

## **System Request - Color Generator Website**

**Team Name:** Lakeshore Misfits

**Members present:** Khiem Nguyen, Munmi Thakuria, and Selena Cade

**Project Sponsor:** Professor Fredericks

### **Business Need:**

This project has the opportunity to give users the ability to generate and pick a color palette for their website. Users can preview the colors in the palette and adjust the colors' value and contrast, ensuring paired light-dark colors comply with the website accessibility guidelines.

### **Business Requirements:**

- Provide a user-friendly website/application
- Provide the user with a simplified interface or panel for choosing various color schemes
- Provide the user with the ability to adjust or correct the contrast and value of the color palette automatically
- Allow user to preview color in a static mock webpage
- Provide the user with information on how well the color palette meets the level AA or AAA Web Content Accessibility Guidelines in terms of contrast ratio
- Allow the user to copy the color values given in each color palette

### **Business Value:**

We expect our color generator website to benefit users such as illustrators, developers, artists, and designers. Some users might not understand color harmony or think about how colors mesh together. We have created a website that gives users proper information, based on the Web Content Accessibility Guidelines, on what colors not to use with one another. Many color generator websites can produce harmonious color palettes but do not account for web accessibility; our application intends to fill this niche. In addition, this project allows us to expand countless future features in future projects.

### **Special Issues or Constraints:**

- The project members have limited or no experience with React and other technologies/dependencies, such as Axios, required for the project. To overcome the team's shortcomings, we will watch tutorials and read articles to understand those technologies better and implement small proofs-of-concept to ensure we can get these technologies to work before we utilize them for the project.
- The environmental setup of each technology might be an issue if they don't all align with one another and aren't consistent across the team members' workstations. We intend to

do more research to ensure that each technology and version is compatible. We will also coordinate with each other on the work environment setup to ensure they are consistent for all members across the board.

- We have limited experience deploying an application on either GitHub Pages or Google Cloud's Virtual Machines, and we understand deploying an application takes time and resources. To ensure we understand how to deploy our application on hosting sites or web servers, we intend to watch tutorials, look over old notes, and communicate with each other and our project sponsor to help us with this issue. To guarantee we deploy the application on time, we will create a realistic scope and schedule for the project. If we need funding for the hosting site or server, we will ask our project sponsor or champion for some monetary credits for the semester.
- There are time constraints with all project members since we are taking other courses and working. We strive to communicate and find a time for every member to meet to work on the project. To ensure we meet our schedule properly and complete our project on time, we will create a realistic scope, factor setbacks or slack time into our schedule, and adjust our requirements as necessary.
- While the APIs we use are free, there might be constraints if those APIs switch over to a pay-to-use model. We will watch closely for each API and ensure they remain free and accessible for the duration of the course.