

CEN 4010 Principles of Software Engineering Summer 2021

Milestone 1 Project Proposal and High-level description

Team Name: CEN 4010 Team 2

Project Name: Covid Hut

Team Number: 2

Names of Team Members:

Emily Chamberlain - echamberlain2019@fau.edu

Dariusz Hassan - dhassan2019@fau.edu

Jose Garcia Delgado - jgarciadelga2018@fau.edu

Arooj Nadeem - anadeem2020@fau.edu

Mateo Scaccia - mscaccia2017@fau.edu

Documentation Date: 6/14/21

History Table: Revision Dates

Covid-Hut

1.Executive Summary

Covid-Hut is a social networking site that makes it easier to connect while maintaining social distancing. Covid-Hut allows you to share images and status updates from the tip of your fingers. Users will be asked to create their account using their email and unique password. After that you have your profile all set up and you are ready to connect! From staying in touch with family and friends, to getting updates about Covid-19, Covid-Hut is a friendly and safe platform to use while dealing with isolation and loneliness during this world wide pandemic. Unlike other social platforms, Covid-Hut provides a secure program to share your life. Covid-Hut is unique because we use hashtags to organize content and display updates related to Covid-19

2.Competitive Analysis:

Our program	Twitter	Instagram
Posting photos/text	Microblogging(posts up to 140 characters with picture)	Photo/text posts
Live covid statistics	Follow other users to see their posts	Short video posts
Hashtags/trending	Hashtags for trend following	Hashtags for trend following
Profile/profile picture	Timeline of posts	Profiles/private profiles(follow other users to see their private profiles/posts)

Comparisons to competitors

1. Photo/text posting:

This feature is shared between our site and our competitors. Instagram has the feature of posting short videos, which is not a planned feature for this site.

2. Profiles:

This feature is shared between our site and our competitors. Features appear to be identical, but it should be noted that Instagram has the private profile feature which restricts other users from seeing your posts if they do not follow you, a feature that is not currently planned for our site.

3. Trending topics:

Each platform possesses a feature to track current trends with the use of hashtags. Our site will implement a feature that keeps up with these trends as well.

4. COVID 19 info:

Competitors of our site do possess means to access helpful knowledge/resources about the Covid-19 pandemic, but this will be a mean feature of this platform. Our platform intends to outperform all competitors in this area, providing live statistics about infection/death rates, nearby vaccination facilities, and other helpful resources available quickly on demand.

3.Data Definition:

Users:

- *Username*
 - Differentiates users
- *Password*
 - Allows account access
- *Location*
 - User's living location to find close friends

Content:

- *Posts*
 - User posted content containing image, text, or both
- *Hashtags*
 - Common text placed on a post to group similar content
- *Comments*
 - Replies on a post
- *Likes*
 - Count and detail of each like from other users

Virus Info:

- *Num. of Covid-19 Cases*
 - Live data containing current number of Covid-19 cases
- *Vaccination Rate*
 - Live data containing current number of distributed vaccines
- *Vaccine Locations*
 - Locations of areas providing the vaccine

4. Overview:

Covid-Hut is a social media platform that will provide a community for users hoping to interact during the COVID-19 pandemic. Covid-Hut's main goal is to allow users to access accurate live information regarding the pandemic while maintaining contact with their close friends and relatives. Users can also join popular discussions/trends by using our "trending" feature. In addition, users can access our Covid resources to find vaccination centers near them as well as various health/safety tips provided by the CDC(center for disease control). Covid-Hut's focus is to be a user friendly platform, so minimal technical skill will be required to log in and begin interacting.

To begin, the user will first log in with their (Google something) account. If they do not have one, they will be given the option to create one. Once they have logged in, they will be directed to their personal profile page. If their account is new, they will be asked to add some information and/or a picture to complete their profile. Once their profile is complete, the user can begin browsing through trending topics on the platform. If they wish to contribute, they can make a post with some text/pictures, and upload it using a hashtag to join the conversation. The user is always given the option to access our various Covid-19 resources, including live and accurate information concerning infection/death rates, vaccination sites near them, and helpful health tips from the CDC. Once the user is done browsing, they can log out and exit the platform.

5. List of high-level functional requirements:

1. Posting:

- We will create a posting system for users to share their photos and videos while social distancing/ self-isolating

2. Viewing:

- This web application will allow users to view posts in their feed as well as view a list of their favorited/liked posts

3. Feeding Data:

- This web application will feed data, from the CDC and other reliable sources, to display vaccine locations, the number of individuals vaccinated, and the current number of Covid-19 cases

4. Compatibility:

- This web application will be able to be displayed on every screen size and look good on mobile, tablet, and desktop devices
- This web application will be compatible with the latest versions of the Chrome, Firefox, Microsoft Edge, and Safari browsers

5. Firebase:

- The web application will use Google Firebase to handle the login and logout functionality of the site. It will have the user connect with their Google Account to register and login to the site

6. List of non-functional requirements:

1. Performance and scalability

- After submitting a post through the web interface, it should be available to appear in other users' lists of posts within 30 seconds for 90% of posts.
- An update to a users list of posts (either the initial view of a list, or an extension to the list when scrolling to the bottom) should appear in 3 seconds for 90% of users.
- 50% of users should be able to post a status update within 1 minute of starting to try and post without having used the application before or receiving help.
- The site should load in 3 seconds when the number of simultaneous users are > 10000

2. Portability and compatibility

- The webpage will be able to run on Chrome, FireFox, Internet Explorer and Safari for Mac Users and mobile users

3. Security requirements

- Google Firebase will hold all the profile information

4. User requirements

- Users will have to create a Google account to be able access site

5. Storage

- The SQL database should handle a high volume of user information

7. High-level system architecture:

- **Languages to be used:**
 - Frontend: HTML, CSS, JavaScript, PHP(For connecting backend to frontend)
 - Backend: PHP, SQL
- **APIs to be used:**
 - Google maps API to display vaccine locations
- **Tools to be used:**
 - Google Firebase for login and logout functionality

8. Team

Scrum Master: Dariush Hassan

Product Owner: Emily Chamberlain

Frontend team leader: Arooj

Backend team leader: Emily

Frontend Team: Arooj, Mateo, Emily

Backend Team: Jose, Dariush, Emily

9. Checklist:

- a) Team decided on basic means of communications: **DONE**
- b) Team found a time slot to meet outside of the class: **DONE**
- c) Front and back end team leads chosen: **DONE**
- d) Github master chosen: **DONE**
- e) Team ready and able to use the chosen back and front-end frameworks: **ON TRACK**
- f) Skills of each team member defined and known to all: **DONE**
- g) Team lead ensured that all team members read the final M1 and agree/understand it before submission: **DONE**