*The Medallion Theater*

# Technology Vision Report

# Front End

For the Front-End programming we will be using a combination of HTML, CSS, TypeScript, the JavaScript library React.js, and CSS-IN-JS framework styled-components. TypeScript has been chosen for its strong type safety and easy adaptability. We will be using React.js due to it being a popular and proven JavaScript library with extensive documentation and support with third party libraries that can do just about anything you could want to do. It is also compatible with any backend technology without having to rewrite any components. This gives us the flexibility to use whatever the best technology stack for the job at hand and not be tied to legacy technologies as they become outdated. Styled-components is an incredibly flexible and powerful framework which allows us to create custom React.js components and style them in the same file they are created using CSS-IN-JS. It also maintains the local style state of the component regardless of the style of container. This helps to make the components reusable in a larger variety of situations with minimal effort.

# Back End and Database

Handling server-side processes we will be using TypeScript with Node.js. This is beneficial to us in that it will increase ease of maintenance by only requiring the developer to be familiar with a single language for both front and back-end services. The processes required for our program will only be needed on demand, making them a great candidate for a serverless architecture. Node.js provides us with an excellent industry proven solution for this.

The storage format for the information required does not need to be dynamic. This makes it a prime candidate for a relational database, which is why we will be using MySQL as our storage solution.