

# COMP3900/9900

## 2022 Term 2

### Project 7

#### Event Management System

Numerous companies wish to host **events**, allow **customers** to book tickets for such events, provide **booking management capabilities** to customers, and deliver ongoing information about their hosted events. **Event Management System** provides a platform to achieve that.

The system must allow:

- **Hosts** to register and login using username and password credentials.
- **Hosts**, once registered, to advertise a new event with details on the event title, description, type (e.g., concert, theatre, etc.), venue (name and address), event start/end date/time, number of tickets available, ticket price, etc.
- **Prospective customers** (anyone in the public) to view a list of events coming up in the next month that have not sold out.
- **Prospective customers** to register their details, including payment details, to become customers and be able to login.
- **Customers**, once registered, to book (purchase) a ticket for a listed event when tickets are available. During the booking process, customers must be able to select an available seat for the event they are booking.
- **Hosts** to broadcast a message to all customers that have booked tickets to a given event (e.g., via email).
- **Hosts** to cancel an event that has not started, which should cancel all event bookings, broadcast a cancellation message to all customers with a booking, and refund booking costs to customers.
- **Customers** to cancel their booking if the event is scheduled to occur at least 7 days into the future, and this should refund customer booking costs and free up the ticket spot for someone else.
- **Customers**, after attending an event they have booked, to leave a review for that event (one review per customer).

- **Hosts** to reply to reviews that have been left by customers for their events.
- **Customers** and prospective customers to read reviews, as well as host replies to reviews, for all events.
- **Customers** to search for events by event title, description, and/or type.
- In addition, the system must be able to provide event **recommendations** to customers based on the event types and hosts booked in the past. It must also be able to provide recommendations to events that have a description, which seems "**similar**" to descriptions for events that have been booked in the past.

You need to come up with, at least, eight (8) functionalities including, at least, two novel functionalities with respect to existing related systems in the selected application domain.

### Useful links

1. <https://www.ticketmaster.com.au/>
2. <https://www.eventbrite.com.au/>
3. Example Email API: <https://sendgrid.com/> (see **Free** plan)