CEN 4010 Principles of Software Engineering, Fall 2021

Covid Connections

(Working name)

*By Team Onux*

Group #

**Team**

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Milestone 1 Project Proposal

9/20/2021

Revision History

#2 (3:50pm – 9/25/21)

Executive Summary (In Progress)

Covid-19 first reached the United States in the last few weeks in January 2020, and since then we have all been hoping for a quick return to normalcy. Now being in September of 2021 normalcy has still not returned and seems farther away than ever. But what people want remains unchanged. People still want to connect with one another and take their mind off the day’s stresses. There are many sites that address these sorts of issues, but they are often broad, and meant for national use. While people can still connect and share on these sites, they often do not have that local connection that you get meeting someone who lives in the same area.

What Floridians need now more than ever, is a site for connecting local people. That is where *Covid Connections* comes in. With *Covid Connections* we wish to build a platform with a variety of services and activities for the people of Florida. First and foremost, we want to be a place where people can come and communicate. Which is why our site shall include forums for our users to discuss and interact with each other. But we also want to build a platform for people to learn. The resources section of our site will hold a plethora of links to different Covid-19 and Mental Health resources for users to discover. Feeling stressed or overwhelmed, go to the games section, where a variety of entertaining games can be played to relax and destress. Though the best way to connect is by seeing each other. Which is why we provide a gallery where our members can post photos and comment on others. We will also have a login system so users can sign up and become members to access some of the services above, But also a special member only homepage.

  The advent of Covid-19, is truly a testament to the unprecedented times we live in. But it is also a good reminder of what is truly important in life. Now that people are feeling more isolated and afraid, they seek what they cannot get. What people need now more than any time in recent history, is that local connection you cannot get just anywhere. That is why the overall goal of building *Covid Connections*, is to create a platform for Floridians to communicate, learn, relax, and most importantly connect during covid.

**Use Case – Homepage**

The User will come to the homepage where they will be able to access the weather, a tab to get to the home page, and other things

1. **Description**
   1. Use Case describe how the user and member will utilize the homepage to get started
2. **Actors:**
   1. User
   2. System
   3. Member
3. **Precondition:**
   1. User has active internet connection
   2. System us available
4. **Primary Flow of Events**
   1. User arrives on the home page
   2. Web page displays relevant information
   3. User selects weather tab
   4. Weather is displayed
5. Alternate Flow
   1. If user is a member
      1. User selects tab to go to frontpage
      2. User sign in or sign up

**Use Case – Forum**

The user will come to the front page to use the forum section of the site. The user will use the forum to exchange ideas they have with each other, to access the discussion of the week and to see the meme of the day. There will be a section where they can find some commonalties between interest they share like a club.

1. **Description:**
   1. Use case describe how users will utilize the forum to exchange ideas.
2. **Actors:**
   1. Users
   2. System
3. **Preconditions**
   1. User has an active internet connection
   2. User has a membership
   3. System is available
4. **Primary Flow of Events:**
5. User arrives on the frontpage
6. User logs in with their respective credentials
7. The system will display the discussion of the week, the clubs to be joined, and a place where they can comment
8. User enters ideas they want to exchange or clubs they want to join
9. Terminate Use Case: Forum
10. **Alternate Flows**
    1. **User Not signed in**
       1. If user is not signed in with their credential, they will be able to see what is being said but won’t be able to comment on it.
       2. The system will prompt the user to sign in or create a new account
       3. User enters their credentials
       4. Return to step 3.
    2. **Club Does not Exist**
       1. If club does not exist, user will have the option to create such club
       2. The system displays a message asking the user to create club
       3. User creates club
       4. Return to step 4

**Use Case: Games**

The user comes to the pages and will be able to play the games that are provided. User will play games like Tetris or other game being provided.

1. **Description:**

* Use case describe the process of how the user will use the games that are provided.

1. **Actors:**

* User
* System

1. **Preconditions:**

* User has active internet connection
* User has membership
* System is available

1. **Primary Flows of Events:**

* User arrives on the frontpage of the web page
* User signs in with their respective credential
* User selects the game tab
* Web page displays the games available to be played
* User selects the game they want to play
* Score is saved
* Terminate Use Case: Arcade Game

1. **Alternate Flows of Event:**
   1. **TBD**

**Use Case – Resources**

The user will come to the resource section of the front page to find out what’s going on in their respective community. User arrives at the home page and enter their Florida location. The system will display critical information to them like covid information, mental health information and many more.

1. **Description:**

Use case describe the process of how users will utilize Resources.

**2. Actors:**

* 1. Users
  2. System

**3. Preconditions**

* 1. User has an active internet connection
  2. User is a member.
  3. System is available.

**4. Primary Flow of Events:**

1. User arrives on the front page

2. User logs in using their credentials

3. User inputs their respective Florida location,

4. Web will display covid related information, mental health, and events going on their area.

5. User select the information they want

6. Terminate Use Case: Local Florida Location

**5. Alternate Flows**

**5.1- User enters a location not located in Florida**

* If in step 3 user input a location outside the state of Florida:
  + Website will notify them.
  + Return to step 3
  1. **If Information is not found**
     1. Web page will display a message saying information is not found, come back at a different time.

**Use Case: Gallery**

The user will be able to share pictures in a gallery and comment on them. Also, other users will be able to see things in the galleries.

1. **Description:**

Use case describes the process of how the user will utilize the gallery section of the page.

1. **Actors:**
   1. User
   2. System
2. **Preconditions:**
   1. User has active internet connect
   2. User is signed in
   3. System is available
3. **Primary Flow of Events:**
   1. User arrives on the frontpage
   2. User logs in using their credentials
   3. User selects their gallery
   4. User posts their pictures or comments on gallery
   5. Terminate Use Case: Gallery
4. **Alternative Flows:**
   1. In Step B, if user is not logged in:
      1. Web page displays will prompt the user to enter their credentials or sign up
      2. User logs in or create a new account
      3. Return to step C
   2. If in set d gallery is full
      1. Web page will display a message telling the user that the gallery is full
      2. User deletes certain pictures in their gallery
      3. Return to step D

**Data definition =>**

This section serves as the “dictionary” of your document. It defines main terms, data structures and “items” or “entities” at high or logical (not implementation) level (e.g., name, meaning, usage, and NOT how the data is stored in memory) so it is easier to refer to them in the document. Focus on key terms (main data elements, actors, types of users etc.) specific for your application and not on general well know terms. These terms and their names must be used consistently from then on in all documents, user interface, in naming software components and database elements etc. In later milestones, you will add more implementation details for each item. You will later expand this section with more details.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Meaning** | **Usage** | **Comment** |
| Member | actor | Use Case scenarios? | This person has an account on the website. |
| Prospector | actor | Use Case scenarios | This person is on the website but does not own an account. |
| User | actor | Use Case scenarios | Any person currently on the website. |
|  |  |  |  |
| Log in | service | Site user service | Personal identification verification for users to have member permissions. |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Weather | data? | Site user services? | Let users know the weather of their current location. Or we could do set location or both? API calls |
| Photos | service | Site user service | Members post and view photos. |
| Web Site | User interface | User interface | Front end display of complete web browser system. |
| Home page | User interface | User interface | Front end landing page for member interaction. |
| Forum |  |  |  |
|  |  |  |  |
|  |  |  |  |

Competitive Analysis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Features | Our website | Facebook | Reddit | Twitter |
| Discussion forums | yes | yes | yes | no |
| Games | yes | yes | no | no |
| Solely for the state of Florida | yes | no | no | no |
| User images and comments | yes | yes | yes | yes |
| Links to mental health resources | yes | yes | no | no |
| Respects user privacy | yes | no | no | no |

## Facebook

Facebook does not directly have any kind of discussion forums, but they do have groups where discussions can be held. Facebook has a variety of games ranging from poker to matching games. Facebook does indeed include a variety of links which are linked to both mental health and information about coronavirus. As to be expected from most social media websites Facebook also allows users to upload pictures and comment on other pictures.

## Twitter

Twitter usually has very good discussions through replying to tweets and using hashtags to make what the tweet is about more specific. When it comes to games twitter doesn’t have any, but they do allow images and videos to be posted like other social media sites. Twitter is a worldwide platform but usually a lot of emphasis is put on celebrities and whatever they say. There isn’t a huge presence of mental health resources unless you specifically look for them, and some apply for covid 19 information.

## Reddit

Reddits’ focus is forum and discussions in small communities called subreddits. There are no games in these subreddits but there are videos and images that are allowed to be posted on these subreddits. Although there are subreddits for groups in Florida reddit is primarily used with intentions of staying semi-anonymous although some people choose to reveal more personal information about themselves. For user privacy there are targeted ads so it’s not very private but more private than some other social media sites.

## Planned advantages

This will be our social platform for connecting others in this difficult, and lonely time. Now there are other websites that do the same thing, but we plan to be different form the rest. Our target audience will be solely people that reside in Florida! Other websites have thousands of users who connect across the world, and oftentimes we tend to forget the people around us such as neighbors or close friends. For this very reason we want people to become more familiar with those around them. Another advantage we will have is the lack of advertisements. Advertisements are usually a source of income for these websites, but not for us. Our sole purpose is bringing people together not making the big bucks. In doing this we really emphasize the user’s privacy.

High Level System Architecture

**High-level system architecture=>**

Lists of main software products, tools, languages and systems to be used, list of core APIs available at this point, supported browsers etc. You also have to decide on which frameworks you will use if any. These provide both user interface, as well as cross-platform and cross browser layout/CSS. All external code you plan to use must be listed along with their license..

High-level system architecture

1. **https://lamp.cse.fau.edu/~cen4010\_fa21\_g08/ Lamp Server:** The FAU provided Lamp Server is the host server for our Fall 2021 Principles of Software Engineering project.
2. **Slack**: The team will communicate interpersonally with Slack, a proprietary business communication platform with chat rooms organized by topics.
3. **MySQL Database:** The MySQL open-source relational database management system will store user information. Users will have the ability to store input and store their information via logging into their profile on the website.
4. **Visual Studio 2019 (IDE):** Visual Studio 2019 is the IDE that the developers will build their code in. The following list of languages will be used in the IDE during development of the website:
5. Hyper Text Markup Language (HTML) - standard language to design web browser.
6. Cascading Style Sheets (CSS) – style sheet language to describe presentation by assisting HTML
7. Personal Home Page (PHP) – scripting language for web development and server-side requests
8. JavaScript (JS) – just-in-time scripting language for web development and assists HTML
9. jQuery – a JavaScript library to assist HTML manipulation and client-side functions
10. **Chrome and Firefox Browser Compatibility:** The system requires full operation with at least two major brows, including Google Chrome, Mozilla Firefox, Safari, Opera, and Internet Explorer. Web based functionality will have full support with Google Chrome and Mozilla Firefox.
11. **GitHub:** GitHub facilitates code collaboration and productivity with online repositories that allow the storing, mering, commenting, organizing, etc. of teams the teams’ code.
12. **Canvas:** This higher education software is the platform that our stakeholder, the instructor, communicates with the development team.
13. **Jira:** Jira is a proprietary issue tracking product software tool that maintains the teams bug tracking, issue management, and organizes the overall Scrum development process

**Team Roles:**

**Team Lead, Scrum Master** - Van Campbell

**Product Owner, Front-end Developer** - Samuel Adkins

**Front-end Lead** - Achelin Felix

**Back-end Lead** - Gustavo Rodriguez

**GitHub Master, Developer** - Samuel Yambo