

**University of British Columbia
Department of Computer Science
CPSC 304 2019 W2**

**Group Project - Implementation of a
Relational Database**

Project Title:	EventOff
Project Milestone:	Milestone 4: Implementation

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above.

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia.

Project Description

This application aims to accomplish an interface for users (who attend events) and for hosts (who host an event) to allow them to interact with the events happening. The app has a very preliminary login page (landing page) where the client can enter their ID and then they are redirected to the corresponding page which contains the features for a regular user and a host based on the login ID.

Using this application, a user can do the following:

- Search for events in a category.
- Check their schedule based on what all events are they attending.
- Find tickets and their vendors by price range.
- Find an event's host's rating.
- Find the cheapest ticket for an event by all ticket vendors.
- Buy a ticket.

In addition, a host can also do the following:

- See all the events they are hosting.
- Find information about all the people who are attending all the events hosted by this host.
- Add a ticket for one of their events and specify the price and the ticket vendor.
- Update an event's details.
- Search for venues by capacity.
- Find people attending an event hosted by this host.
- Get contact information of the performers performing at an event hosted by this host.
- Delete an event.

Example Login IDs:

User	Host
4345	2834
3252	10011
20056	3967

Proposed Schema vs. Actual Schema

Proposed (changed tables are highlighted):

host1(email, organization)
host2(host_id, name, **email**, rating)
event(event_id, name, start_date, end_date, ranking, **host_id**)
performer(performer_id, name, contact, ranking)
venue1(name, address, capacity)
venue2(venue_id, **name**, **address**)
eventcategory(category)
regularuser1(name, email)
regularuser2(name, address)
regularuser3(user_id, **name**)
ticket(ticket_id, price, booked_on, user_id, host_id)
ticketvendor1(name, address, contact)
ticketvendor2(vendor_id, **name**, **address**)
userschedule(user_id, schedule_id, time_block_start, time_block_end)
hostschedule(host_id, schedule_id, time_block_start, time_block_end)
bookedat(event_id, venue_id, start_date, end_date)
performsat(event_id, performer_id)
iscategory(event_id, category)
isfor(ticket_id, event_id)
reserves(user_id, event_id, ticket_id)
sells(vendor_id, ticket_id)

Actual (only changes shown):

1. ticket(ticket_id, price, ~~booked_on~~, **event_id**, **user_id**, **host_id**)
 - The host_id attribute was redundant. It's accessible by joining with event table. The user_id is also redundant since that relationship is encoded in the purchased table. We decided to drop tracking and displaying the booked_on attribute. Since reason for event_id on #2.
2. ~~isfor(ticket_id, event_id)~~
 - Since isfor is a many ticket to one event relationship, the event_id can just be an attribute of the ticket table.
3. ~~userschedule(user_id, schedule_id, time_block_start, time_block_end)~~
4. ~~hostschedule(host_id, schedule_id, time_block_start, time_block_end)~~
5. bookedat(**event_id**, **venue_id**, start_date, end_date)
 - For 3, 4, and 5, the datetime attributes can all be found by joining with the event table, so they are redundant.
6. ~~reserves(user_id, event_id, ticket_id)~~
7. purchased(**ticket_id**, **user_id**)
 - For 6 and 7, the reserves table is replaced with the purchased table. The change to the ticket table (#1) made the event_id attribute redundant.

New ER Diagram for reference:

