

ENUE MANAGEMENT AND TICKETING APP



Guillermo Zerpa @Guiyed on GitHub

Description

VenueApp is an event ticketing Web application that allows staff members of any organization to manage and track reservations for the events they offer. It also allows consumers to browse the webpage for available events and make a reservation online.

This application could become a customizable platform for any business owner who needs to manage users, events, memberships, reservations, tickets, promotions etc.



Features

- User **Signup**, **Login** and **Logout** (Through Sessions)
- Embedded Administrator and User roles in the app (Allowing separate dashboards and features)
- Intuitive *Management* of *database* tables (create, edit, delete)
- Populate Events table via 3rd party connection (Ticketmaster API)
- Query Interface to browse or search events in the database.
- Events Location Map (Using BingMaps API)
- Unique user reservation QR code Ticket. (Using goqr.me API)



Planning - User Stories

- Administrators can login, create and edit events (with details such as date/time, location, title, description, category, etc.).
- Administrators can populate or fill the events database with real life data via queries to an Events API.
- Users can browse the web app and search for available events
- Users can signup and/or login to the app which will enable them to Book an event and also manage their reservations and profile info.
- Users can view their bookings and request an QR code for the event.



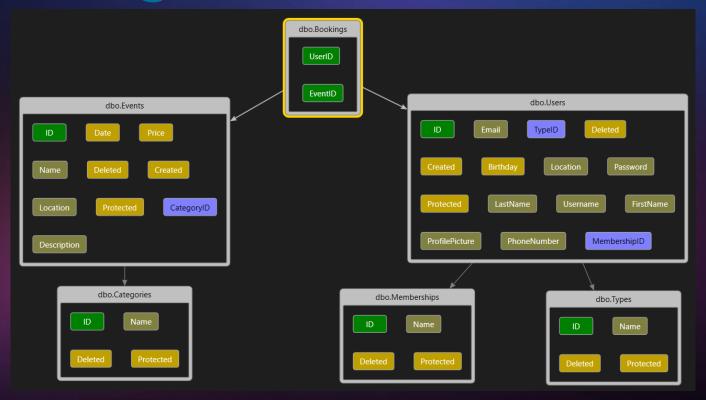
Planning - Database

The primary tables for the database are: Users, Events and Bookings. The Secondary tables are: Type, Memberships and Categories.

- All tables except Bookings, have a primary key(ID).
- Users have all the information of a common user, like: Username (Unique index), Full Name, Password, etc. they have a one to many relationship to the Type table, and Membership table through their foreign keys.
- Events have all the information of an event, like: Name, Date, Time, Category, etc. They have a one to many relationship to Categories through the foreign key.
- Bookings is a Cross-Reference table to create a many to many relationship between the users and the events. The objective is to create a unique Reservation for each user.



Planning - Database (continued)





Technology Stack

- IDE: Visual Studio 2017
- Language: C#
- Framework: ASP.NET Core MVC
- Template engine: Razor Pages
- Database engine: SQL Server Database (Managed by Microsoft Entity Framework)
- Front End and UI: Bootstrap, HTML and CSS
- API Interactions: JavaScript and Ajax















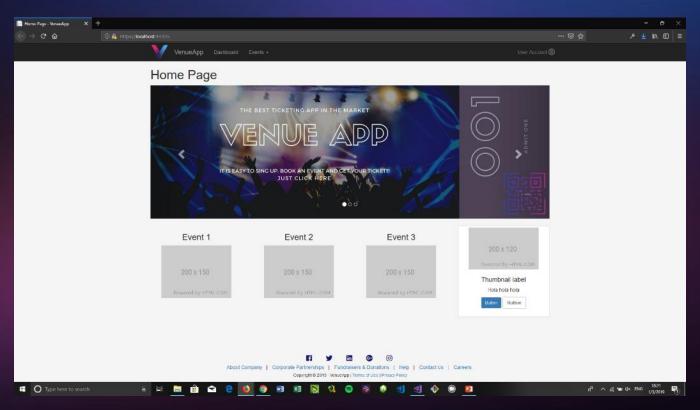






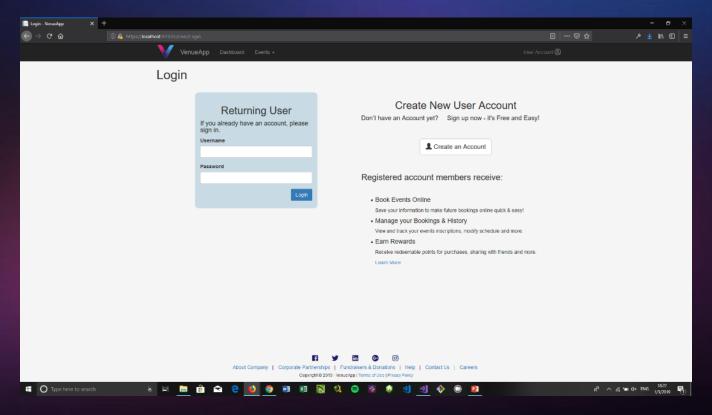


Demo (Homepage)



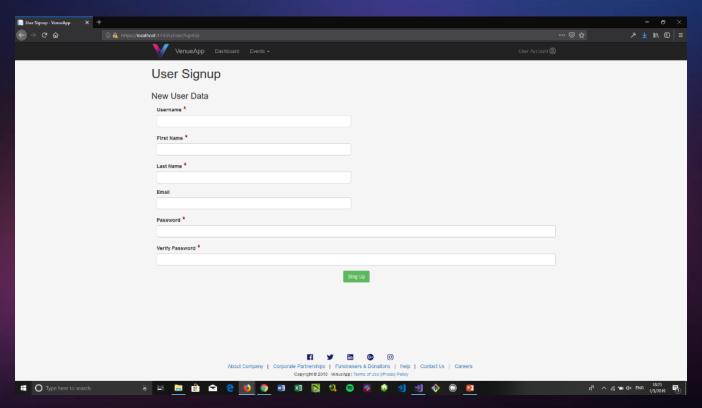


Demo (Login)



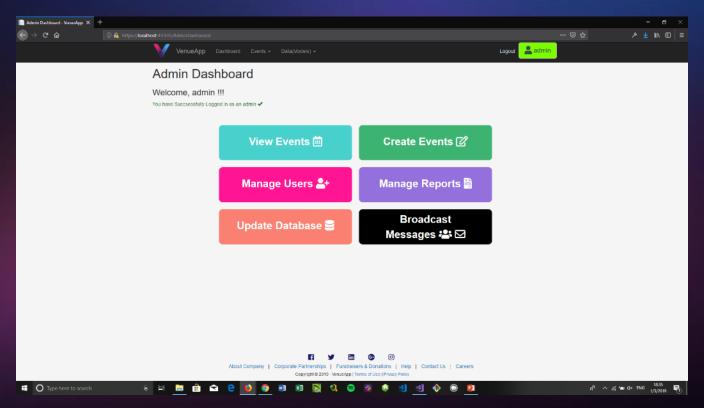


Demo (User Signup)



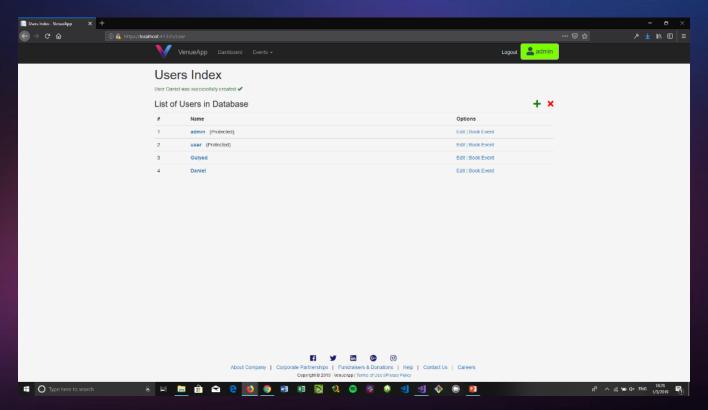


Demo (Admin Dashboard)



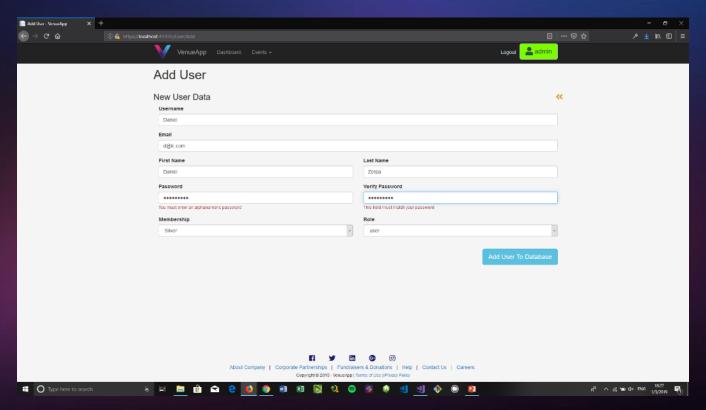


Demo (Manage Users by Admin - Index)



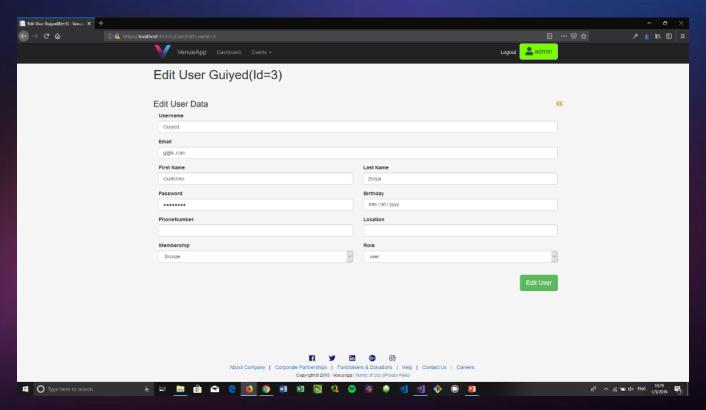


Demo (Manage Users by Admin – Add)



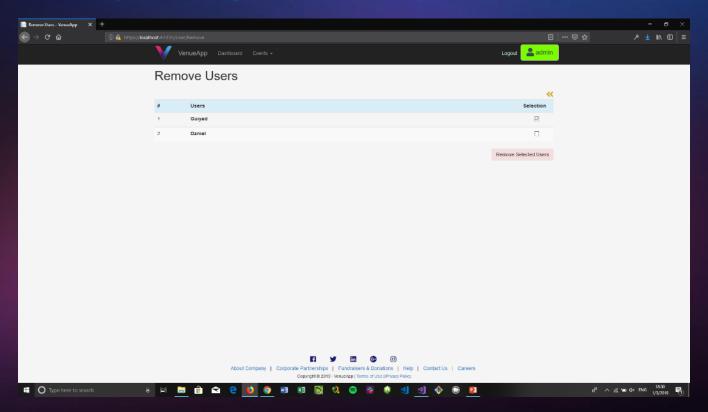


Demo (Manage Users by Admin – edit)



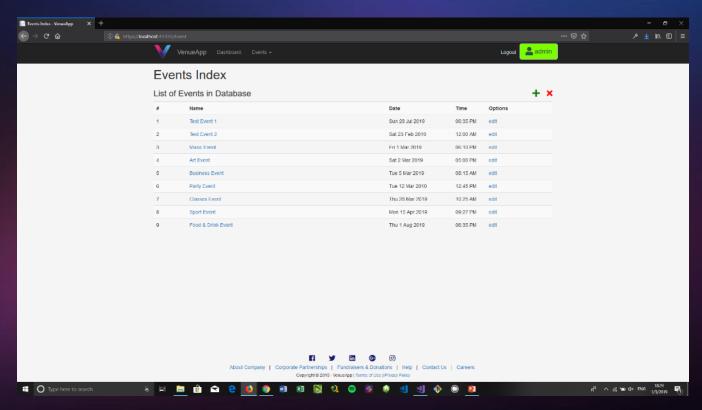


Demo (Manage Users by Admin - delete)



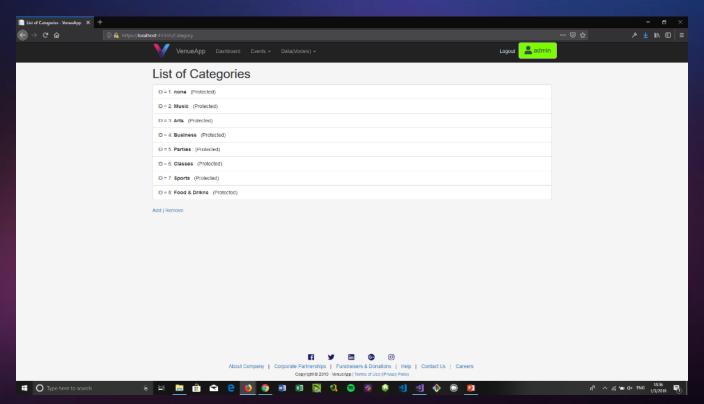


Demo (Manage Events by Admin)



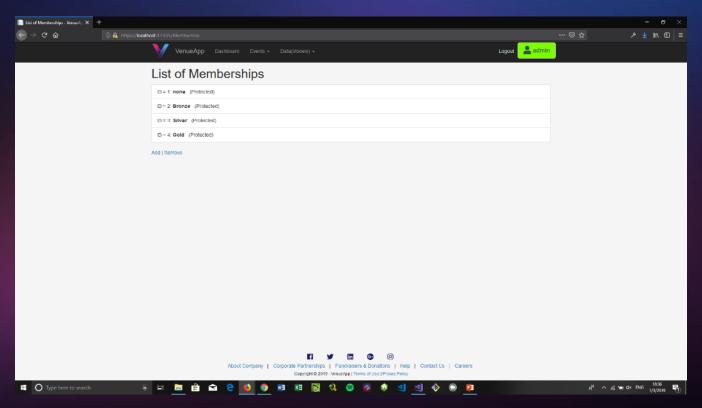


Demo (Manage Categories by Admin)



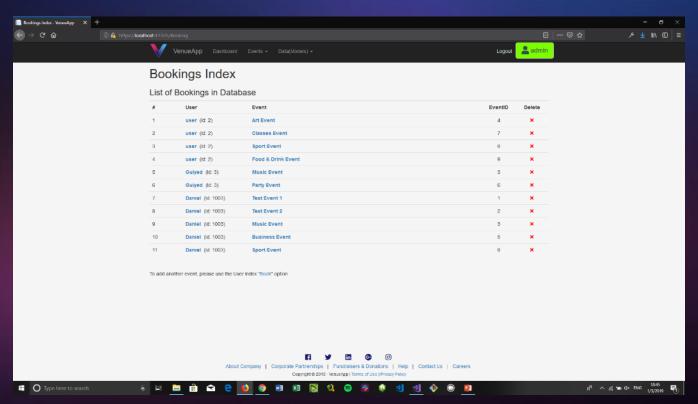


Demo (Manage Memberships by Amin)



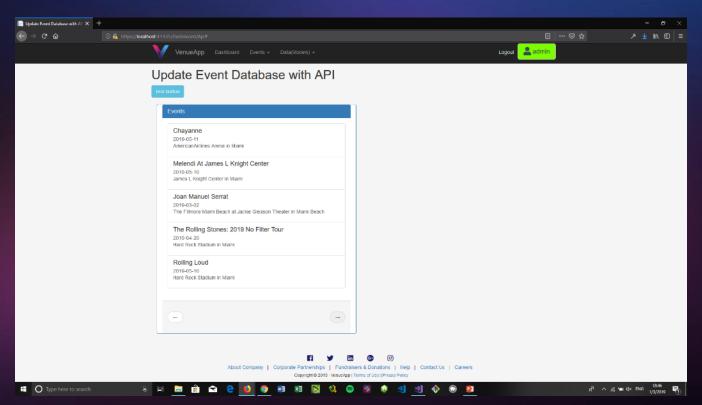


Demo (Manage Bookings by Admin)



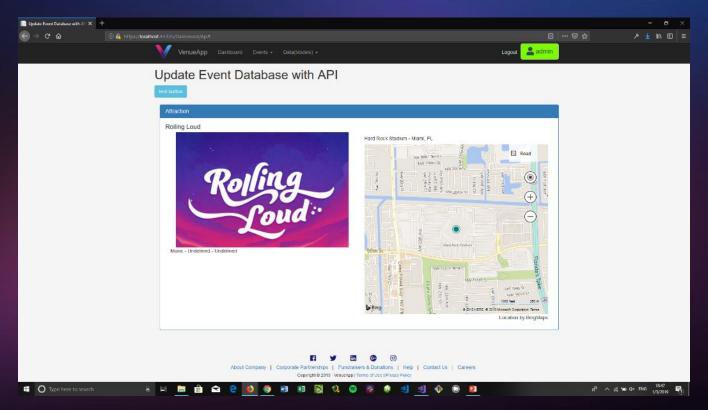


Demo (Interacting Event API - show)



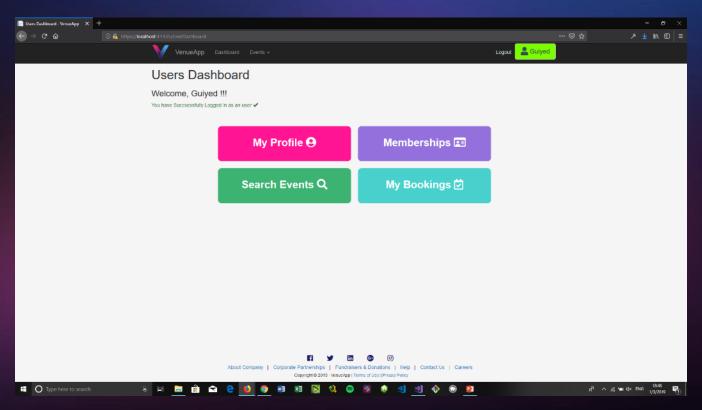


Demo (Interacting Event API - details)



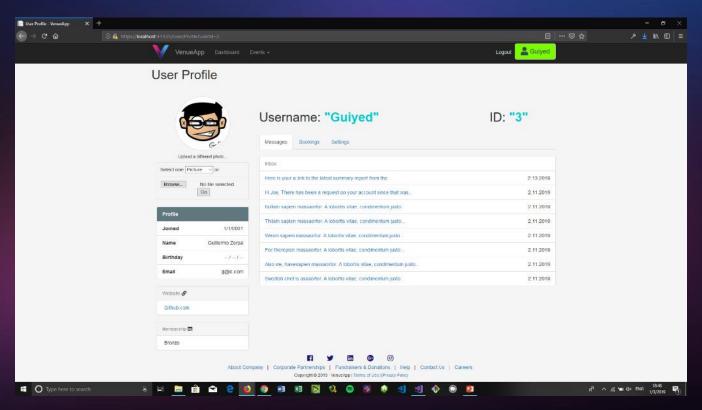


Demo (User Dashboard)



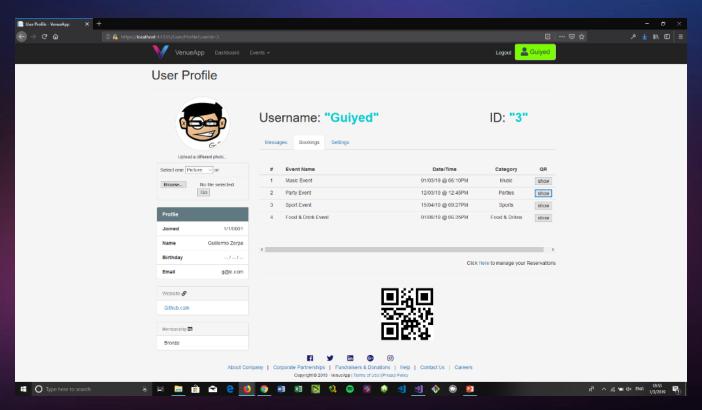


Demo (User Profile - Home)



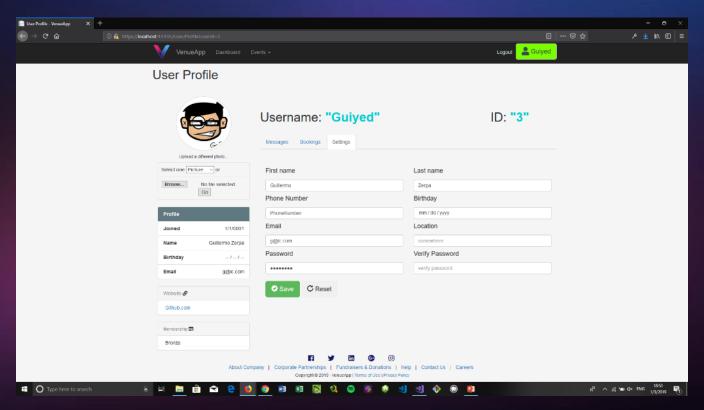


Demo (User Profile – View Bookings)



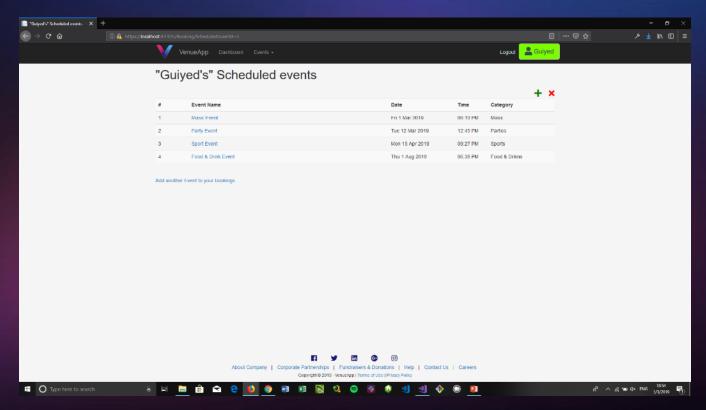


Demo (User Profile - Settings)



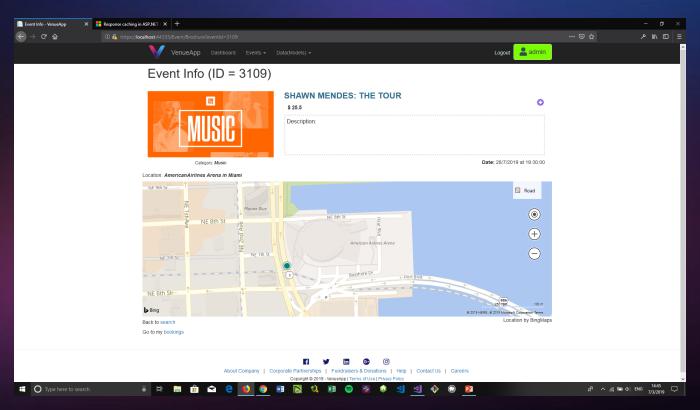


Demo (Manage Bookings by User)





Demo (Event Brochure by User)





Demo (Solution Explorer)

```
💿 - 🔘 ধ - 🔄 🔛 🛂 🥠 - 🧠 - Debug - Any CPU - 🕒 🕨 IS Express - 🖒 - 📠 - ե 때문 🗷 🖫 🗏 🖽 🗎
UserController.cs > X User.cs VenueAppDbContext.cs
                                                         site.js DashboardController.cs EventController.cs
                                                                                                                                                                   ▼ Solution Explorer
                                             Profile.cshtml
 ■ VenueApp
                                                      - VenueApp.Controllers.UserControlle
                                                                                                                                                                      1 P ⊡using System;
                using System.Collections.Generic;
                                                                                                                                                                      8 Solution 'VenueApp' (1 project)

■ B

■ VenueApp

                using System.Ling;
                                                                                                                                                                          Connected Services
                using System.Threading.Tasks;
                                                                                                                                                                        Dependencies
                using System.Web:
                                                                                                                                                                        ▶ ■ Froperties

■ B

■ www.root

                using Microsoft.AspNetCore.Http;
                                                                                                                                                                         Þ 🛮 🛗 ess
                using Microsoft.AspNetCore.Mvc;
                                                                                                                                                                          ▶ a images
                                                                                                                                                                          > ≡ is
                using Microsoft.EntityFrameworkCore;
                                                                                                                                                                          Þ ∎⊞ lib
                using VenueApp.Data;
                                                                                                                                                                          ▶ ∎ 📹 videos
                using VenueApp.Models;

■ ■ Controllers

                using VenueApp.ViewModels;
                                                                                                                                                                         > = C* BookingController.cs
                using VenueApp.Helpers;
                                                                                                                                                                         > a C CategoryController.cs
                                                                                                                                                                          namespace VenueApp.Controllers

⇒ a C<sup>a</sup> MembershipController.cs

                                                                                                                                                                          public class UserController : Controller

⇒ a C* UserController.cs

■ ■■ Data

                         private VenueAppDbContext context;
                                                                                                                                                                          Þ a ≡ Helpers
                          public UserController(VenueAppDbContext dbContext)
                                                                                                                                                                        ▶ a ■ Migrations

■ ■ Models

                                                                                                                                                                          > Ca Booking.cs
                              context = dbContext;
                                                                                                                                                                          b a C<sup>3</sup> Event.cs
                                                                                                                                                                          b = C+ User.cs
                                                                                                                                                               + 1 ×
                                                                                                                                                                          ▼ Ø 0 Errors 1 0 of 17 Warnings 0 0 Messages W Build + IntelliSense
  Entire Solution
                                                                                                                                                                        ▶ a ■ ViewModels

■ ■■ Views

       Code Description ♥
                                                                                                                                        Project
                                                                                                                                                                          ▶ a ■ Booking
                                                                                                                                                                          > = Category
                                                                                                                                                                          ▶ s ■ Dashboard
                                                                                                                                                                          Þ ∎ Event
                                                                                                                                                                          ▶ ∎ Home
                                                                                                                                                                          ▶ ■ Membership
                                                                                                                                                                          > ∎ Role
                                                                                                                                                                          ▶ a # Shared
                                                                                                                                                                          Þ ∎■ Test
                                                                                                                                                                          > ≡ ■ User
                                                                                                                                                                           ■ PiewImports.cshtml
```



What I Learned

- I became more proficient reading documentation and searching information on Google.
- I learn the hard way how to implement sessions and roles.
- I learned how to create separate Dashboards for users and admins.
- I learned how to integrate "tabs" in a single page. I used this for my profile view.
- I learned some JavaScript via reverse engineering of running examples.



What I Learned (continued)

- I learned what is an API and how to interact or connect with an API via AJAX.
- I finally understood CSS and got proficient with Bootstrap 3.3.7
- I learn more about GIT Branches and their benefits to use them.
- I have also learned that there is always a free or almost free API for anything that you need. For example I used API's for pictures placeholders, Events Data (with a lot of useful and updated information), Map Location and QR codes.



What's Next

- Deploy App on the Internet (Microsoft Azure, AmazonWebService)
- Refactor the whole app (DontRepeatYourself).
- Learn how to use and implement the built in Windows Security,
 Authentication, and Authorization Libraries.
- Add Cookies and promotions.
- Implement and integrate an automatic "Broadcast message" feature (using email and/or SMS) for target marketing.
- Learn AngularJS and incorporate it to the project.

