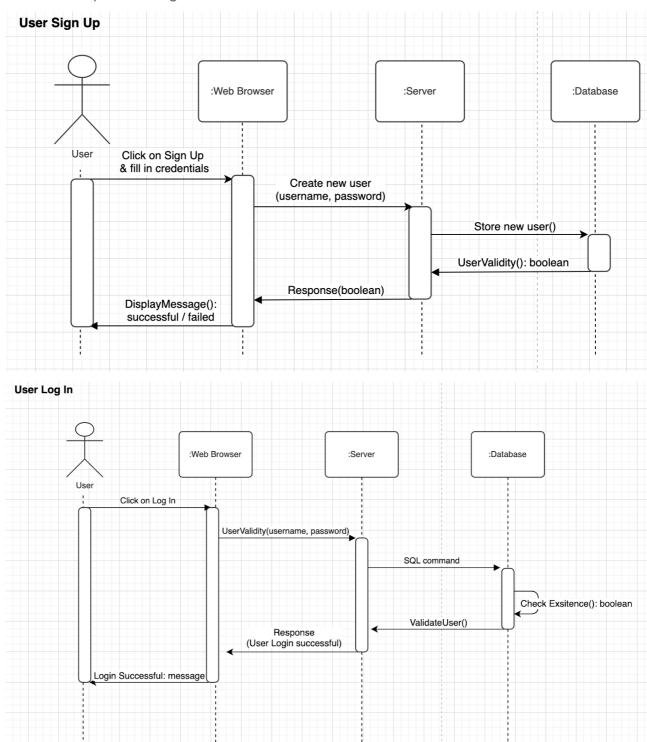
THEN there will be a "Mark as resolved" button on the side

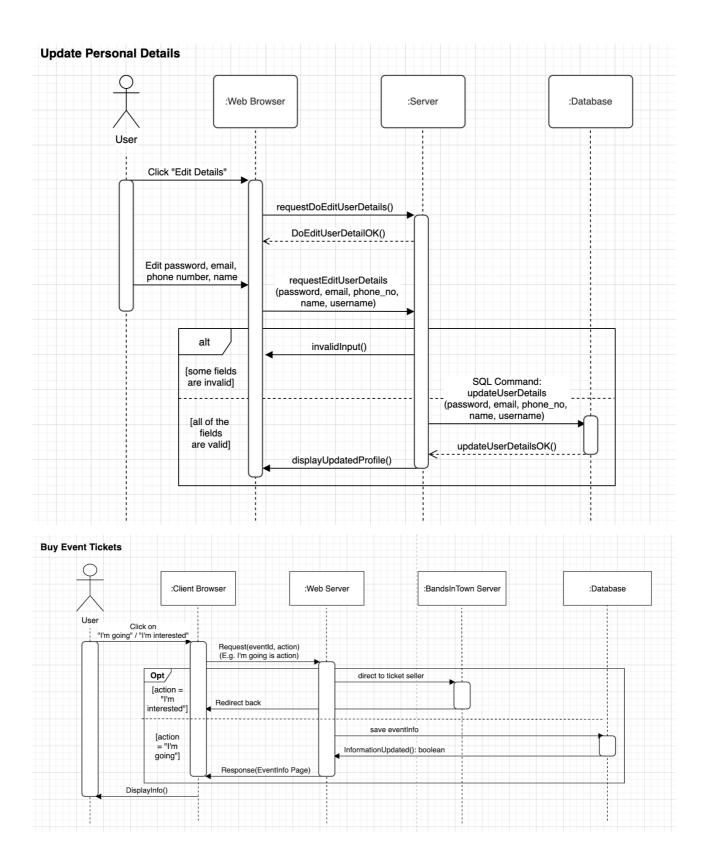
WHEN I click on the button

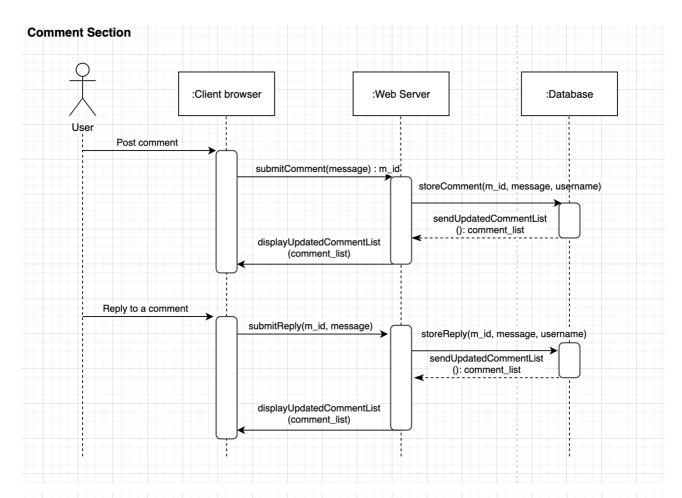
THEN it will remove the enquiry from the list of open enquiries

We decided to add new functions such as "Reply to Comments" which makes a more interesting user experience, whereby users have the ability to respond to comments and communicate to other users, as well as completely change the implementation of some requirements, such as having a "Customer Enquiry" feature instead of the previous "Live Chat" feature, which was a decision made to simplify our work load, as we had come to the conclusion that the implementation of a "Live Chat" would be too complicated and difficult.

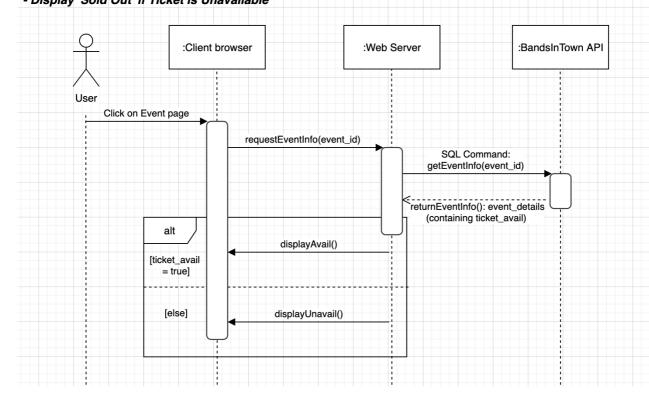
3.2 UML Sequence Diagram

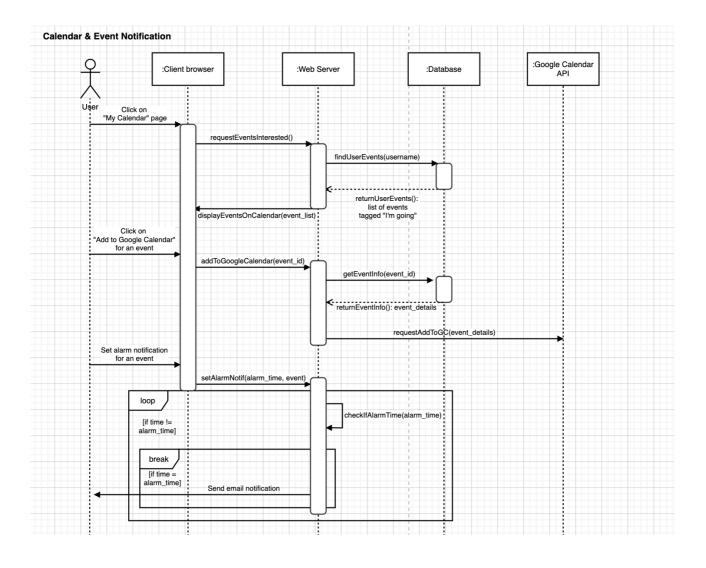


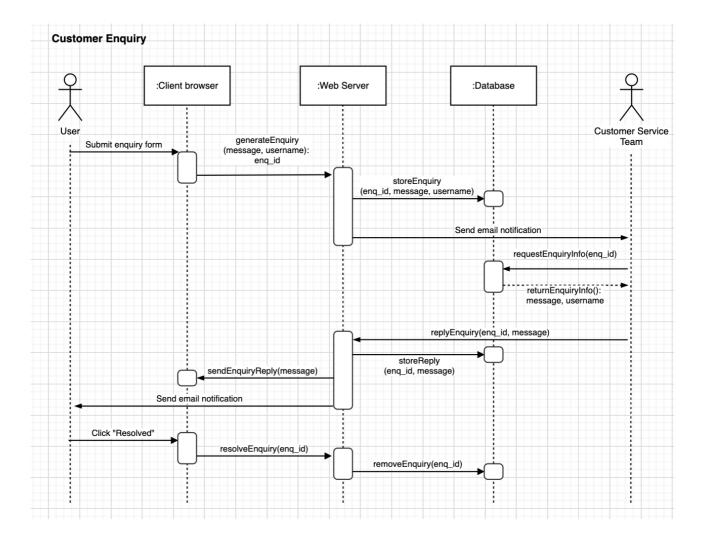




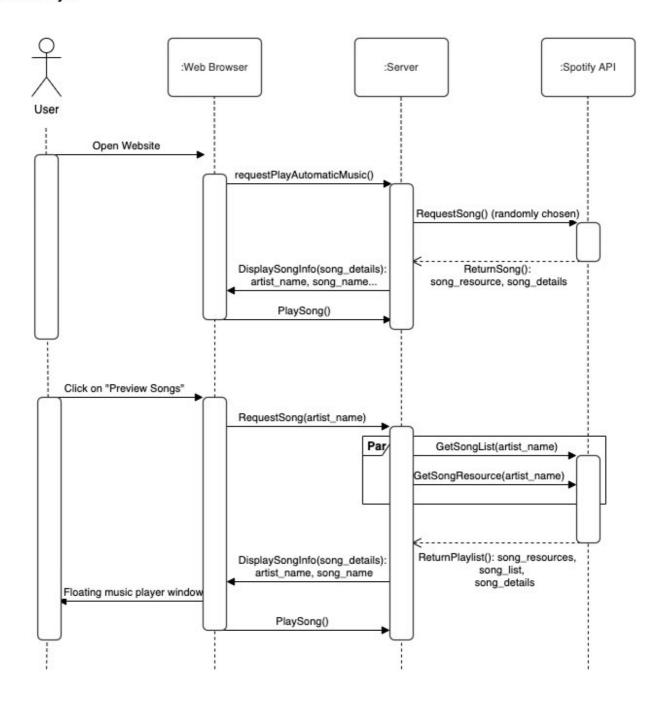
Check Ticket Availability - Display 'Sold Out' if Ticket is Unavailable







Music Player



Event Recommendations

