SCOUTING APP 1.0 REPORT

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Contents

Overview

The app has multiple features that help besides just the posting information ability. There is a "SOS" button which is currently linked to a google form that asks you what you need. This feature can be easily changed. The app has three links at the top right part of the screen that can be used to easily see the GitHub organization, contact form, and our legal information about our code. Lastly there is a security file in the code that will be discussed further in the document.
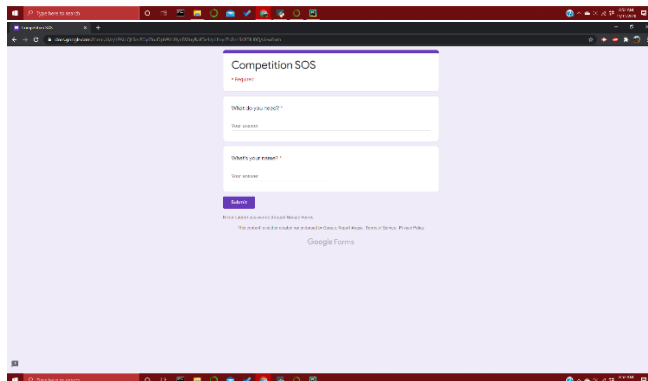
Snapshots
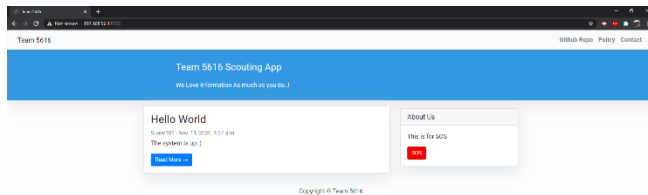
This is a snapshot of the home page of the web application where you can see that SOS feature, the three buttons in the top right and the posts.
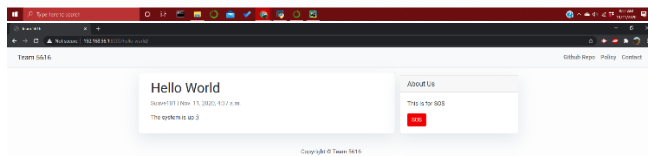
This is a snapshot of a sample post where you can see the post better. If the post were longer, you would have to click to this screen due to a small amount of space on the home page.

This is a snapshot of the "SOS" form which is where you go if you click the "SOS" button. The form asks you for your name and what the problem is. *Note: You can post issues on the main site and we can replace this with something else or delete it all together.*
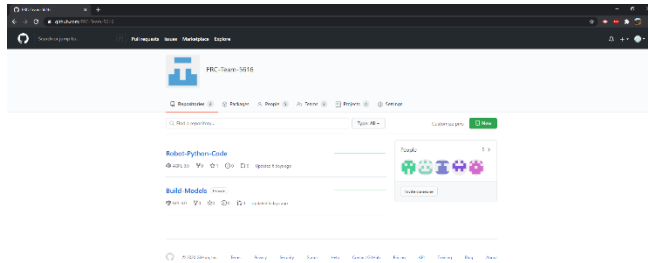
This is a snapshot of the page on our GitHub organization that the "Github Repo" button brings you to. We can change where on the GitHub organization we direct it to or change the link and link text all together.
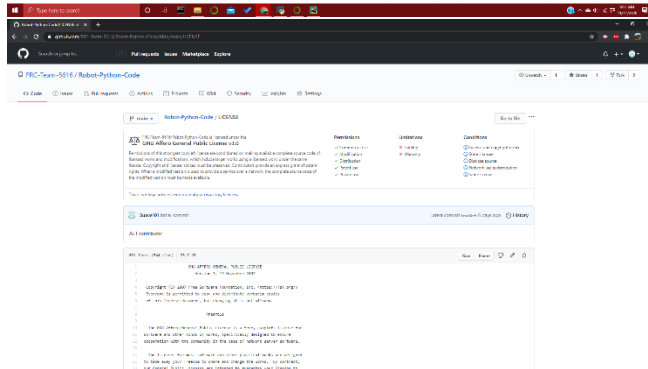
This is a snapshot of the page on our GitHub organization that the "Policy" button brings you to. We can change where on the GitHub organization we direct it to or change the link and link text all together.
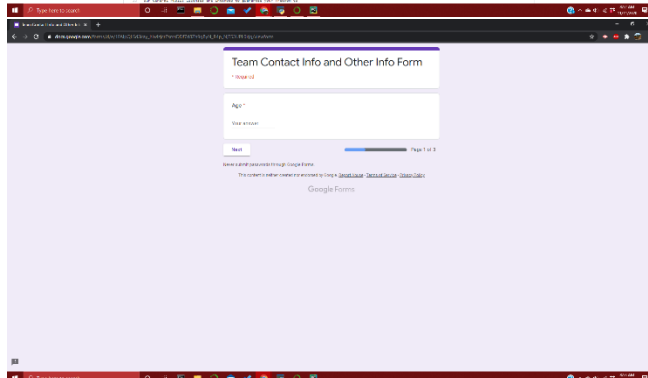
This is a snapshot of the Contact Google Form where the "Contact" button takes you to. This form and the button can be changed.

Application Security Policies

There are multiple Security Policies for the app we can use. The following policies are what we can use for the Application. Each policy has its upsides and downsides, and we can use as many of them as needed.

- Lowest Access Policy
- IP Routing/ Allowed Hosts
- Application Groups
- Password Policy - V1
- Password Policy - V2
- Password Policy - V3
- Shutdown Protocol
- Audit Policy

Lowest Access Policy

This policy works by giving everyone the lowest access to the system possible. This means only the leads have superuser accounts and everyone else can only post and delete posts. This policy would go well with the Application Groups system. This policy gives optimal security but, it may have effects on user's emotion and productivity. This may affect emotion because you are having zero trust in the system. This policy may affect productivity because, the people using the system do not have access to add users and change user settings. This could cost the leads time and effort at the competition. This can be applied easily.

IP Routing/ Allowed Hosts

This policy is works by only allowing specific IP addresses onto the application. The upsides to this are that if other teams get on our network trying to access our application, they will not be able to. The downside to this is that it will take a substantial amount of time to add a device to the system during competition due to the nature of static IP addresses and our system security protocols on the host device. This is a built-in feature that we can choose to use or not.

Application Groups

This is an already built in part of the Application where you can make groups of users and limit their access to the Application according to their group status. For example, you would have the leads in a different group with more access to the application than a new team member on the build team. The upsides to this are structural integrity of system security and its already built in. The downside to this policy is that some users

may have not enough access to parts of the Application at times. This is a built-in feature that we can choose to use or not to use.

Password Policies

The policies below have their upsides and downsides. The higher the version the higher the security. The recommended policy by Microsoft is Version 2.

- Version 1
    - 8-character minimum length
    - Must use symbol(s) and at least one uppercase letter
- Version 2
    - 10-charcter minimum length
    - uppercase characters
    - lowercase characters
    - non-alphanumeric characters
- Version 3
    - 24-charcter minimum length
    - Must use at least 5 symbols
    - Must use at least 5 uppercase letters
    - Cannot be pronounceable

Shutdown Protocol

This is how we can lockdown the system if an attacker enters the system. There are two ways of doing this. Protocol 1 would be unplugging the whole system including the router. Protocol 2 would be taking down the web server temporarily. Protocol 1 is good for attacks on the router or the main computer (Raspberry pi). Protocol 2 is good for wireless attacks on the system or a lead account being taken over.

Audit Policy

This is a built-in system that will audit every critical, warning, and info level task. There is also a built-in system that logs everything but does not have persistence unless copied before system shutdown. The upsides to this are that there is a digital trail for us to analyze if someone accesses our system without our permission and information, we can use in data forensics. There are no downsides to this built-in policy.

Application Styling

The application uses a white and blue color scheme. The application has a title, subtitle, and a website header title. The application needs new styling and title text. The recommended color scheme and styling is a green and black dark theme with different text styling. The administration page cannot be styled.

Current Application Status

The application is currently working, and stuff can be posted to it. The application needs to be restyled and titles and other text need to be reworded. The application can be used at the HSU Foundation as a blog or team only social media. The application needs to be reviewed.

Closing Statement

The Scouting App 1.0 is currently working and is ready for review. The only things the app needs are general restyling and content rewording. Lastly, the app need security policies to be picked for competition.