Web Application Design: Event Management System

Description of site:

The following Event Management Web Application for Music Events will allow users of the site to do various functions. The focus of the site is on Music events such as but not limited to, music concerts, music festivals and live music at a venue. The users of the site will be able to see all necessary details for a given music event such as, location, time, artist/s, and much more. The web app will also allow users to post events for other uses.

Description of technology context:

The most applicable platform for this type of application would be a web application as this will give the widest availability to users, there if very little downside to this. Internet availability will change wether the web app is available and can be seen as a downside however if there is no internet connection then none of the event data can be downloaded thus rendering the site pointless. Having this app as a mobile application limits the usability drastically as small screens and touch controls aren't the best suited when it comes to extensive writing for posts and seeing many events at once. Another downside to this is if you are writing in native languages such as java or Kotlin for android and Swift for ISO, you'll will need to maintain 2 separate code bases, which becomes easily becomes hard to manages with a limited team. The upside to this approach is that users are more likely to download a phone app then download a desktop app for a Event Management app. An Desktop app is arguable the worst choice out of the 3 platforms. The issue with this is you have prominently 3 different desktop OS's, Windows, macOS, and Linux, with each os implementing system commends and system structure in different ways. this becomes a unnecessary hurdle to deal with when it comes to such a simple app. A way around this is to use Electron as this is basically a web app that is run as a Desktop app and is compatible anywhere Chromium can be run. The problem with this approach is that using electron is extremely cumbersome on system requirements for such a simple app, and is unneeded. A positive side to running the app as a desktop app is that it can be opened and run without the internet, although this is mostly pointless as all the data to make the app useful wont be retrieved.

User Stories:

1)

Title: View Upcoming Music Events

Story: As a Music Enthusiast I want to be able to view Upcoming events and be able to sort them on a number of parameters because this will make it quick and easy to pick the next music event I might want to attend.

Acceptance Criteria:

1. Show a list of events on the main page
2. Have the list of events update when new events are added
3. Be able to search for a Music event with key words from title or description
4. Filter the shown events based of flags such as Age Appropriate or Type of music/Artist

2)

Title: Buy/Get a Ticket for a Given Event

Story: As a Regular festive attendee I want to be able to buy tickets for a given musical Event but due to the inability to pay the same way each time I will need to be able to pay in multiple different ways because being able to buy a ticket from a central music event website will make the process of buy tickets easier and less of a pain.

Acceptance Criteria:

1. Have pricing visible on the event page
2. Have a easy to see "Buy" button for the event
3. Have the checkout page easy to navigate
4. Have multiple payment methods available for users

3)

Title: View a Music Event's Details, such as location and Price

Story: As a Person who is interested in attending a music event I want to be able to view as many details about the events as possible because having more details available will help in the decision making process of if I would like to attend this music event.

Acceptance Criteria:

1. Have the event information easy to read on the event page
2. Have important information about event highlighted in some way

4)

Title: Post a New Music Event of the Web App

Story: As someone who is organising an music event I want to be able to share my event on the Music Events Web App, and update the information as needed because being able to share an event of a central Event hub will boost the amount of people who attend and being able to change the event information will insure every will stay well informed about the event.

Acceptance Criteria:

1. Having the user have the ability to add a Music Events to the App
2. Allowing the user to be able to change the event details as needed
3. When Event details have changed notify all users interested in or bought tickets to event
4. Ability to add tags to an event to make the event more easily searchable

5)

Title: Share a Music Event with friends

Story: As someone who like to attend music events with friends I want to be able to easily share the event with my friends to see how they fee about the event I'm looking at because this would make it far easier to get my friends to come along to the event.

Acceptance Criteria:

1. Have a quick share button to popular social media sites

6)

Title: Subscribe for Updates about a Music Event

Story: As someone who likes to look at lots of music events but never certain straight away wether or not id like to attend a event I want to be able to subscribe to an event to get updates or hear about promotions because this would greatly increase the likelihood of me buying a ticket to an event.

Acceptance Criteria:

1. Ability to add uses to an email list for a event
2. Give the event organiser the ability to send a email to all those who are interested in the event
3. Allow the user to unsubscribe from an event if they so wish

7)

Title: Add Comments to a Music Event

Story: As someone who has attended a given music even the year before id like to add a comment to the same upcoming event about my experience to give new attendees an idea of what to expect because being able to share your experience with other people lets new users know whats an event is like from not just the event organiser.

Acceptance Criteria:

1. Alow user to add comments to events
2. Alow comments to be flagged by other users for removal
3. Auto filter words in comments before adding to event page

8)

Title: Get event data from an API for other websites to use

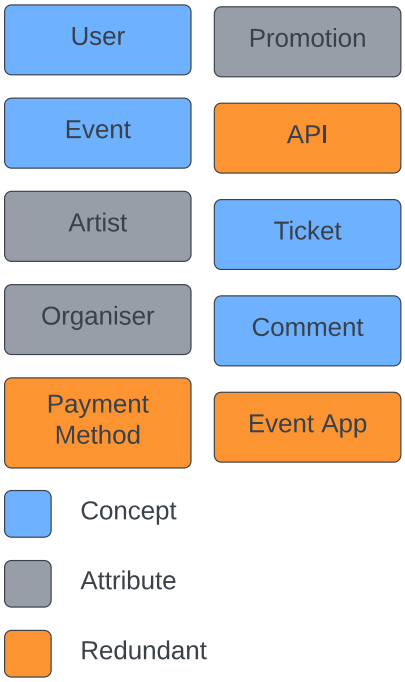
Story: As someone who is writing a websites that is looking at a smaller subsection of all music events I want an API to interface with this web app to alow me to easily get the data I need to make my own specialised version because being able to create a specialised website for a specific type of event will help users see and hear about the events boosting sales of tickets.

Acceptance Criteria:

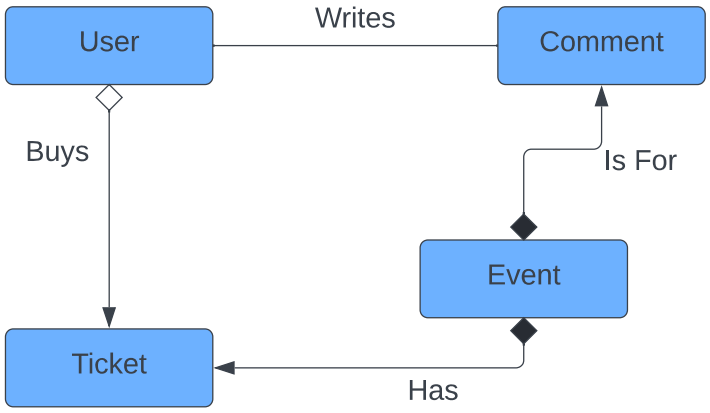
1. Have the vast majority of the events data available over the API
2. Be able to take payments over the API
3. Add a subscription fee to the API to make it monitorial viable

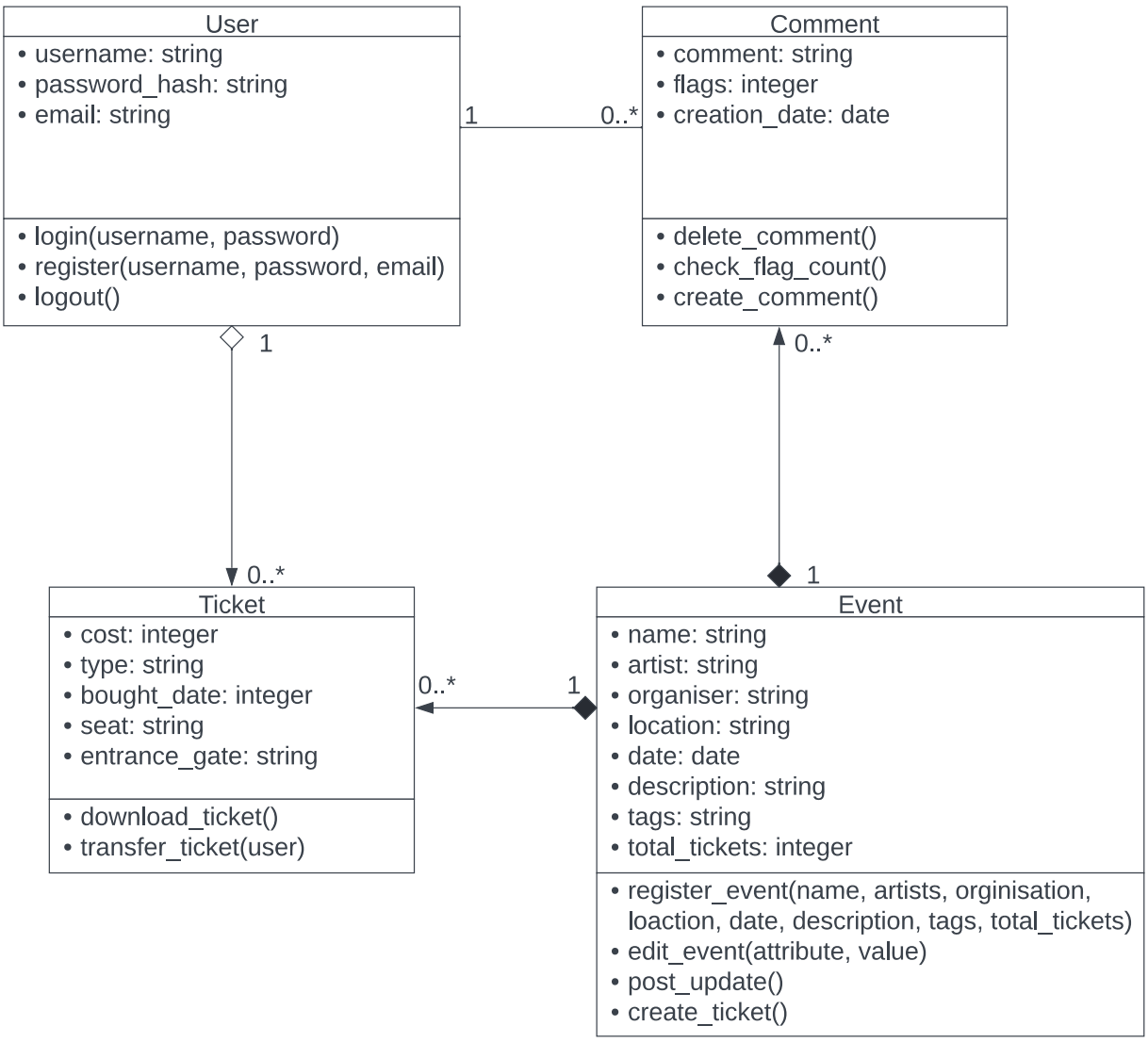
Conceptual Model:

This is a list of concepts and classes gathered from the user stories, then colour coded on the chosen concepts.



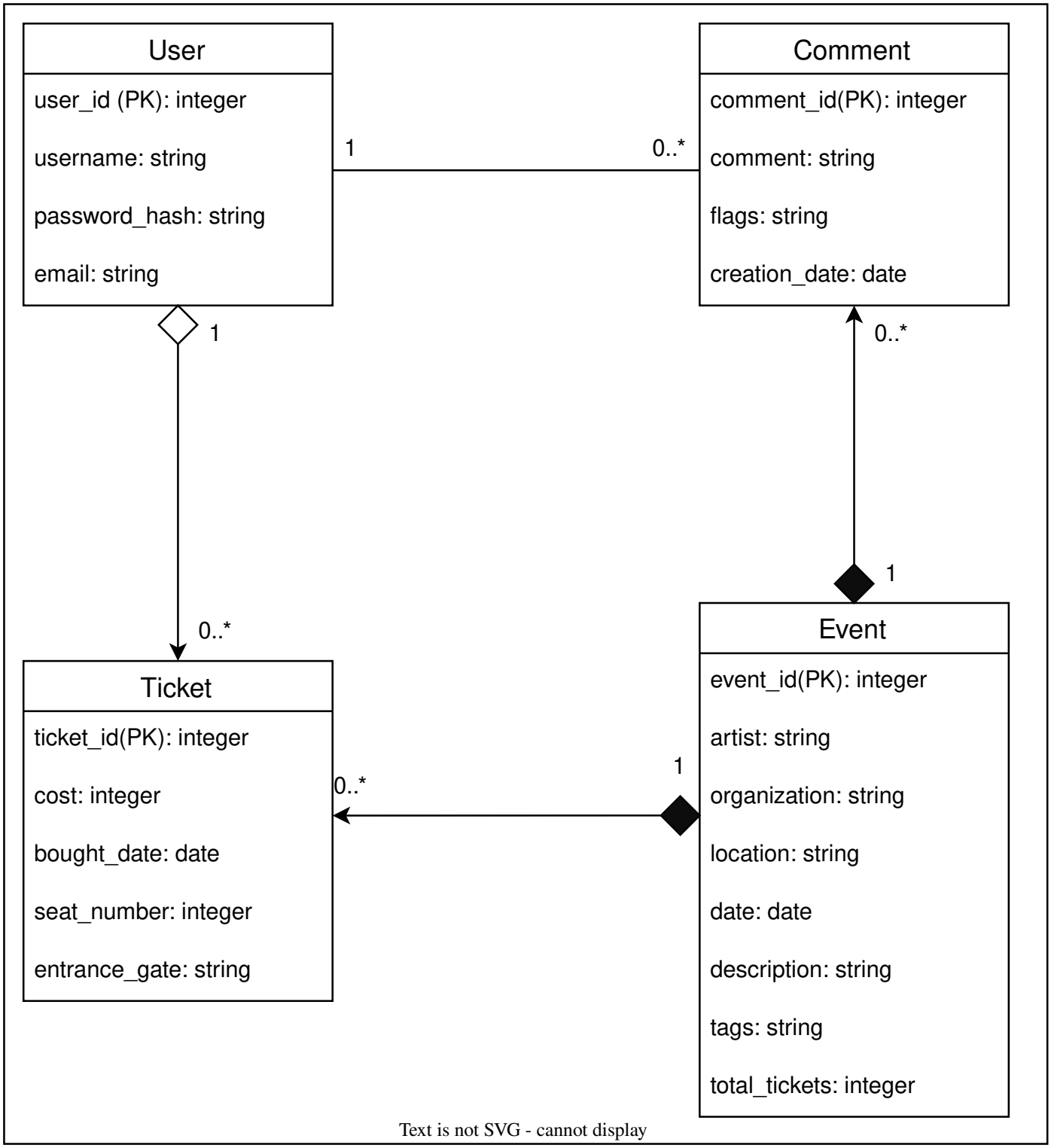
This is the refined list of classes and some of the brief relationships between each class.



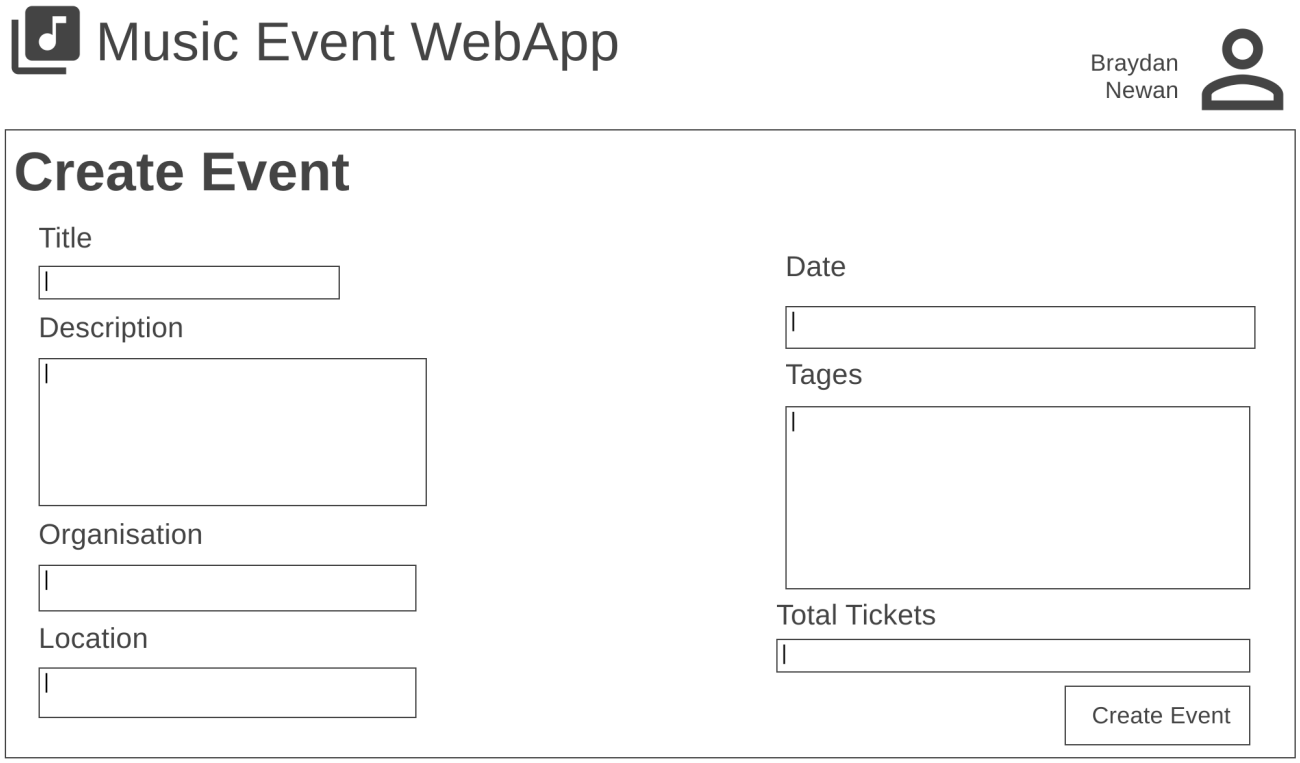


This is the final conceptual model that shows all relationships, attributes, and functions associated with each class.

Data Model:


User
user_id (PK): integer
username: string
password_hash: string
email: string
Comment
comment_id(PK): integer
comment: string
flags: string
creation_date: date
1
0..*
1
0..*
0..*
1
Ticket
ticket_id(PK): integer
cost: integer
bought_date: date
seat_number: integer
entrance_gate: string
0..*
1
Event
event_id(PK): integer
artist: string
organization: string
location: string
date: date
description: string
tags: string
total_tickets: integer
Text is not SVG - cannot display

Wire frame:


Music Event WebApp
Braydan
Newan
Create Event
Title
Description
Organisation
Location
Date
Tages
Total Tickets
Create Event

Music Event WebApp
Braydan
Newan
Cool Music Event
Lorem ipsum dolor sit amet et delectus accommodare his consul copiosae legendos at vix ad putent delectus delicata usu. Vidit dissentiet eos cu eum an brute copiosae hendrerit. Eos erant dolorum an. Per facer affert ut. Mei iisque mentitum moderatius cu. Sit munere facilis accusam eu dicat falli consulatu at vis. Te facilisis mnesarchum qui posse omnium mediocritatem est cu. Modus argumentum ne qui tation efficiendi in eos. Ei mea falli legere efficiantur et tollit aliquip debitis mei. No deserunt mediocritatem mel. Lorem ipsum dolor sit amet et delectus accommodare his consul copiosae legendos at vix ad putent delectus delicata usu. Vidit dissentiet eos cu eum an brute copiosae hendrerit. Eos erant dolorum an. Per facer affert ut. Mei iisque mentitum moderatius cu. Sit munere facilis
Event Details
Tags
Buy Tickets

Music Event WebApp

Braydan
Newan

Buy Ticket

Event Details

Amount:

Payment Type

Cost: $300

Procced to Payment