COVID Lens

Progress Report 1

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COVID Lens Application
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COVID Lens Application
Project Definition

What is it, and why is it needed?

COVID Lens Application
Project Definition

- COVID Lens is an <u>iOS application</u> that will be utilized as a viable countermeasure to the current safety and social threats posed by the COVID-19 virus.
- The global COVID-19 pandemic was declared on March 11, 2020 by the World Health Organization and, as the new year is slowly approaching, the virus shows no apparent signs of disappearing soon.
- This suggests a necessity of new data-driven tools and methods to help society work around and cope with COVID-19 while promoting safety.

COVID Lens Application
Project Definition

What is the goal of the project?

COVID Lens Application
Project Definition

The main goal of COVID Lens is to produce a novel COVID-19 tracking and public awareness system that will inform and protect members of the UNCG community from the COVID-19 virus.

COVID Lens Application
Project Definition

How will it be achieved?

COVID Lens Application
Project Definition

- COVID Lens will update regularly and inform users of the possibility of COVID-19 exposure in their area.
- Users will be provided with information and resources - from reliable sources such as the Centers of Disease Control and World Health Organization - to stay up-to-date with current COVID-19-related news as well as current safety measures.
- Users will also be able to view a real-time map that displays areas where positive COVID-19 diagnoses have been reported.

COVID Lens Application
Functional Requirements

- The application should be able to:
    - track user location data and update it in real time,
    - display data on a real-time map,
    - gather required data from users
    - provide users with nearby COVID-19 testing locations,
    - provide users with guidance and reminders regarding COVID-19 safety measures.
    - allow users to sign up and sign in using their UNCG student login credentials,
    - allow users to self-report a positive diagnosis for COVID-19 while preserving anonymity.

COVID Lens Application
Usability Requirements

- Users will be able to adjust settings to personalize their experience with the app.
- Authorized users will have fast access to data upon request.
- Users also will be able to share their experiences.
- The user interface should be easy to learn and navigate.

COVID Lens Application
System Requirements

- Supporting any major version of iOS 13 or higher.
- Basic internet connectivity and cellular data service.
- Additional recommended requirements:
  - Bluetooth-supported devices
  - Mobile location data enabled

COVID Lens Application
User Requirements

- User must be a student currently enrolled at UNCG.
- Allow basic device permissions for the application.

COVID Lens Application
Security Requirements

- Application must maintain the confidentiality of all sensitive data that is classified confidential.
  - Emails
  - Passwords
  - Location data
  - User diagnosis report
- Application libraries/APIs must follow and ensure the confidentiality of login information.
  - Sign-up/sign-in APIs

COVID Lens Application
Project Specifications

Focus Domain

- COVID Lens will serve to inform and protect members of the UNCG community from the COVID-19 virus by containing it as it encourages users to self-quarantine when needed and social distance.
- It would also focus on informing the UNCG community on preventive measures from the virus.

COVID Lens Application
Project Specifications

Libraries / Frameworks

- MySQL for database services
- Swift for front end development
- Python for data analysis
- PHP for back end development

COVID Lens Application
Project Specification

Platform

An iOS application available for Apple mobile devices.

Genre

An iOS application within the genre of health and community and community safety.