

Group 9

315: Julian De La Cruz, Alhasssane Traore, Adam Mellan, Amulya Badineni

JWP: Kieran Nashad, Josh Camacho

Stage II: Inception: Project Proposal & Specifications

I. Problem Statement

A. The very first impression of CivicStory is overwhelming, its content seems to be thrown all around the website with no consideration to user demographics and preferences. The audience of the website is undefined. In other words, the content isn't personal to a user by location, interest, hobbies, or any other category. Users do not have a clear cut way to join the movement, other than viewing videos, forums, and articles.

II. Objective

A. The goal of the project is to allow users to create an account and select specific preferences. By having accounts, the target audience of the website is defined. The content of CivicStory will be then filtered according to a user's preferences so that they can then get a custom feed that shows the top/interesting piece of news pertaining to the topics, locations, etc that the user-specified they are interested in.

III. Desired End Product

- A. To use user preferences to allow for users to tailor their homepage allowing for greater audience engagement and to provide users with content they will be interested in rather than having them sort through a large amount of content.
- B. Create a program that uses a database that contains user data and meta-data to efficiently populate a custom user feed on the homepage.

IV. Description of Importance

- A. This will help CivicStory understand the type of content users enjoy and promote more relevant and accurate information in a timely manner. If users go to the site and find it difficult to find the content that they would most like to see, they most likely would not come back. Letting the users have custom feeds and allowing them to pick and choose what they do and do not like will enhance the overall user experience.
- V. Plan to Research Information & Obtain Needed Data

A. The students will read from the textbook as well as use the resources provided by the school and the internet to learn and understand the concepts needed to make this project successful. We will also search for other similar websites to better understand what the best method is for presenting newsworthy information to users.

VI. How it Can be Reused

A. A system just like this could be beneficial to many websites that have a large amount of content that users can access. For example, Netflix does something similar by asking new users what genres and movies/TV shows they enjoy and use that information to give them a unique and personal home page.

VII. Possible Other Applications

A. The intended end product could potentially be applied to a number of other applications. For example, if someone were to create a social media site from scratch, allowing for account creation and user data manipulation would be incredibly beneficial. This system could help in that aspect.

VIII. Performance

- A. Accuracy aim to present content that is relevant to the user's interests/metadata
- B. Should be efficient enough to be scalable
- C. Should be designed in a manner that makes future implementations as easy as possible.

IX. Security

- A. According to the Github "Trust and Privacy" tab, they are "GDPR compliant" and obey the Privacy Shield Framework. The data we upload to Github will be encrypted and protected. As the project is created we will learn more about the extra security that we can implement.
- B. Some security concerns that the team must keep in mind are proper data encryption/hiding so that the user can't see what they don't need to see, and making sure that user account information such as username, password, preferences, etc can only be accessed and modified by the user to whom that data belongs to.
- C. The DBMS we will decide what data can be accessed by which programs

X. Backup and Recovery

- A. Logical backups will be performed periodically and saved to a different server in case the database needs to be rebuilt
- B. Will have a dedicated backup server running in RAID 0

XI. Technologies & Concepts to Learn

- A. Students will learn how to use DBSM (MySQL, PostgreSQL, Oracle) in order to store, retrieve and update data.
- B. Tags overlaps, constraints

- C. Tables, Relationships, Cardinality
- D. Data modeling
- XII. Diagram
 - A. Will implement during Stage III
- XIII. GitHub Project Link
 - A. https://github.com/badinea1/CivicStory/projects
 - B. Temporarily made public, will be made a private repository

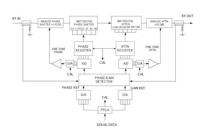
CivicStory Project

Group 9: Adam Mellan, Julian De La Cruz, Alhasssane Traore, Kieran Nashad, Josh Camacho, Amulya Badineni

Objective

Problem Statement: The content on CivicStory is not organized in a user-friendly manner, it seems to be thrown all around the website with no consideration to user demographics and preferences. From these preferences, the user's homepage will have content tailored to what they want to do. They can get information about their preferences.

Objective: The goal of the project is to allow users to create an account and select specific preferences. From this data, the user's homepage will show articles, videos, etc. that pertain to those choices.



Placeholder graphic for now, will update later.

Approach

Create one database that contains user accounts, videos, podcasts, articles, locations, and tags specific to the user.

- Store user account (name, id, email) only in one place to ensure consistency and save storage space
- Will look into multimedia databased to store videos, images, and podcasts
- Utilize PostgreSQL
- Research about other open source software

Key Milestones

- Final Draft of Project Proposal
- Database Model
- Design
 - 3/26/2020

2/24/2020 3/09/2020