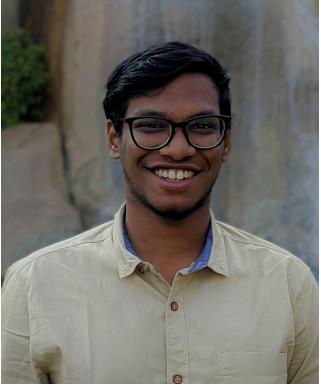


# IS-F341 Software Engineering (II - 2021-22)

## G15 & Event tickets portal

[Link for System Demonstration](#)

Student ID, Name Role (PO+DEV/SM+DEV/DEV)	Photo
2019A7PS0142H, Katakam Bhuvan Chand PO+DEV	
2019A7PS0016H, Sai Manideep Bandaru DEV	
2019A7PS0023H, Sai Venkata Laxmi Druthi Kommineni SM+DEV	

2019A7PS0190H, S B Tharun Reddy DEV	
2019A7PS0011H, Satwik Kasina DEV	

## Section 1 – Project Overview

Most of the people in cities wish to attend events such as sports, krank sessions, musical sessions, fests etc., but often find it difficult to find the events happening near them or to reserve or buy tickets in advance is an exhausting task in their busy schedules.

To overcome this, we propose “*ETik*”.

### Problems/Challenges:

1. Organizers cannot connect with customers and cannot publicize about the event.
2. Organizers find it difficult to calculate the revenue/profits of the event manually.
3. Cancellation of tickets after buying them manually after spending so much time and money, is not possible.
4. People find it difficult to spend so much time buying tickets.
5. People find it difficult to find events they are interested in.

### Expected Functionalities:

1. Event organizers get connected to customers via this application, and sell the tickets for the event they’re organizing.
2. Organizers review the revenue generated and profits made for the events they organized.
3. People see the list of events happening location-wise and type of tickets(stands type, food type, goodies type) available for the event.
4. People book tickets for the event they wish to attend via this application, without standing in queues and by avoiding traveling to buy tickets.
5. People get tickets with their details on it, they get to download those tickets and share them with others.
6. Organizers get a scrolled view of the events they organized.

## Section 2 – Existing Work System

### AS-IS Work System Snapshot (Optional)

Customers	Product/Services	
• ..	• ..	
Major Activities and Processes		
• .. • ..		
Participants	Information	Technologies
• ..	• ..	• ..

## Problems/Challenges

Participant/ Customer	Description of problems/challenges
Customer	I cannot filter the events by date and time.
Customer	I cannot download my tickets to share them with my friends via messaging applications.
Organizer	I cannot get the overall statistics about the sold tickets, sold goodies and revenue of the completed event.
Customer	I cannot buy the goodies of my favorite band via the application.

## User Personas

#01

Aryan Shridhar (Customer)	<p>"I want to book tickets beforehand so that I wouldn't miss out on my favorite band"</p>	
	<b>Capabilities</b> <ul style="list-style-type: none"> <li>- Adept with modern technology</li> <li>- At ease with online booking system</li> </ul>	<b>Goals/Objectives</b> <ul style="list-style-type: none"> <li>- Shouldn't miss out on his favorite bands.</li> <li>- To book tickets without spending too-much time.</li> <li>- To book tickets without traveling too far.</li> </ul>
<b>Demographics</b> Age: 21 Education: Undergrad Work: - Family: Unmarried Location: Chennai	<b>Brief bio</b> Aryan is an undergraduate student who stays in a hostel, far from the city. He wishes to spend some weekends partying with his friends and attending shows which interests his friends and him.	<b>Frustrations/Pain points</b> <ul style="list-style-type: none"> <li>- It is annoying and time-consuming to stand in a queue and buy tickets.</li> <li>- Refunds in case of cancellation takes many days.</li> </ul>

#02

Surdeep Dravid (Customer)	"I wish to listen to music and dance to my favorite beat to let all the stress out on weekends"	
	<b>Capabilities</b> <ul style="list-style-type: none"> <li>- Comfortable with mobile and computer.</li> <li>- Familiar with UPI and credit card payments.</li> </ul>	<b>Goals/Objectives</b> <ul style="list-style-type: none"> <li>- To book tickets without spending too-much time</li> <li>- To get the complete information of the event from the organizer himself.</li> </ul>
<b>Demographics</b> Age: 29 Education: Has M-tech degree Work: Software Engineer Family: Unmarried Location: Kolkata	<b>Brief bio</b> Surdeep is a software employee. He stays away from his family and is unmarried. He works hard during weekdays and wants to attend events happening in his city, to make new friends.	<b>Frustrations/Pain points</b> <ul style="list-style-type: none"> <li>- I cannot waste my weekend time standing in queues.</li> <li>- Sometimes booking on call has a tedious procedure and creates confusion.</li> </ul>

#03

Pooja Shabi (Customer)	<p>"I want my employees to enjoy as much as possible on a holiday "</p>	
	<b>Capabilities</b> <ul style="list-style-type: none"> <li>- Adept with technology</li> <li>- Familiar with ticketing-applications.</li> </ul>	<b>Goals/Objectives</b> <ul style="list-style-type: none"> <li>- To find the best event among all the ones happening.</li> <li>- To find a relevant event which my team and I are looking for.</li> </ul>
<b>Demographics</b> <p>Age: 38 Education: Masters in Management Work: Startup owner Family: Married Location: Delhi</p>	<b>Brief bio</b> <p>Pooja is the owner of a start-up company in a metro-politan city. She believes that the company she established is in a good position because of the contributions of her employees. She has immense respect towards them and wants to surprise them by taking them to events in the city.</p>	<b>Frustrations/Pain points</b> <ul style="list-style-type: none"> <li>- I cannot find much information anywhere, about events to decide which is the best for the night.</li> <li>- I cannot share the tickets with my employees.</li> </ul>

#04

Satyajit Kulkarni (Organizer)	<p>"My aim is to get maximum turn-out of people for the event I'm organizing"</p>	
	<p><b>Capabilities</b></p> <ul style="list-style-type: none"> <li>- Knows how to use a smartphone and works on a computer.</li> <li>- Knows how to use social-networking apps and how to publicize using them.</li> <li>- Can speak English, Hindi, Marathi.</li> </ul>	<p><b>Goals/Objectives</b></p> <ul style="list-style-type: none"> <li>- To make as much profit as possible from the events.</li> <li>- To get maximum turn-out of people for the event I'm organizing.</li> <li>- To have a list of revenue I got from the past 5 events.</li> </ul>
<p><b>Demographics</b></p> <p>Age: 40</p> <p>Education: Has MBA degree</p> <p>Work: Event Manager</p> <p>Family: Married and has one kid</p> <p>Location: Mumbai</p>	<p><b>Brief bio</b></p> <p>Satyajit is an event manager and stays away from family. He is not available on weekends as he visits home every weekend. He plans everything for the events happening and wants to handle any disturbances from home.</p>	<p><b>Frustrations/Pain points</b></p> <ul style="list-style-type: none"> <li>- Would not get expected turn-out because of lack of publicity.</li> <li>- Cannot handle disturbances in the planning properly without staying there.</li> <li>- Have to note down the revenue I made manually.</li> </ul>

#05

Chandrashekhar Vinutha (Organizer)	"I want to make my customers happy"	
	<b>Capabilities</b> <ul style="list-style-type: none"> <li>- Knows how to use a smartphone and works on a computer.</li> <li>- Knows how to use social-networking apps</li> <li>- Can speak English, Hindi, Telugu</li> </ul>	<b>Goals/Objectives</b> <ul style="list-style-type: none"> <li>- To make as much profit as possible from an event, by making the customers happy at the same time.</li> </ul>
<b>Demographics</b> Age: 45 Education: Postgraduate Work: Event organizer Family: Married and has 2 kids Location: Hyderabad	<b>Brief bio</b> Chandrashekhar is a postgraduate from Delhi. He lives in Hyderabad, with his wife. His kids stay abroad. He has been an event organizer for a decade. He tries to stay updated with the trend in organizing events and doesn't want to lose customers.	<b>Frustrations/Pain points</b> <ul style="list-style-type: none"> <li>- I find it a bit difficult to understand and adjust to the new trends in organizing events.</li> <li>- Sometimes I lose customers because of no proper planning while organizing.</li> </ul>

## Section 3 – System Scope

### TO-BE Work System Snapshot (moderate support)

Customers	Product/Services	
• Customer	• Event Tickets	
Major Activities and Processes		
<ul style="list-style-type: none"> <li>• Customer gets registered(new user) or logs-in to the application to book tickets.</li> <li>• Customer updates his location, based on which nearby events get displayed.</li> <li>• Customer selects one of the events, to know about the event and decide upon booking tickets for it.</li> <li>• Customer selects the ticket type(s) for an event, after which a form gets displayed to fill in the details of the customer.</li> <li>• Customer confirms the payment and with each ticket, a download option appears on the screen.</li> <li>• Customer gets a list of the events he booked tickets for, in the past.</li> <li>• Customer gives rating and review to the event the customer attended.</li> <li>• Customer gets an option to like the event, and gets notifications about the similar events happening.</li> <li>• Organizer gets registered(new user) or logs-in to the application to create an event or to get the statistics for his previous events.</li> <li>• Organizer creates an event, writes information about the location, date and time of the event.</li> </ul>		
Participants	Information	Technologies
<ul style="list-style-type: none"> <li>• Customer</li> <li>• Organizer</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Details</li> <li>• Location, Time, Date of the event</li> <li>• Types of goodies that are for sale in the event</li> <li>• Organizer details</li> </ul>	<ul style="list-style-type: none"> <li>• Computer/Laptop</li> <li>• Database</li> <li>• PDF viewer</li> </ul>

## TO-BE Work System Snapshot (maximum support)

Customers	Product/Services	
<ul style="list-style-type: none"> <li>• Customer</li> <li>• Organizer</li> </ul>	<ul style="list-style-type: none"> <li>• Event Tickets</li> <li>• Sales Reports</li> <li>• Ratings and Reviews</li> </ul>	
Major Activities and Processes		
	<ul style="list-style-type: none"> <li>• Customer gets registered(new user) or logs-in to the application to book tickets.</li> <li>• Customer updates his location, based on which nearby events get displayed.</li> <li>• Customer selects one of the events, to know about the event and decide upon booking tickets for it.</li> <li>• Customer selects the ticket type(s) for an event, after which a form gets displayed to fill in the details of the customer.</li> <li>• Customer gets the payment options, confirms the payment and with each ticket, a download option appears on the screen.</li> <li>• Customer gets a list of the events he booked tickets for, in the past.</li> <li>• Customer gives rating and review to the event the customer attended.</li> <li>• Customer gets an option to like the event, and gets notifications about the similar events happening.</li> <li>• Organizer gets registered(new user) or logs-in to the application to create an event or to get the statistics for his previous events.</li> <li>• Organizer creates an event, writes information about the performers, location, date and time.</li> <li>• Organizer views the statistics of his previous events to analyze the revenue/profit.</li> <li>• Organizer gets the dynamic statistics of the ticket purchases for an event which is going to happen.</li> <li>• Customers get points after each purchase of a ticket.</li> <li>• Customer redeems the points after reaching a certain level and uses them as a discount while purchasing tickets.</li> </ul>	
Participants	Information	Technologies
<ul style="list-style-type: none"> <li>• Customer</li> <li>• Organizer</li> </ul>	<ul style="list-style-type: none"> <li>• Customer details</li> <li>• Location, Time, Date of the event</li> <li>• Types of goodies that are for sale in the event</li> <li>• Organizer details</li> <li>• Information about the event.</li> <li>• Previous ratings and reviews of the band.</li> </ul>	<ul style="list-style-type: none"> <li>• Computer, Laptop</li> <li>• Database</li> <li>• Payment Gateways</li> <li>• PDF viewer</li> <li>• Email</li> </ul>

## TO-BE Work System Snapshot (selected for project work)

Customers	Product/Services	
<ul style="list-style-type: none"> <li>• Customer</li> <li>• Organizer</li> </ul>	<ul style="list-style-type: none"> <li>• Event tickets</li> <li>• Revenue/profit reports</li> </ul>	
Major Activities and Processes		
<ul style="list-style-type: none"> <li>• Customer gets registered(new user) or logs-in to the application to book tickets.</li> <li>• Customer updates his location, based on which nearby events get displayed.</li> <li>• Customer selects one of the events, to know about the event and decide upon booking tickets for it.</li> <li>• Customer selects the ticket type(s) for an event,after which a form gets displayed to fill in the details of the customer.</li> <li>• Customer confirms the payment and with each ticket, a download option appears on the screen.</li> <li>• Customer gets a list of the events he booked tickets for, in the past.</li> <li>• Organizer gets registered(new user) or logs-in to the application to create an event or to get the statistics for his previous events.</li> <li>• Organizer creates an event, writes a description of the event and information about the performers, location, date and time.</li> <li>• Organizer views the statistics of his previous events to analyze the revenue/profit.</li> </ul>		
Participants	Information	Technologies
<ul style="list-style-type: none"> <li>• Customer</li> <li>• Organizer</li> </ul>	<ul style="list-style-type: none"> <li>• Customer details</li> <li>• Location, Time, Date of the event</li> <li>• Types of goodies that are for sale in the event</li> <li>• Organizer details</li> <li>• Information about the event.</li> </ul>	<ul style="list-style-type: none"> <li>• Computer/ Laptop</li> <li>• Database</li> <li>• PDF viewer</li> </ul>

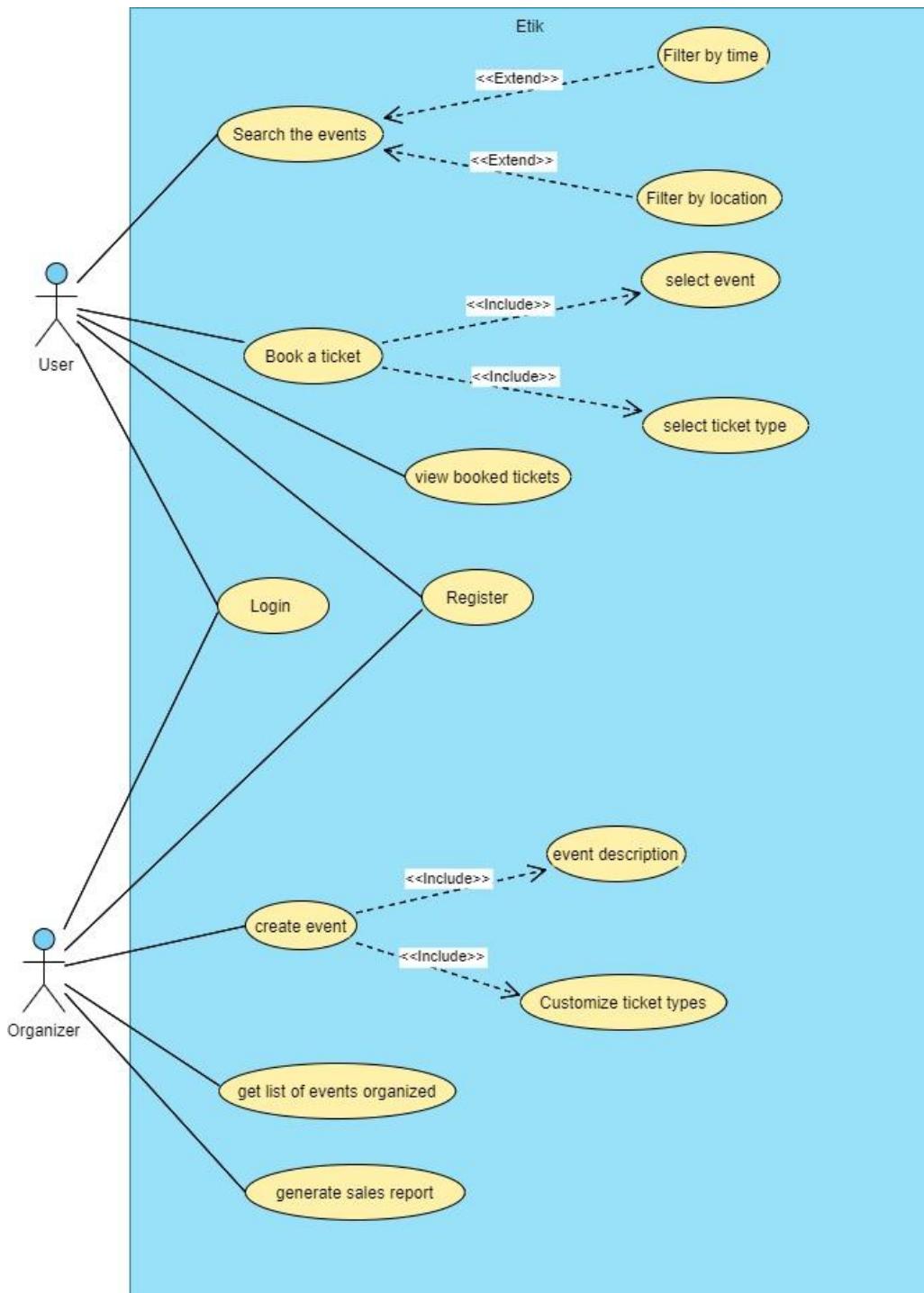
## Section 3 – Product Backlog

As a	I want to	so that
User	Register myself	I can create an account and book tickets
User	Log in	I can view events and book tickets
User	update my location	I can view events nearby.
User	search by name of the event	I can find the event I'm looking for
User	filter events based on time/date	I can find the event in my convenience
User	see event schedules	I can Plan and book accordingly
Customer	select the types of tickets i.e goodies or food or stands	I can book accordingly
Customer	confirm the types of tickets I selected	I can update my profile and continue the payment checkout.
Customer	see the total amount while tickets are still in cart	I can decide whether to book or not
Customer	view payment options	I can confirm my booking
Customer	view my ticket	I can refer my timings if necessary
Customer	view my ticket(s) for an event after booking	I can download the ticket(s).
Organizer	Register myself	I can sell tickets for an event.
Organizer	Log in	I can update the list of events
Organizer	Create an event	I can reach out to audience

Organizer	get a list of events I organized	I can navigate to the particular event and view statistics.
Organizer	see total revenue generated	I can generate sales report
Organizer	customize the types of tickets	User can book accordingly
Organizer	write event description	I can ensure users can get a brief description of the event.
Organizer	Generate a weekly sales reports	I can view a bar graph of the tickets sold in a week

## Section 4 - Use case modeling

### Use case diagram



## Use case description # 1

Name	<b>Login</b>
Description	User/Organizer login
Actors	User,Organizer
Trigger	<ul style="list-style-type: none"> <li>1. User decides to login into his account to browse for tickets</li> <li>2. Organizer decides to login into his account to create an event</li> </ul>
Preconditions	<ul style="list-style-type: none"> <li>1. User must already have an account</li> <li>2. Organizer must already have an account</li> </ul>
Postconditions	User/Organizer should be redirected to dashboard accordingly
Main course	<ul style="list-style-type: none"> <li>1. User/Organizer selects whether they want to login as User or as Organizer</li> <li>2. User/Organizer enters his email and password</li> <li>3. User/Organizer clicks on Sign in(AC1)(EX1)</li> <li>4. User/Organizer is directed to user/organizer dashboard</li> </ul>
Alternate courses	<p>AC1- If the credentials are invalid</p> <ul style="list-style-type: none"> <li>1. An error message “Invalid Email/Password” will be popped.</li> </ul>
Exceptions	<p>EX1- User/Organizer does not have an existing account</p> <ul style="list-style-type: none"> <li>1. User/Organizer should register an account by clicking on the register button in the sign in page</li> </ul>

## Use case description # 2

Name	<b>Book a ticket</b>
Description	User books a ticket for an event
Actors	User
Trigger	User wants to book a ticket for an event
Preconditions	User is on the dashboard viewing the event he wants to book ticket of.
Postconditions	User has successfully booked a ticket for the event.
Main course	<ol style="list-style-type: none"> <li>1. User clicks on the event he wants to book tickets of on the dashboard.(AC1)</li> <li>2. User then selects the type of ticket he wants to book.(AC2)</li> <li>3. User clicks on book ticket.(EX1)</li> <li>4. User is shown his ticket and prompted to pay at the entry of the event.</li> </ol>
Alternate courses	<p>AC1- The event has no available tickets</p> <ol style="list-style-type: none"> <li>1. User cannot select the event on the dashboard</li> <li>2. Instead a message pops up saying that the event is full.</li> </ol> <p>AC2- The selected ticket type is sold out</p> <ol style="list-style-type: none"> <li>1. A message is prompted saying the user to select another type of ticket since this ticket is sold out</li> </ol>
Exceptions	<p>EX1- User does not want the ticket</p> <ol style="list-style-type: none"> <li>1. User goes back to event dashboard</li> </ol>

## Use case description # 3

Name	<b>Search the events</b>
Description	Users browse events.
Actors	User
Trigger	User decides to see all the available events or specific events.
Preconditions	<ul style="list-style-type: none"> <li>1. User is logged into his account.</li> <li>2. At least one event exists.</li> </ul>
Postconditions	User made a decision regarding the purchase of ticket
Main course	<ul style="list-style-type: none"> <li>1. User can see all the available events in the dashboard.</li> <li>2. User applies location filter.(AC1)</li> <li>3. User applies filter using time.(AC2)</li> <li>4. User can apply safe filter on.(EX1)(AC3)</li> <li>5. User searches for an event</li> <li>6. The events satisfying those filters and search are displayed to the user on the dashboard.</li> </ul>
Alternate courses	<p>AC1- User does not apply location filter.</p> <ul style="list-style-type: none"> <li>1. Results displayed are based only on time filter.</li> </ul> <p>AC2- User does not apply time filter.</p> <ul style="list-style-type: none"> <li>1. Results displayed are based only on time filter.</li> </ul> <p>AC3- User does not turn on the filter.</p> <ul style="list-style-type: none"> <li>1. All events are displayed.</li> </ul> <p>AC3- User does not search</p> <ul style="list-style-type: none"> <li>1. Events displayed are based only on filters.</li> </ul>
Exceptions	<p>EX1- User cannot find the specified event.</p> <ul style="list-style-type: none"> <li>1. A message is displayed on the dashboard saying "No Results".</li> </ul>

## Use case description # 4

Name	<b>Register</b>
Description	User/Organizer creates an account
Actors	User/Organizer
Trigger	<ul style="list-style-type: none"> <li>1. User decides to create an account</li> <li>2. Organizer decides to create an account</li> </ul>
Preconditions	User/Organizer must have an email address
Postconditions	User//Organizer has an account with which he can login
Main course	<ul style="list-style-type: none"> <li>1. User/Organizer goes to the website link.</li> <li>2. User/Organizer selects USER option or ORGANIZER option</li> <li>3. User/Organizer selects Register in the sign in page.</li> <li>4. User/Organizer enters his email align with username and password.</li> <li>5. User/Organizer clicks on Register.(AC1) (AC2) (AC3) (AC4) (AC5) (AC6) (AC7) (EX1)</li> <li>6. User/Organizer is redirected to the sign in page.</li> </ul>
Alternate courses	<p>AC1- Account with the email is already present</p> <ul style="list-style-type: none"> <li>1. An error message will be popped up saying already registered please login</li> </ul> <p>AC2- Password is less than 8 characters</p> <ul style="list-style-type: none"> <li>1. An error message will be popped up saying password is too short</li> </ul> <p>AC3- Password is more than 26 characters</p> <ul style="list-style-type: none"> <li>1. An error message will be popped up saying password is too long</li> </ul> <p>AC4- Password does not contain an uppercase letter</p> <ul style="list-style-type: none"> <li>1. An error message will be popped up saying password should contain at least 1 upper case letter</li> </ul> <p>AC5- Password does not contain a lowercase letter</p> <ul style="list-style-type: none"> <li>1. An error message will be popped up saying password should contain at least 1 uppercase letter</li> </ul> <p>AC6- Password does not contain a number</p>

	<ol style="list-style-type: none"><li>1. An error message will be popped up saying password should contain atleast 1 number</li></ol> <p>AC7- Password does not contain a symbol</p> <ol style="list-style-type: none"><li>1. An error message will be popped up saying password should contain atleast 1 symbol</li></ol>
Exceptions	<p>EX1- User/Organizer does not want to create an account</p> <ol style="list-style-type: none"><li>1. He goes back to the sign in page</li></ol>

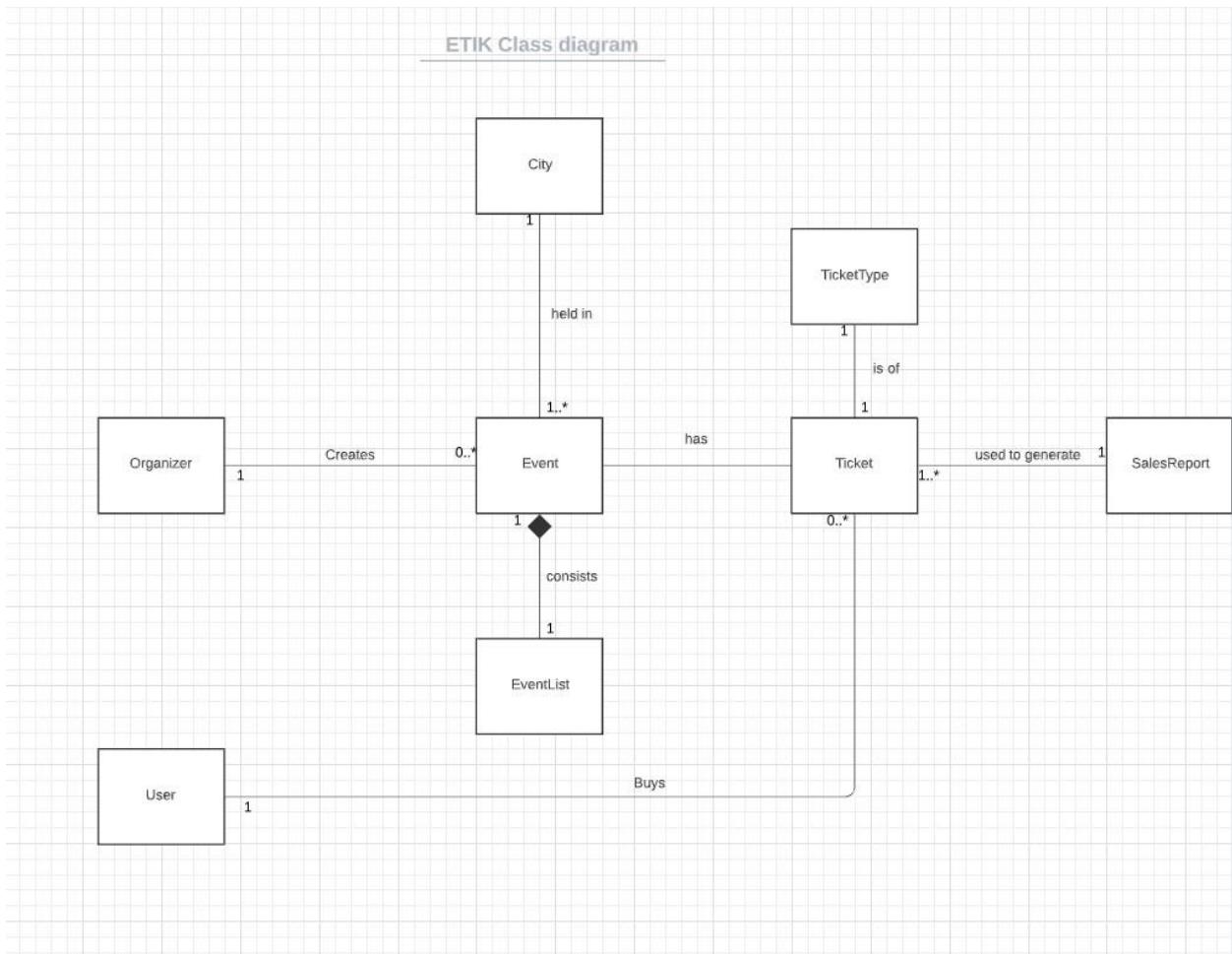
## Use case description # 5

Name	<b>Create event</b>
Description	Organizer creates an event for the users to participate in
Actors	Organizer
Trigger	Organizer needs to create an event in the portal for which he need a valid account
Preconditions	Organizer is signed into his account
Postconditions	An event is created where users can buy tickets
Main course	<ol style="list-style-type: none"> <li>1. Organizer clicks on the Create event button</li> <li>2. Organizer adds the event description</li> <li>3. Organizer customizes the ticket types of the event</li> <li>4. Organizer adds the price and the number of tickets for the event</li> <li>5. Organizer clicks on Create(AC1) (AC2) (AC3) (EX1)</li> <li>6. Organizer is shown a summary of the event created</li> </ol>
Alternate courses	<p>AC1- An event with the same name is created already</p> <ol style="list-style-type: none"> <li>1. A message is displayed to choose another event name</li> </ol> <p>AC2- Price added is not valid</p> <ol style="list-style-type: none"> <li>1. A message is displayed to enter correct price</li> </ol> <p>AC3- Number of tickets added is not valid</p> <ol style="list-style-type: none"> <li>1. A message is displayed to enter correct number of tickets</li> </ol>

Exceptions	EX1- Organizer does not want to create an account 1. Organizer goes back to the dashboard
------------	--

## Section 6 – Class diagram

<attributes and operations should be listed on the following pages as a table; about 8 to 10 classes are expected with relationships; domain modeling should follow transaction pattern approach as much as possible>



**Attributes and operations**

Class name	Attributes	Operations
User	UserID, FirstName, LastName, Email, Password, Phone Number, DateofBirth	profileCust(UserID)
Organizer	OrganizerID, FirstName, LastName, Email, Password, Phone Number, DateofBirth	profileOrg(OrganizerID)
City	CityName, State, Pincode	getCity(), getState(), getPincode()
Event	eventID, eventName, Creator, Description, Tags, StartDate, Photo, CityName	createEvent(eventID), updEvent(eventID),
Ticket	TicketID, Date, Time, AmountPaid, Quantity, eventName, cityName	getTicket(TicketID)
TicketType	Type, Price	getTypePrice(Type)
EventList	LikeCount	getEvents(), LikeEvent(), deleteEvent()
SalesReport	reportID, TotalTicketsSold, TotalRevenue	generateReport(), calculateRevenue()

**NoSQL documents**

<b>Document name and structure</b>	<b>Classe(s)</b>	<b>Justification(s) for embedding, referencing and denormalization</b>
<pre>Ticket ({   ticketID: ObjectId,   UserID: ObjectId   date:{ type:Date , default:Date.now}   Time: String,   quantity: Number,   TicketType({     Type: String,     Price: Number   }) });</pre>	Ticket,TicketType, User	<ul style="list-style-type: none"> <li>- Since TicketType describes the type of ticket the user has bought, to have easy access to the price of that type of ticket, we are <b>embedding</b> the TicketType in Ticket. We are embedding here because we need more read performance in reading the price of the Type in the ticket.</li> <li>- We are also <b>referencing</b> the User Class by including the UserID, because it is the user who buys the tickets and every ticket has a user associated with it</li> </ul>
<pre>User ({   UserID: ObjectId,   FirstName: String   LastName: String,   Email: String,   Password: String,   PhoneNumber: String,   DateOfBirth: Date });</pre>	User	
<pre>Organizer ({   OrganizerID: ObjectId,   FirstName: String   LastName: String,   Email: String,   Password: String,   PhoneNumber: String,   DateOfBirth: Date });</pre>	Organizer	

SalesReport ({ reportID: ObjectID, OrganizerID: ObjectID eventID: ObjectID TotalTicketsSold: Number, TotalRevenue: Number, })	Report , Organizer, Event	- To generate a report on a certain event the organizer wishes to do , we need to have information about the event and also the organizer who created it so we <b>reference</b> Event and Organizer into the Report by using OrganizerID and eventID.
Event({ eventID: ObjectID, organizerID: ObjectID, eventName: String, Creator: String, Description: String, Tags: String, StartDate: Date, Photo: Binary data, CityName: String })	Event, City,Organizer	- We are adding a column CityName to the Event Document to read that attribute faster.We are introducing <b>denormalization</b> here - We are also <b>referencing</b> the Organizer Class by including the OrganizerID, because it is the organizer who creates the events and every event has an organizer associated with it

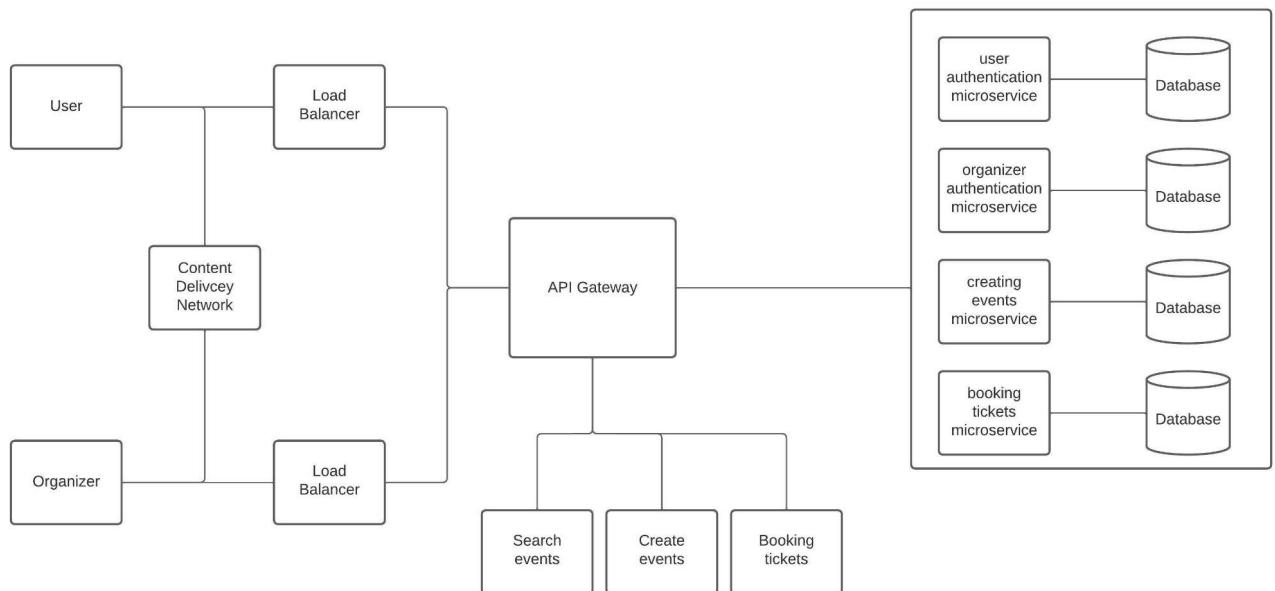
## Section 7 – System Architecture

### Micro-service System architecture

We propose Micro Service System Architecture for our system for real-life deployment.

Microservices architecture is a design pattern for designing applications. Microservices allow a large programme to be broken down into smaller, self-contained components, each with its own set of responsibilities. Each service has its own codebase, which is easy to administer.

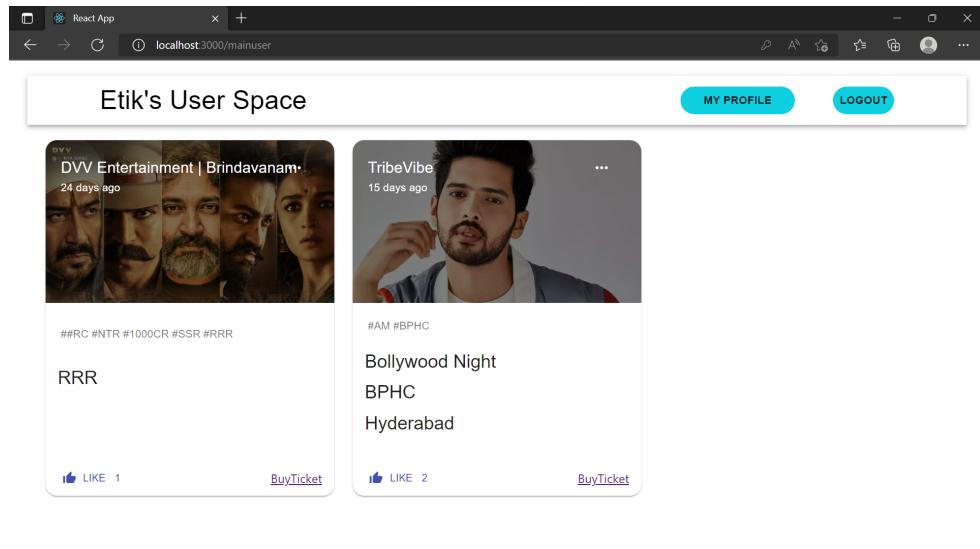
There are several microservices in our project Etik, such as login and signup for organizer and user, publishing an event by the organizer, filtering events based on location, name, and other criteria, and booking tickets for an event by the user. We can have independent code bases, providing services independently with different programming languages and approaches, using this architecture. It gives increased productivity as each service represents a single functional area or business use case. From the implementation, this can simply be scaled up to the production level. Our product also includes a number of APIs for inter-microservice communication. The transition to cloud based is really easy since the application is cloud ready.



## Section 8 – Dashboard

<two or three screenshot of dashboard that captures typical information provided to managers or decision maker type of users in your project case>

Customer Dashboard:



Organizer Dashboard:

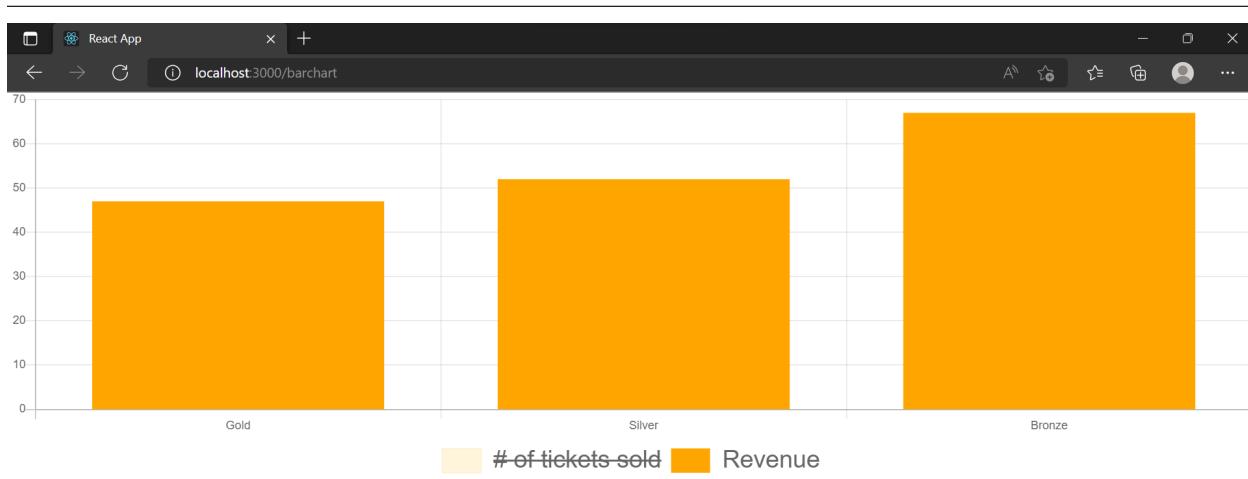
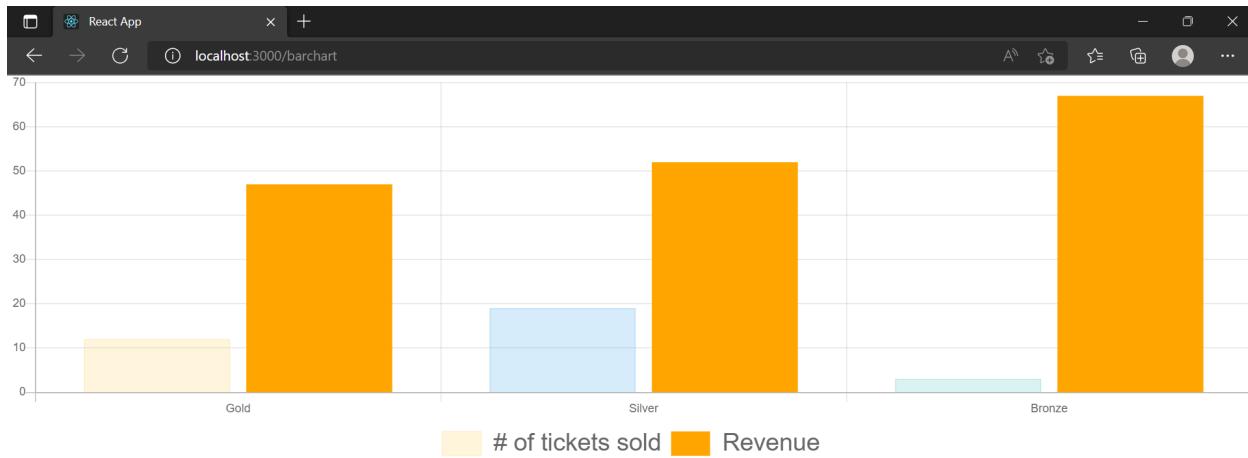
**Create an event**

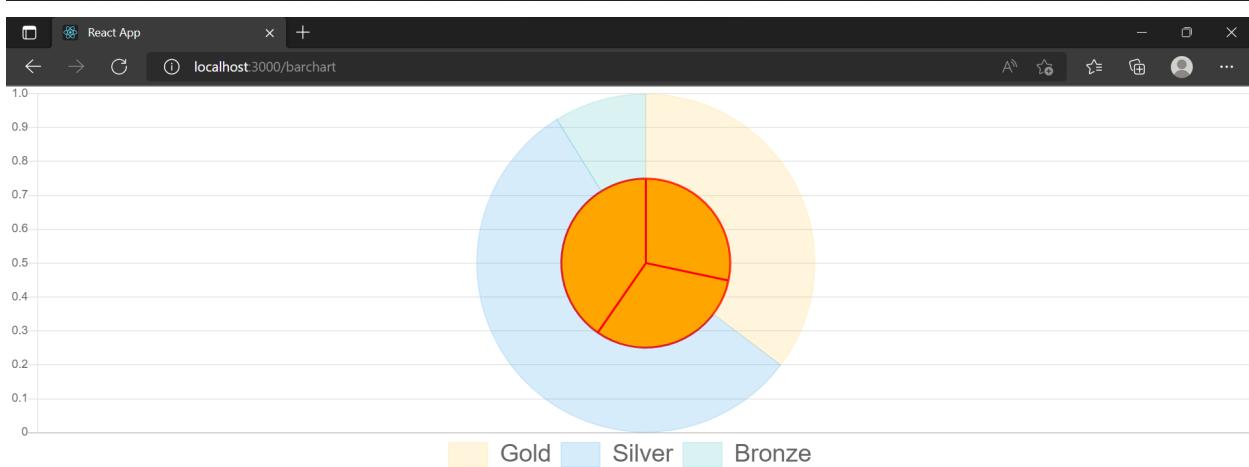
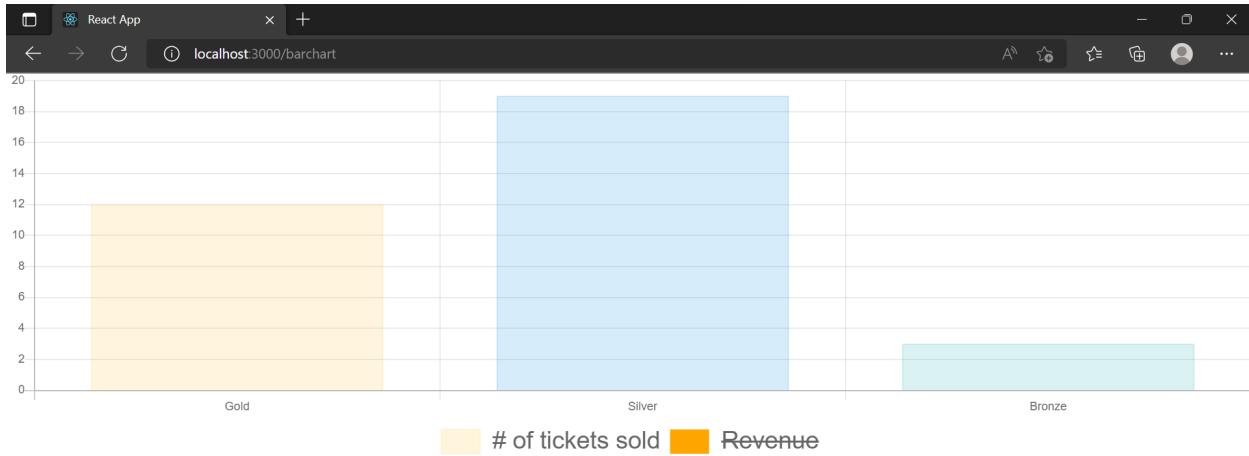
- Creator: [Input field]
- Title: [Input field]
- Location: [Input field]
- City: [Input field]
- Description: [Input field]
- Tags (comma separated): [Input field]

Choose File: No file chosen

**SUBMIT**    **CLEAR**

## View Sales Feature for Organizer :





## Section 9– Conclusion

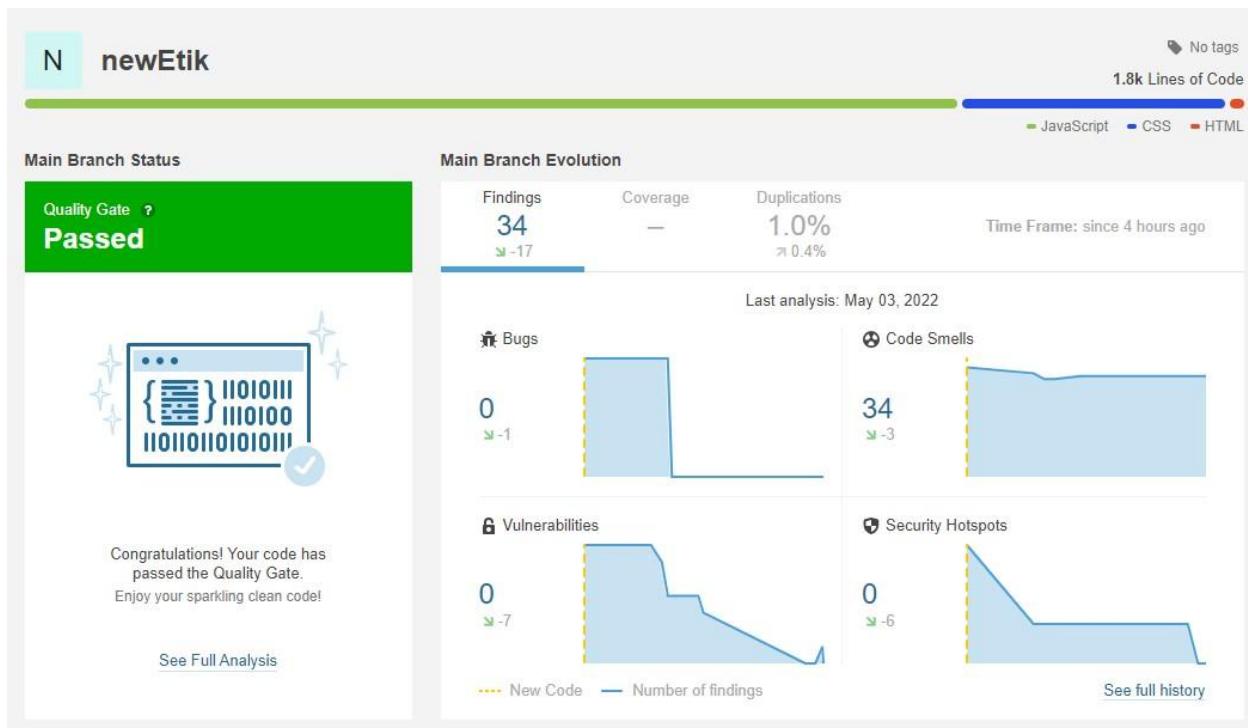
It is very difficult to find the details of the events happening near by the user and book the tickets. These days the users have to follow multiple social media pages to know about the events happening in their city which is a tiresome process. On the other side, for the Organizers it is not economically feasible to market properly about the event. Etik acts as the a bridge between organizers and target audience. It makes events ,fests accessible to people who find it difficult to know the information about nearby events or to reserve the tickets in advance. Etik helps organizers by letting them host the event on the platform and calculate the revenue generated from the event. It helps the customers by letting them reserve the tickets for the event, download it and share it with others.

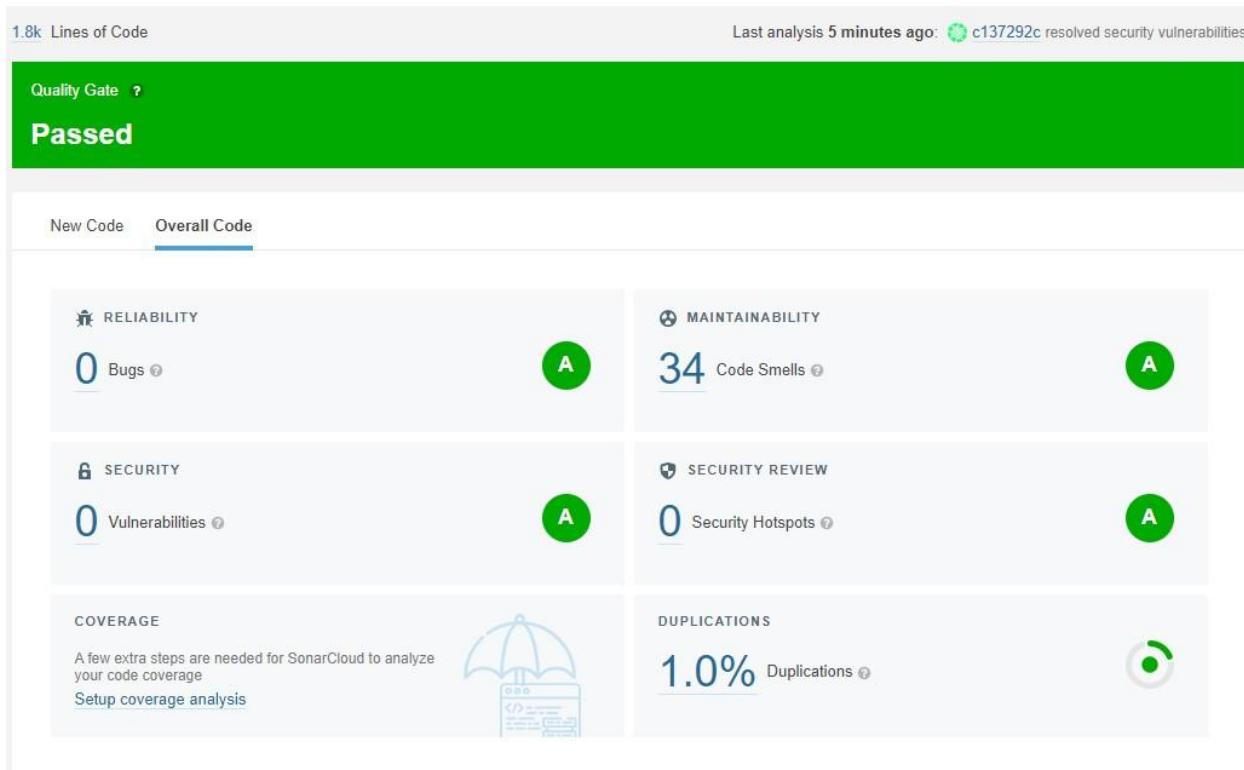
The project work has been problem-based learning in a practical approach to building a software/web application. The problem which is addressed is real and needs an immediate solution and this project has made the team think about the ground-level solution to it. It has also given the team hands-on experience on MERN stack development with considerably good functionalities, UI/UX design techniques, prototypes, and mockups, as well as putting them into practise. To efficiently communicate and maintain our code, the team learned to use tools like git and github.

We as a team have worked with good coordination with timely meetings, planning, designing the application. The three months journey in the project has improved the teamwork skills significantly. The sprints in the project are well divided in perfect durations which covered all the processes of agile methods of development.

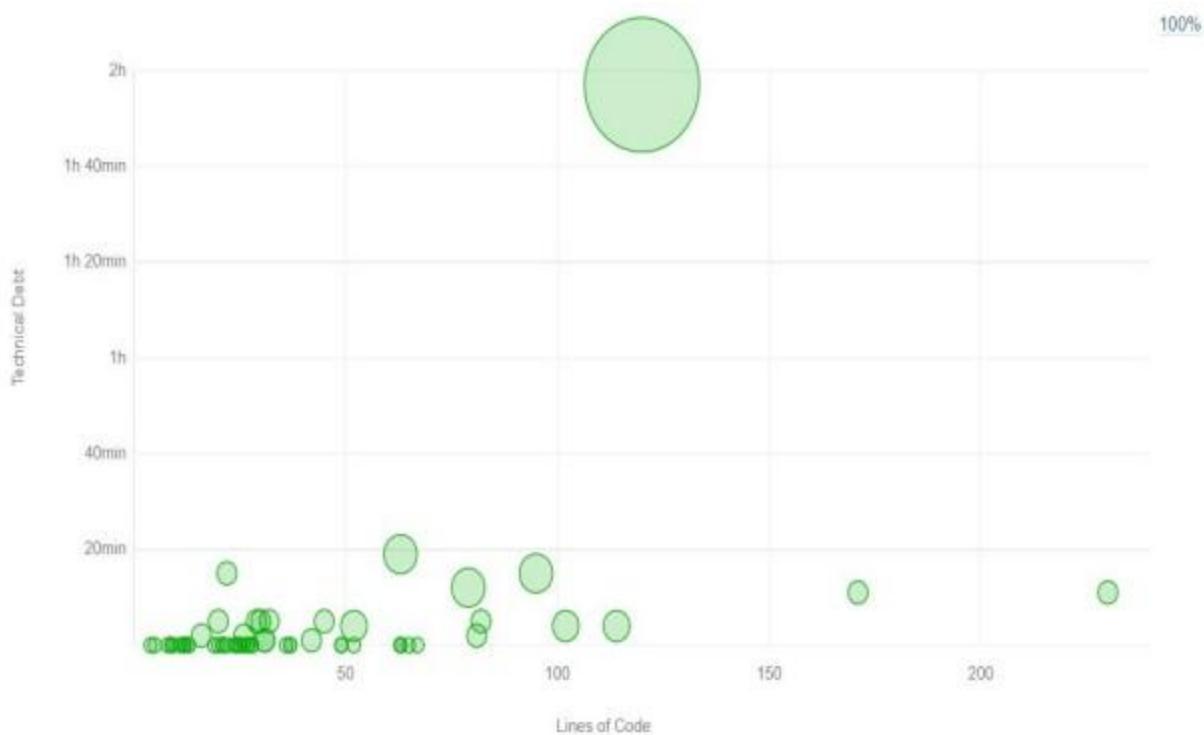
Project planning, domain knowledge, designing the product have been the three major challenges for us across the project development. By default, our target audience is people living in major cities. This has confined the reach of aid the web application is providing. We would like to further improve our UI/UX, Enable UPI payment on the website and add forgot password option for the user.

## Appendix A - Code Quality Reports



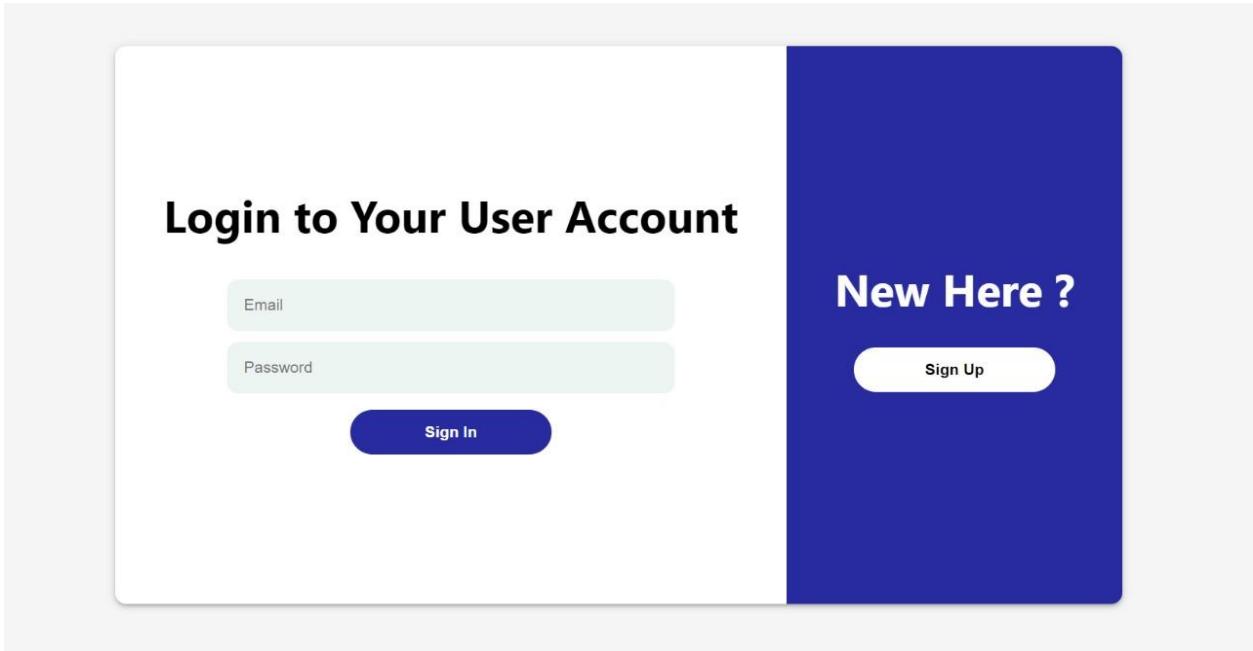


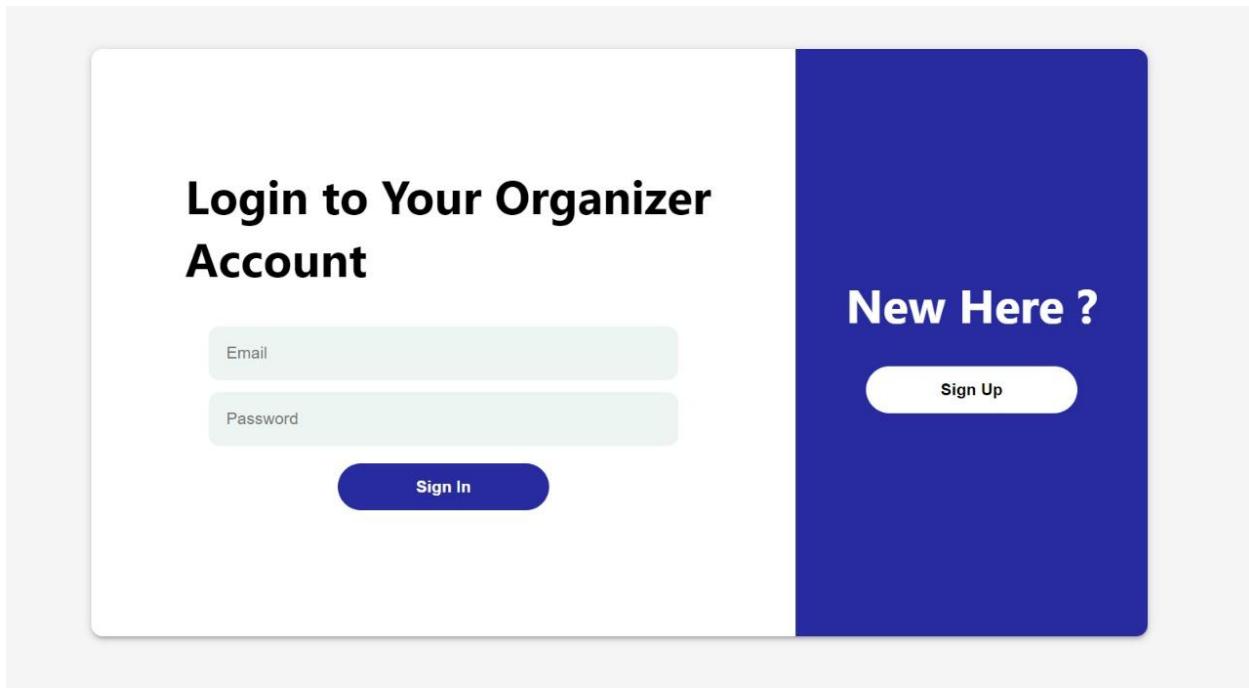
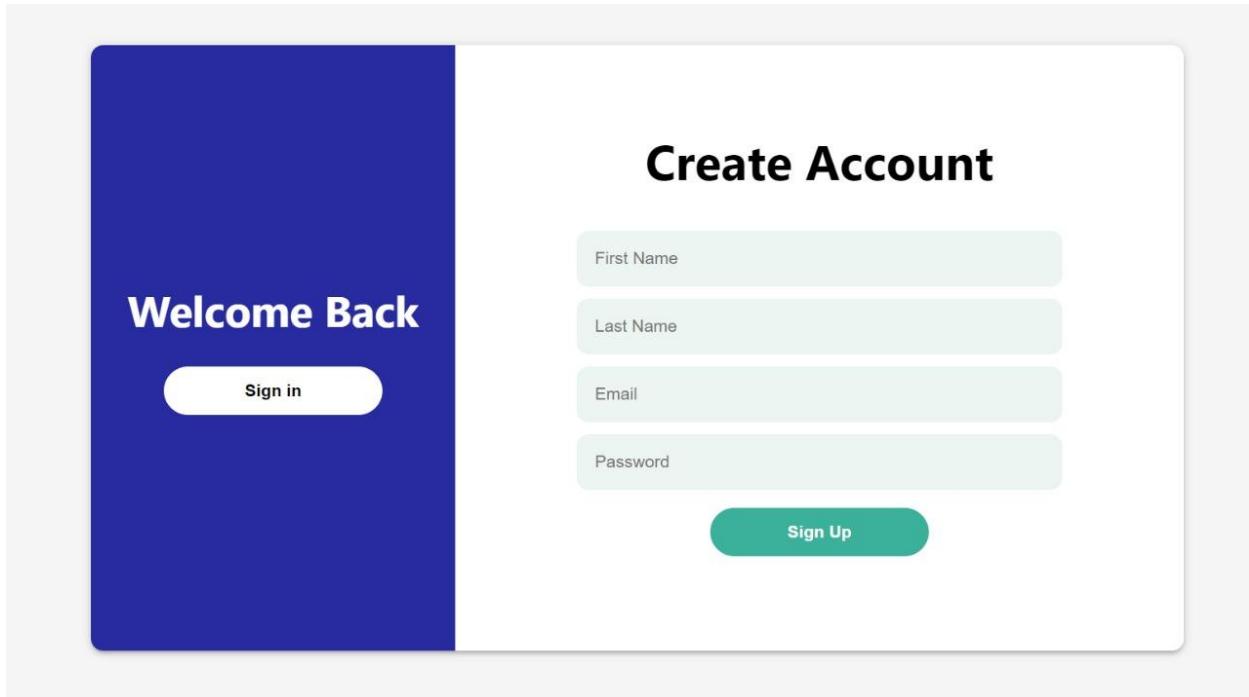


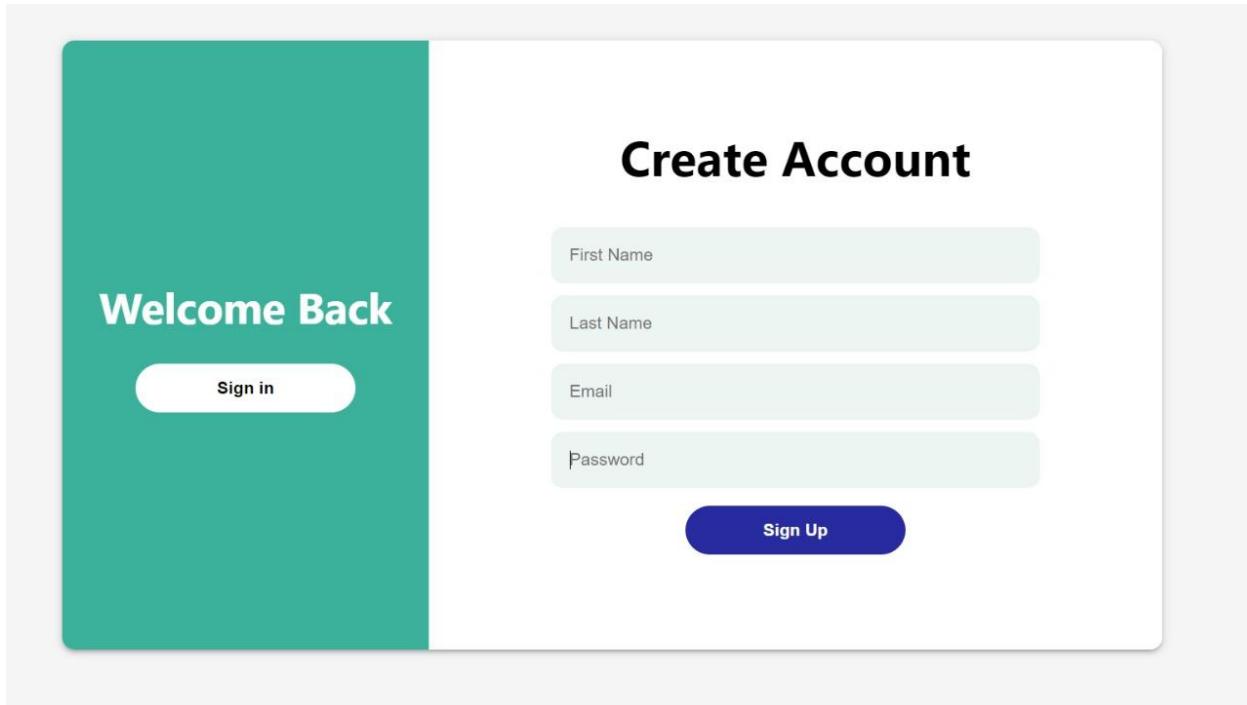


## Appendix B - Sample screenshots

<key functionality implemented in this sprint;  
limit to a max of five screenshots>







The image displays the 'Organiser Space' interface. At the top, there is a header with the title 'Organiser Space' and a 'Logout' button. Below the header, there is a feed of posts:

- DVV Entertainment | Brindavanam** (a day ago): A post featuring a movie poster with several actors. It includes hashtags: ##RC #NTR #1000CR #SSR #RRR. Below the post are 'RRR' and two interaction buttons: 'LIKE 0' and 'DELETE'.
- TribeVibe** (a day ago): A post featuring a placeholder image icon. It includes a timestamp: '# a day ago'. Below the post are two interaction buttons: 'LIKE 0' and 'DELETE'.

On the right side of the screen, there is a vertical sidebar containing a section titled 'Creating an Event' with fields for 'Creator', 'Title', 'Description', and 'Tags (comma separated)'. At the bottom of this sidebar are three buttons: 'Choose File' (with a note 'No file chosen'), a blue 'SUBMIT' button, and a red 'CLEAR' button.

### Creating an Event

Creator

Title

Description

Tags (coma separated)

No file chosen

SUBMIT

CLEAR

## User Space

[Logout](#)



DVV Entertainment |  
Brindavanam  
a day ago

##RC #NTR #1000CR #SSR #RRR

RRR

Like 0 Delete

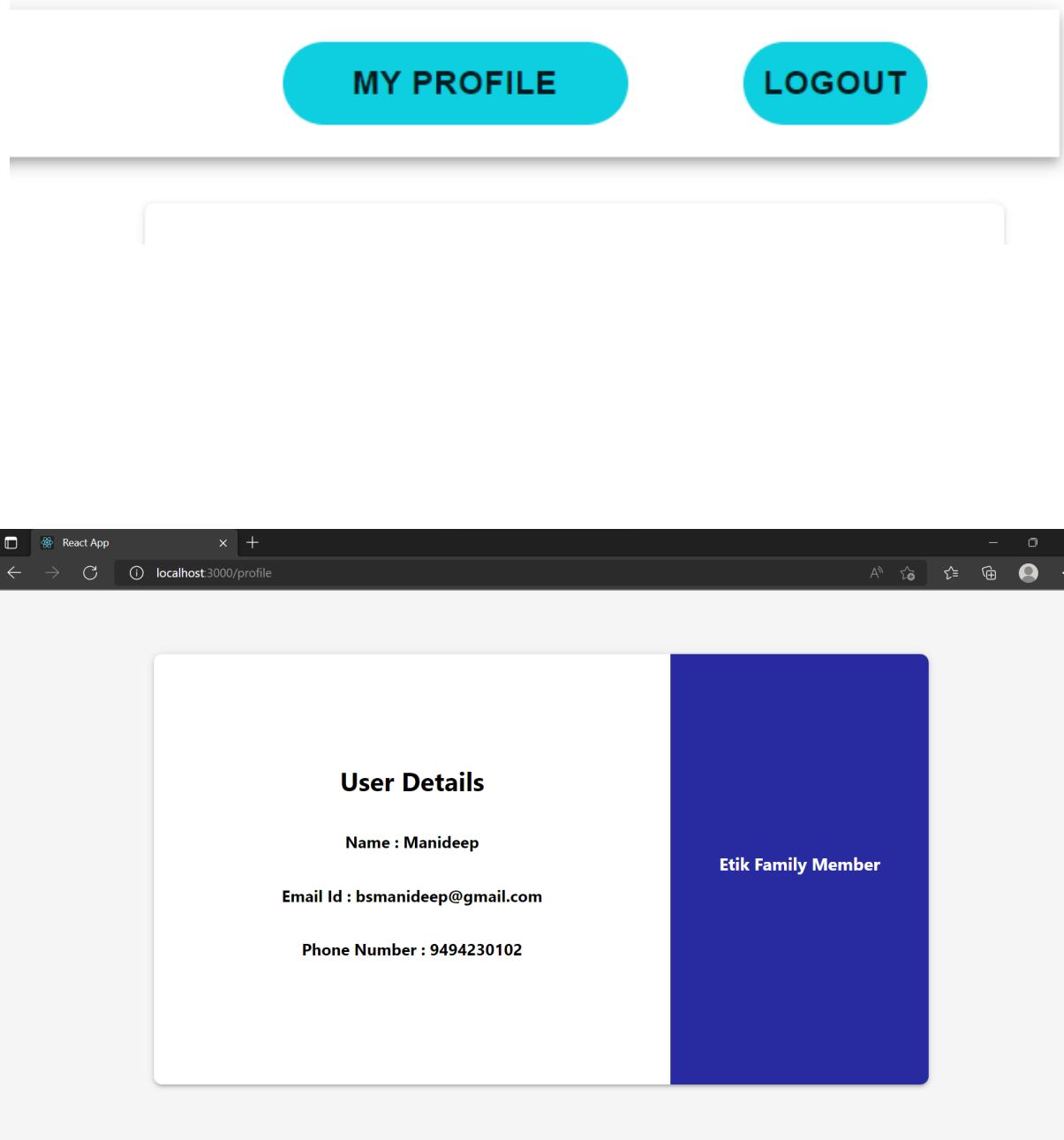


TribeVibe  
a day ago

#

Bollywood Night - Armaan Malik

Like 0 Delete



## User Buy ticket feature :

**Details**

Quantity

---

Ticket Class ▾

Price : NaN

**SUBMIT**

**DOWNLOAD**

## Appendix C – Project management

<Selected reports from Pivotal Tracker – Project overview (example shown below), Iteration report, and Burnup chart; exported or screenshots from the Tracker>

