CEN: 4010 Principles of Software Engineering, Summer Term, 2020

Team: Anime Lover's

Project Name: The Covid Cove (Milestone 3)

Team 14

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Group Peer Evaluation (Total:10 pts):

Zain Cruz: 25%

Samantha Medina: 25%
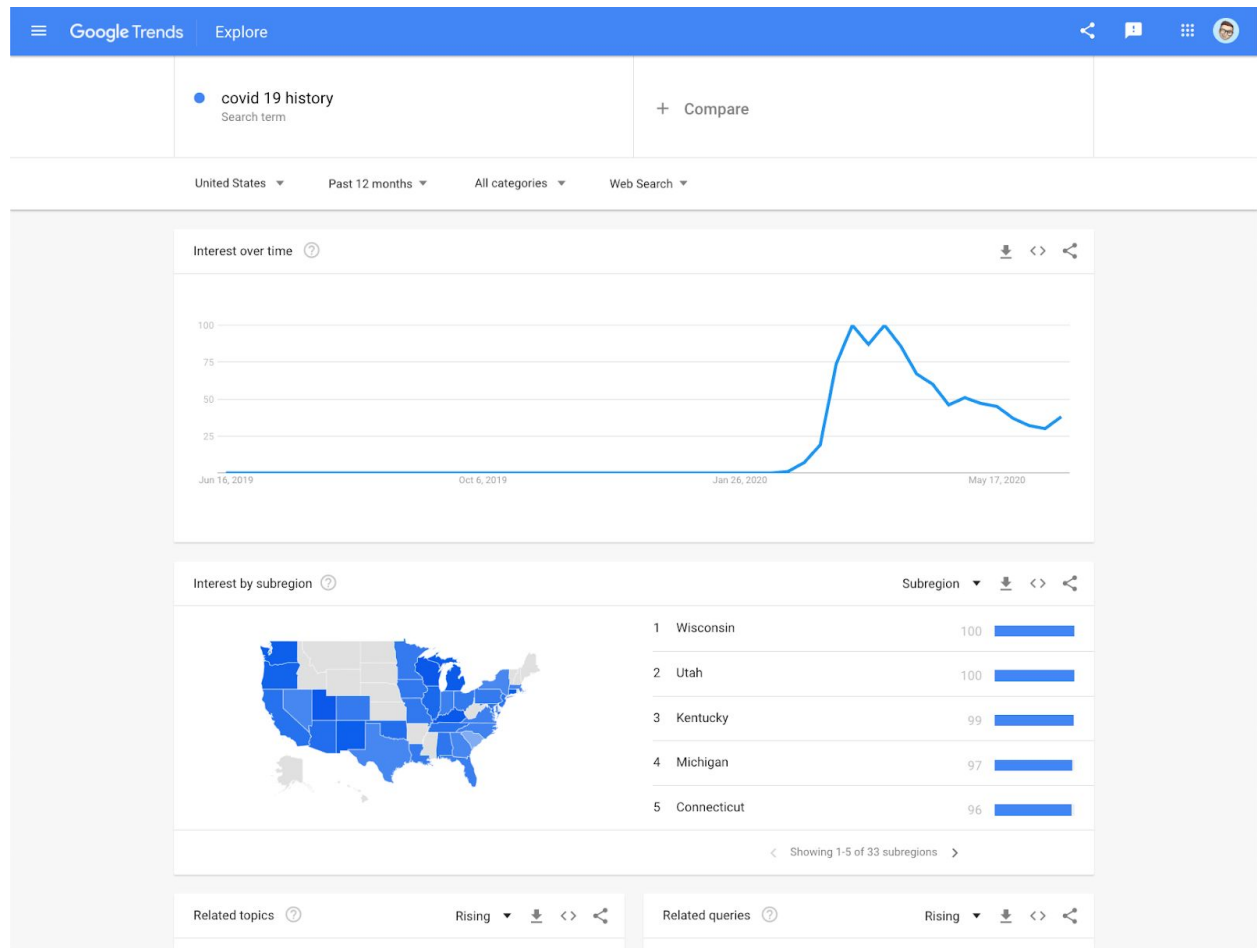
Ricardo Morales: 25%

Adam Fox: 25%

Milestone 3

2.   Executive summary:

A platformed continuously updating archive with a list of current headlines related around the time period covid-19 has been going on. Once clicked these articles will lead you to a page linking to the actual article. Then leading to a newsroom like online user interface experience. On this page people can come together to express their opinions and experiences about the incurring pandemic as well as catch up on all the latest political and scientific research/ news about the virus. There is a whole in the market if you refer to our competitive analysis and the images below. The images show the large interest in the search result covid-19 history. As well as the lack luster amount of websites able to give it in formats the user can handle. How many times have you had to research a source? We aim to give you all the best sources in one place.

So the Covid Cove will be a newcomer on the digital technology market place. Allowing users who are in a rush an elegant solution to catch up. As well as serving a purpose of keeping an active database for years to come for historians to use, so that when we are not here we can give back to the next generation. It also elegantly displays various news articles for the consumer

to click on. The site will feature an "up vote" function that allows users to differentiate what's trending, as well as various other ways to communicate. The longevity of this platform will exist beyond the pandemic as the links on The Covid Cove provide access to information that will be considered important history in retrospect.

About 6,310,000,000 results (0.80 seconds)

www.who.int › ... › Diseases › Coronavirus disease 2019 ▾

Coronavirus (COVID-19) events as they happen

Latest updates on **COVID**-19. ... comes to the value of US$ 1.3 million. It is the first donation in WHO's **history** of a medicine for a noncommunicable disease.

WHO updates COVID-19 · WHO announces COVID-19 ... · Director-General

www.statnews.com › 2020/05/14 › underderstanding-c... ▾

Understanding Covid-19, a 'supernova in human history' - STAT

May 14, 2020 - **Covid**-19, a 'supernova in human **history**,' will need multiple perspectives to understand and manage. By Vinay Prasad and Jeffrey S. Flier.

en.wikipedia.org › wiki › Coronavirus_disease_2019

Coronavirus disease 2019 - Wikipedia

Coronavirus disease 2019 (**COVID**-19) is an infectious disease caused by severe acute ... 4.1 Pathology. 5 Prevention; 6 Management; 7 Prognosis; 8 **History**; 9 Epidemiology. 9.1 Infection fatality rate; 9.2 Sex differences; 9.3 Ethnic differences.

Causes: Severe acute respiratory syndrome c...   **Treatment**: Symptomatic and supportive
Symptoms: Fever, cough, fatigue, shortness of ...   **Deaths**: 340,875 (6.4% of confirmed cases)

COVID-19 vaccine · COVID-19 in pregnancy · Reverse transcription · Li Wenliang

www.nejm.org › doi › full › NEJMp2004361

History in a Crisis — Lessons for Covid-19 | NEJM

Apr 30, 2020 - From herpes and legionnaires' disease in the 1970s, to AIDS, Ebola, the severe acute respiratory syndrome (SARS), and now **Covid**-19, ...

by DS Jones - 2020 - Cited by 54

www.sciencedirect.com › science › article › pii

COVID-19: The first documented coronavirus pandemic in ...

May 5, 2020 - The novel human coronavirus disease **COVID**-19 has become the fifth ... onset had no known **history** of exposure to the Huanan market [1].

by YC Liu - 2020 - Cited by 1

www.cdc.gov › mmwr › volumes ▾

Evidence for Limited Early Spread of COVID-19 Within the ...

Jun 5, 2020 - Known Cases in Persons with No Relevant Travel **History** Before February 26. Two notable cases of **COVID**-19 occurred in Santa Clara County ...

emedicine.medscape.com › article › 2500114-clinical ▾

Coronavirus Disease 2019 (COVID-19) Clinical Presentation ...

4 days ago - **History**. Presentations of **COVID**-19 have ranged from asymptomatic/mild symptoms to severe illness and mortality. Common symptoms have ...

www.coralsprings.org › ... ▾

COVID-19 Updates | Coral Springs, FL

In the City of Coral Springs, we are One Team, with One Mission, together we can prevent the spread of **COVID**-19. Broward County will begin to open under ...

3.   Competitive analysis:

The covid cove	www.who.int
- Keeps an active timeline of all the latest news articles on covid and what other things are going on in the US. - The members can discuss/comment in the chat or they can have a live voice chat to talk about the news. - Talk about important news/events that had been happening during all this time of COVID-19	- Shows covid related articles around the world. - Does not allow the user to comment on their page. - Only talks about health issues mostly related to COVID-19
The covid cove	**Discord**
- Allows the user to Talk via voice chat, but each voice channel is focused on one COVID related "theme". - The servers are predefined (events happening during COVID-19) and any user can enter to the server and comment about it. - Its purpose it to connect and inform people with respect to relevant news happening in the US	- It's a gamers app to talk, does not provide any important news. - Allows to create multiple servers of any topic and any user can enter the server. - Its purpose is to connect people who has alike hobbies more specifically in gaming
The covid cove	**CRUSH COVID RI**
- Will provided any important event happening during COVID times. - Purely informational app in which any user can log in can join the community and comment about COVID related events.	- App purely based on COVID-19, you can get news (infections, possible vaccines, etc). - A way for the state of Rhode Island to "control" COVID (can request to get tested or check your symptoms online).

From the research we made of a likewise app, we didn't find any app or website that does what "The Covid Cove" is planning to do. As we saw in the pictures in the executive summary, during these times people are looking more and more at COVID-19 and information related to it.

What we plan with "The Covid Cove" is to be a center in which people can find a lot of useful information related to COVID-19 and important events that are happening during these pandemic times. Although there are a lot of newspapers and blogs that can provide information, what makes us different from many others is that we will allow users to have a continuous conversion about the topics at hand, using text chat live comments. This will be a place in which users can express their ideas, opinions, as well as their personal experiences.

Our goal is to connect people and to do so by providing access to useful information of what is happening during these times of pandemic. We are not just providing a plethora of information however, we are curating relationships between people that have common interests and concerns.

4.   Data Definition:

Covid 19: is coronavirus pandemic that plagues the world in early 2020

LAMP: is a web development stack that has Linux, Apache, MySQL database and PHP components.

MySQL database: Open-source relational database management system.

PHP: used as a database in order to store the users information.

Bootstrap: A design template to allow for simpler stylization.

Landing page: The page a consumer is first brought to in order to briefly learn how to navigate a site.

Forum Table: Table used to hold and display article information for the consumer to use.

Drop-down List: Contains the list of articles that a consumer can choose from in order to make a comment.

Comment box: Used to record consumer text and comments in real time.

Form page: The landing page in which the above three entities will appear simultaneously for the consumer. Max header size 131KB with dimensions 1920 x 1080.

Covid-19 api: The existing application programming interface that our site is implementing.

Login page: Page that contains the login box items which existing consumers will use to log into our website.

Sign up page: Page that holds the registration items where new consumers will be.

directed in order to sign up, using php and phpmyadmin for authentication.

About page: Holds and displays all information of the team members in this group, which can be viewed by any consumer. Max image size for portraits is 1.4 MB with dimensions 1242 x 2208. Header size 201KB with dimensions 1600 x 1221.

5.   Overview, scenarios and use cases:

This web page is directed towards any person that wants to know what is happening in the world during this pandemic of COVID-19. Users will have basic search skills, the ability to create an account by entering information(first name, last name and email), and comment skills in a form. People looking for information regarding COVID-19 can find links that will direct them to articles from trustworthy sources on our home page. At the time that our users click on the link of the article, a live chat option will be open/"unlocked" for the users to comment about the news that they just read. In the comments section, users debate, share experiences, get to know people that "think similar to them" and read others opinions relative to the article.

Due to Coronavirus most of the people had to change their lifestyle and their way to make income, with this we refer that people start working from home. In a way this working from home lifestyle gives people "more time" to spend in front of the computer, meaning that they have more time to research for certain information. As we saw in the _executive summary_ people are always looking for information related to COVID-19 and in the same way there exits a lot of information on google about the pandemic. Our

web-page aims to make this research of information more friendly for the user and to have most of the information in "one place".

- **Initial assumption:** A user or a group of users wants to keep updated with all the new information related to COVID-19. On our page they'll find the latest news and if they are users they can comment on our life chat room.

- **Normal:** Users choose which news they'll like to read and they also have the option to comment certain news, if they just want to access our site to gather information without commenting anything they have that option too.

- **What can go wrong:**

    ❖ While the page links and information is being updated it can lead to some "broken" links and this can bother the user and stop using our platform.

    ❖ Up to day we haven't thought about implementing the idea of deleting comments. This can make the user feel uncomfortable (we all make mistakes and users can regret what they just wrote).

    ❖ People may not like the idea of making a username to comment about news → we don't have anonymous comments available.

6. **High-level functional requirements:**

- 1. Form page

    - 1.1 Shows all articles available

    - 1.2 User can click article title to be redirected to read article

- 1.3 Shows date of article creation

- 1.4 Shows amounts of upvotes given to article

- 1.5 Shows comments made on article

- 1.6 Option to choose an article and leave comment

- 1. Login/Sign up page

  - 1.7 User can log in to account if existent

  - 1.8 If no account existent, user can create one with email, username, & password

- 1. About page

  - 1.9 Team member photos & links to bio of each member

- 2. Updating chat section

  - 2.1 User can leave comments on current article

  - 2.2 User can reply to other comments

- 2. User can click "Upvote" or "Downvote" whether they enjoyed the article or not

  - 2.3 Website updates to show tally of upvotes and downvotes

- 2. User can see all articles with option of sort orders

  - 2.4 List by most upvoted articles to downvoted

  - 2.5 List by most downvoted articles to upvoted

  - 2.6 List by most recent articles

  - 2.7 List by most viewed articles

- 3. Bookmarked articles

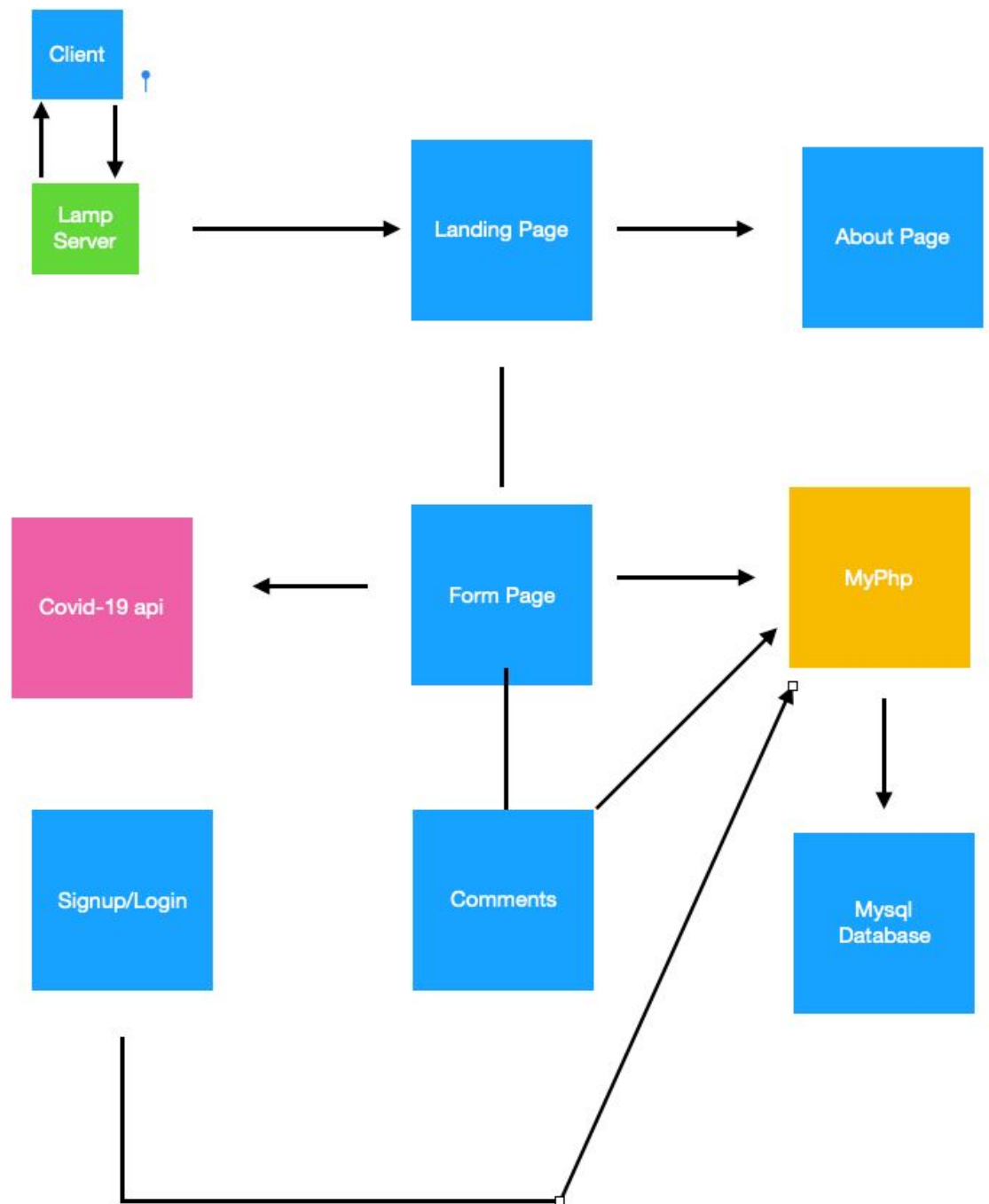 - 3.1 Users with accounts can see all of their saved articles

7.   List of non-functional requirements:

-   **Performance:** Seamlessly, The Covid Cove is available 24 hours 7 days a week, where the landing/home page can support 3,000 users per hour with no more than a downtime of 5 seconds, including the rendering of text and article image previews.

-   **Usability:** Site will be user friendly with clear, straightforward navigation for anyone to access and use The Covid Cove with minimal user errors. Main user error would be giving wrong login information. No training required to use.

-   **Accessibility:** Forums/articles accessible to those on The Covid Cove, comment/chat feature only accessible when signed in.

-   **Expected load:** Minimal, users mostly accessing The Covid Cove to read articles and some users leaving comments and up/downvoting articles.

-   **Security Requirements:** Login with username and a password of minimum 8 characters long and must contain one capital letter, special character, and number. Option to create an account with username, password as previously stated, and valid email address.

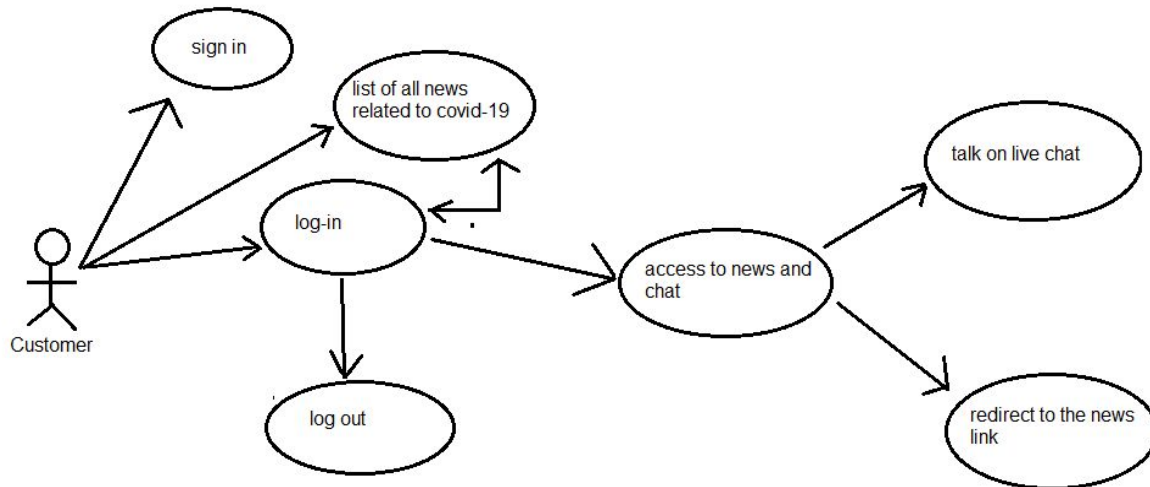-   **Storage ability:** Average website has about 150MB of storage so we are going for the same.

8.   High-level system architecture and database organization:

We are going to have 2 tables one for login the other for the forum and comments. We will only be storing characters in our database. So the storage methods will not have to be that complex. We have yet to determine the exact implementation for the search

method if we include it in our system. We won't be creating any apis just using existing

ones from the https://covid-19-apis.postman.com/ .

9.   **High Level UML:**

In our UML diagram (Use Case Diagram) what we intended to show was all the possibilities that our users have. We made the example from the point of view of only one user. As soon as they open the web-portal they can see the news, they can sign in or login. Once the user is logged in it will open the option of the life chat in which they can talk to other users about the news.

10.   **Identify Actual Key Risks:**

Some potential risks are database leaking & penetration, XSS attacks, and bots. We are going to have to limit users amount of actions to our board. So someone dosen't just have a bunch of bot accounts spamming the same material. Another risk is account hacking or getting into the admin panel.

11. **Youtube High Level Demo:**

https://www.youtube.com/watch?v=e-PEG0voxuY

In this video's vertical demo, we show the form page used to not only display our form table that houses articles for the consumer, but also shows their ability to comment after choosing a specific article. We also show the login page as well as the sign up page here, where users will go to make an account, or login if they are an existing member.