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Project Description

We have chosen to create a web application to provide utilities and interfaces for both character players and dungeon masters of the table-top game, Dungeons and Dragons. We were all four inspired by our interest in the creativity and experience of the game, despite some of us having minimum personal experience in a campaign. Outside of the group, many of our friends thoroughly enjoy the imagination and wonder that comes with the gameplay. It's from these experiences and the experiences of other players that there exists a list of grievances in playing Dungeons and Dragons. Because we are all interested in learning to both tackle the creation of a full-stack web application and solve this list of grievances, we are very motivated to work on this project, *the Dungeons and Dragons Campaign and Data Tracker (DnDTracker)*, and further our knowledge on how company's require professional developers to handle end-to-end technical requirements.

The DnDTracker is not a utility specific to one side or the other of Dungeons and Dragons' player-base: character players and dungeon masters. Instead, DnDTracker is intended for use by both. The features and interfaces provided by the application allow for ease-of-use with record-keeping while following along a campaign. Any user who logs in will be able to participate in a group as either a character player or a dungeon master. Because of this, the DnDTracker provides flexibility with parallel and past campaigns, allowing users to take on the roles they assume and make use of the features catered to that role in any of their groups.

Because the application is catered towards both sides of the Dungeons and Dragons player-base, all users are able to register, login, and navigate between campaigns through a consistent user experience. To avoid the need for users to fill out yet another account registration form, the DnDTracker will implement Google's Sign-In API. From there, users can navigate current and past campaigns as well as create new ones. The dungeon master, or campaign creator, will be provided an interface to manipulate the state of the current campaign, include notes on the story thus far, and alter data for player and non-player characters. The character players will be provided an interface to customize their characters, view their and others' current stats, and track notes sent by the dungeon master. The goal of the web application is to provide better organization and simplicity while enjoying Dungeons and Dragons.

The application will use a handful of AWS resources (DynamoDb, ElasticBeanstalk, and S3) for hosting our database, deployables, and files. Our technology stack will also include ASP.NET, JQuery, and SCSS for the app's core functionality and SignalR for client-server

communication. To avoid the need for security compliance and implementation, account authorization and persistence will be handled by Google's Sign-In API. The application will be largely written in C# via Razor, with Javascript, HTML, and CSS embedded into the markup and stylesheets. These combined technologies and integrations will provide a great foundation for us as developers, allowing us to grow and learn from modern corporate technologies.