

Database Justification

Why we chose MySQL Workbench:

We decided on MySQL Workbench for our Spiritual Deval project mainly because it is free to use and it is opensource, which is very important to our sponsor. We have a very basic database schema for our project and MySQL Workbench more than fulfills our needs. All that our database schema requires are a few simple tables that can be related to one another through foreign keys. This database framework is also fairly simple to manipulate through the Blazor framework. Furthermore, all three of our team members have experience working with MySQL Workbench.

Tables and Relationships:

Our schema consists of four tables: 'eventregistrations', 'events', 'useraccounts', and 'volunteerregistrations'.

eventregistrations: has a 'user_id' as well as a 'event_id' column which are foreign keys corresponding to 'useraccounts' and 'events' tables respectively. It also has columns 'event_registration_id' and 'registration_date'.

events: related to eventregistrations through the primary key 'event_id' which corresponds to 'event_id' in that table. It also has columns 'EventTitle', 'EventDescription', 'EventDate', 'EventLocation', 'MaxParticipants', 'VolunteersRequired', and 'SkillsRequired'.

useraccounts: related to eventregistrations through the primary key 'id' which corresponds to 'user_id' in that table. Also, in this table are stored the user 'password's which are hashed for security. It also contains columns 'user_name', 'role', 'email', 'first_name', and 'last_name'.

volunteerregistrations: contains 'user_id' and 'event_id' which are foreign keys corresponding to 'useraccounts' and 'events' tables respectively. It also contains columns 'volunteer_registration_id', 'registration_date', and 'skills_provided'.

Reasoning for Setup:

According to our functional requirements, users with the role of 'administrator' need to be able to view those users who have registered for events. They also need to be able to view those users who have registered to volunteer for events. The eventregistrations and volunteerregistrations tables allow us to implement that to our admin page on the website.