Event Management System for WUSPBA

HomeTeam

Introduction

The Western United States Pipe Band Association (WUSPBA) has asked our team to create a new, comprehensive replacement for their aging current system. This includes a new User Experience for both users and administrators as well as a complete backend overhaul for event planning and user registration.

About WUSPBA

As an organization, WUSPBA organizes solo and team concerts/competitions both in person and online for an "All Ages" clientele. This means that their new front end will have to be accessible and easy to use.

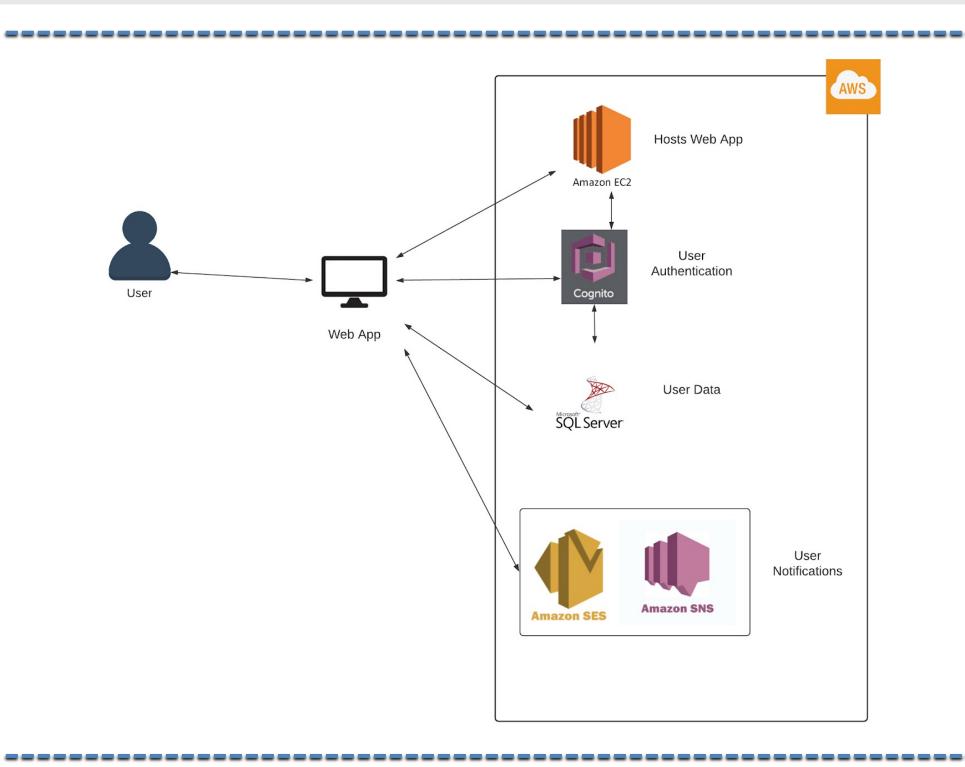


The Website

The site itself will be hosted on a Windows 10 Amazon EC2 instance. This setup supports ASP.NET technologies, as well as allows us to adjust instance resources as the client's needs change. Specifically, we will be making significant use of the ASP.NET Core Authorization and MVC libraries, along with the Entity framework and ling libraries William Meldrum, Kevin Nguyen, Johnny Zhang, Warren Kidman, Todd Thornley

User & Contest Data

WUSPBA needs to keep records of their users, their roles, and events. This includes event placings, grades, scheduling, and more. We will be using Amazon's Relation Database Service to host a Microsoft SQL Server instance, managed through Microsoft SQL Server Management Studio. We have decided to keep WUSPBA in the Microsoft ecosystem for ease of use.



User Registration

User registration and authentication will be handled through AWS Cognito via REST API calls. The user base in Cognito will only hold user authentication information. All WUSBPA related information will be generated and stored between the web app and our AWS RDS instance. Cognito will generate unique identifiers for each user, which will be used across Cognito and our user database.

Payment

All fees, for user registration and contests, are handled via PayPal. This allows us to test user transactions and implement an easy-to-use payment method that allows both pay by card and with a PayPal account. WUSPBA will be able to easily add their PayPal information and begin accepting payments once in production.





Notifying Users

User notifications will be handled through Amazon Simple Email Service and Simple Notification Service. These services will allow games administrators to contact participants through email, text, and push notifications. Combined with our user database, this will allow administrators to specify bands, groups, or individual users.