Architecture Document

Project Pijper Media

Version 1.0

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Team names:
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TA:
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Introduction

The goal of this architecture is to get a good idea of what the project is going to look like. The product should be a social wall with posts of different platforms so the user can easily see which topics are trending/going viral. Our client already had a good idea of what the site should look like and which specific options it should have. The social wall should show all posts sorted by platform. One has the option to then either select the post so he/she can write about it, or go directly to the source of the post. As said before, such posts only are posts which are considered as trending or viral. It has not yet been decided as to when a post is viral or trending. Therefore, we will create an algorithm which can be changed according to the Client's wishes.

Architectural overview

We will need a MYSQL database which will house all the posts with their respective information. The aforementioned posts will be displayed on a desktop-website. This website will look like the sketch shown in figure 1 shown below:

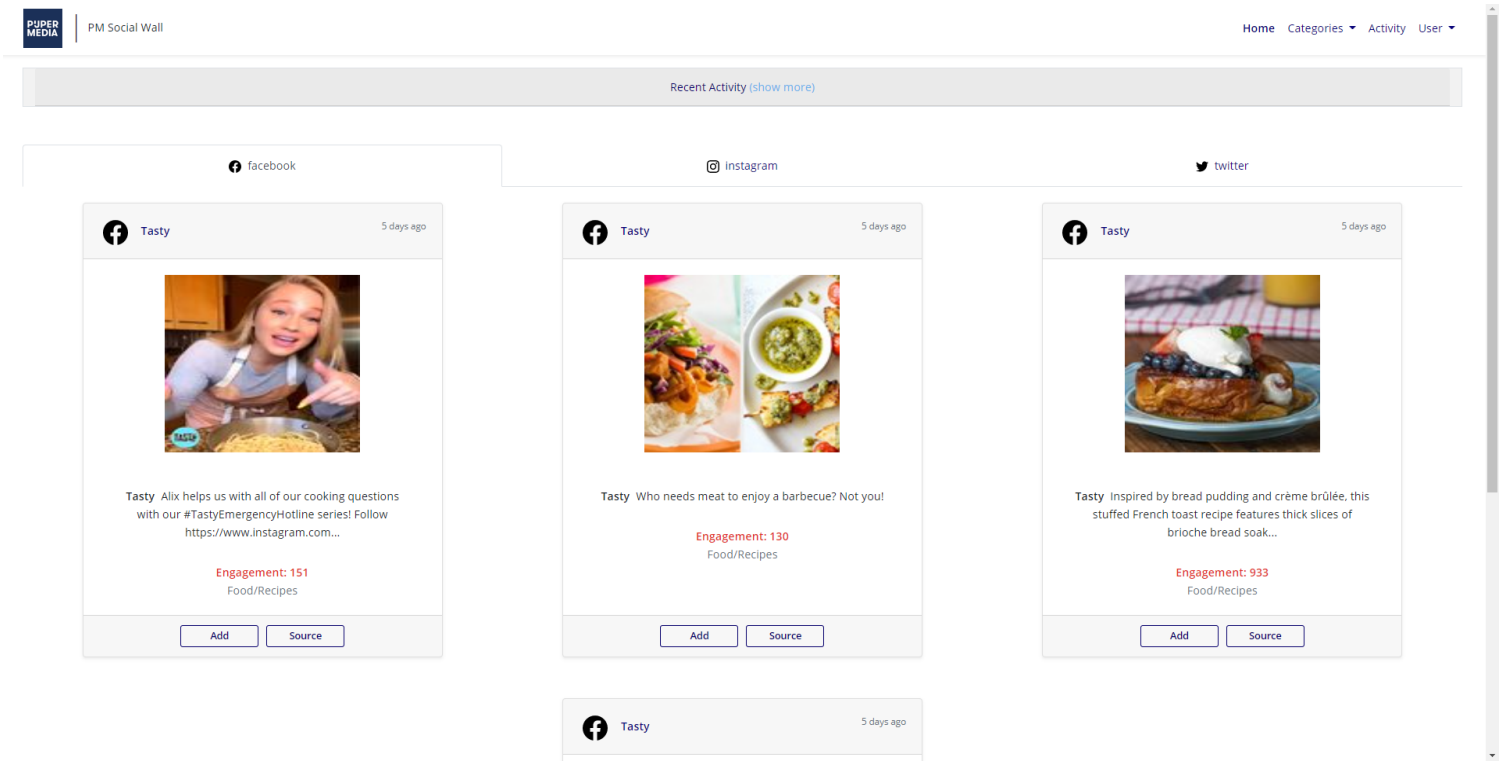


Figure 1

The site will have different components. Most important is the part which is shown in figure 1, it consists of different feeds with posts which will be categorized by the platform.
Above these feeds there will be a “My Activity” part of the site, where the user will be able to see the posts which are being written about. These posts will be shown accompanied with the name of the person who is writing about said post as is shown in figure 2:

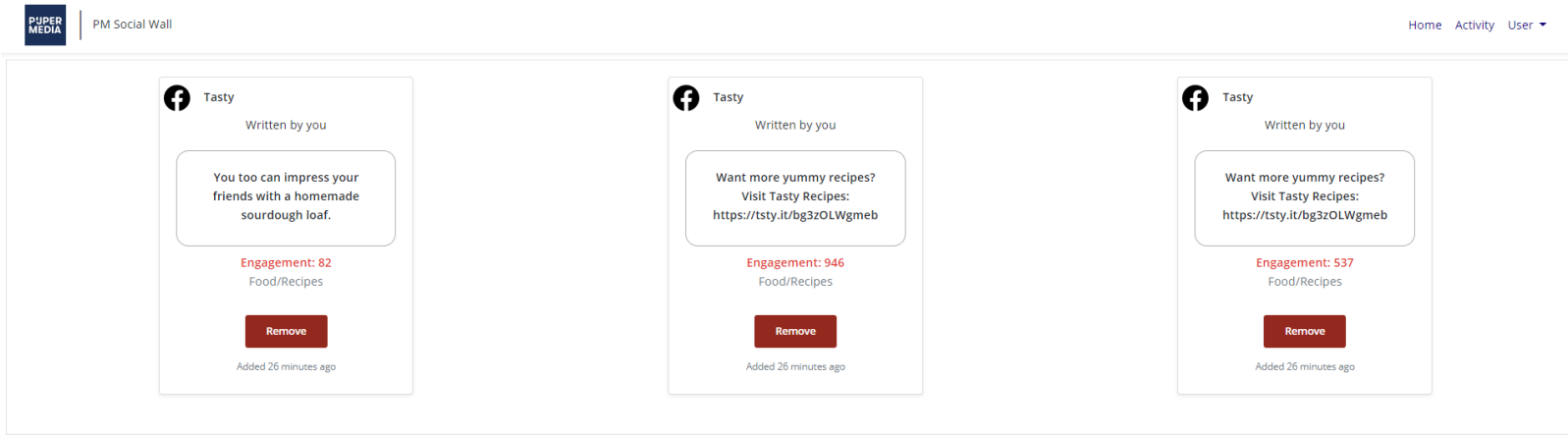


Figure 2

This will also be included on the main page itself in a small dedicated part of the screen. It will not be too big, since the Client does want the posts to be the main part of the screen. This can be seen in the figure below:

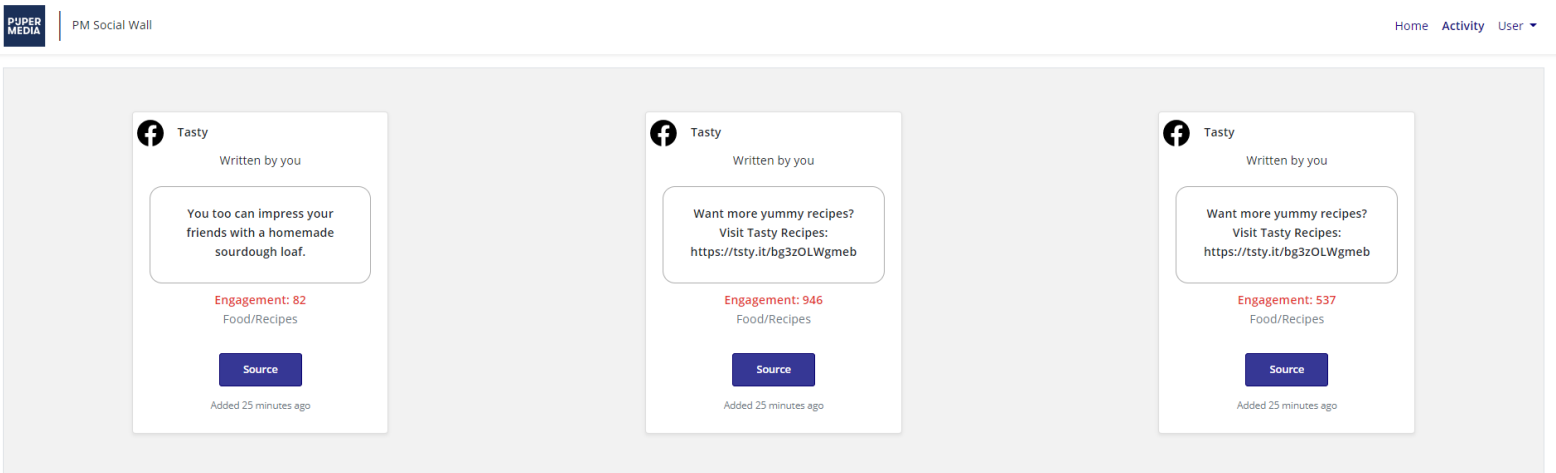


Figure 3

There will also be the option to change the categories. This can be done via pressing the “Categories” button at the top right of the website as shown in the figure below:

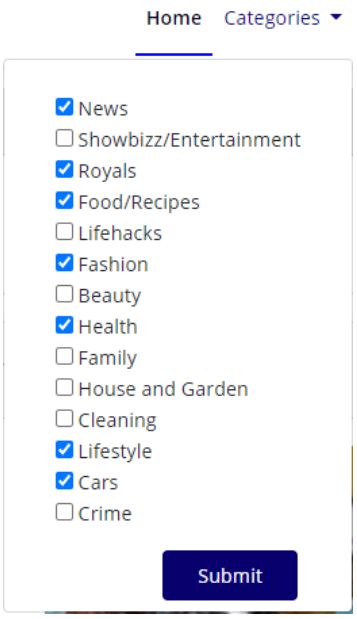


Figure 4

Finally, there is the option to press the User button in the top right corner as can be seen in figure 1. Once this button is clicked, the following dropdown menu will appear:

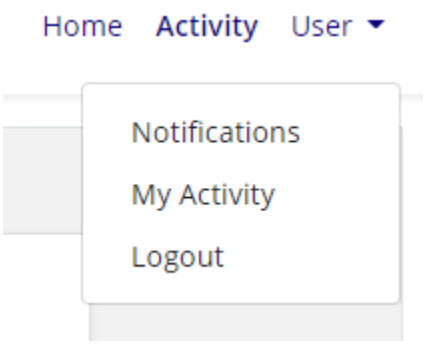


Figure 5

There is also the wireframe of the layout of the app. This is given in the Appendix at the end of this document and shows all components.

Frontend

The frontend mainly focuses on the **public** and the **views** folder. Besides, it also makes use of the controllers in the **Controllers** folder, in order to initialize the controllers. In the **views** folder, one can find all the blade.php files, which consist mostly of HTML, CSS and Javascript code.

There is a login page in which one can obviously Login. Furthermore there is also the possibility to register instead. Once the website is opened, one will be taken to the welcome.blade.php, which is the welcome page. If one logs in, he or she will be taken to the home.blade.php, which is the main/home page of the app. This has the extension from app.blade.php that consists of the options on top of the page such as categories, log-out, etc. In the categories tab, one can add or remove categories dedicated to their account. Finally there is a My Activity tab, which brings you to a page where you can see all the posts you selected. They can also be removed in this section.

Backend

We can split the backend up into two different parts: database and data gathering. We will discuss these here.

Data gathering

For the gathering of the data we have a separate folder. In this folder we have separate php programs for each platform we want to gather data from. For example we have a file called facebookData.php, which gathers data from facebook pages using the facebook graph api. This data is then stored in our database.

Database

Now we will take a look at the database. Right now we have a database which holds 6 different tables: categories, failed_jobs, migrations, password_resets, posts and users. The most important ones are the posts and categories tables. In the categories table we store the information of which categories each user is interested in. The other table, posts, holds all information about the posts from the different platforms. The users and

password_resets tables are used for the logging in of users. Lastly the failed_jobs and the migrations tables are necessary for using laravel, they do not really affect our application.

As of now, each post on the posts table has the following columns: ID, post_id, category, platform, data_source, caption, post_url, image_url, is_trending, followers_count, engagement, old_engagement, writer_id, posted_at, created_at, updated_at.

If we use this database there will be a lot of redundant data, so we want to change this. Therefore we want a more normalized database. This would include a data_source table which stores the source_id, platform and followers_count. The source_id refers to a different table which holds the source and category.

id	source_id	platform	followers_count

id	source	category

Technology Stack

The programming languages that we will use in this project are the following; PHP, Javascript, MySQL, CSS and HTML. We will use the Laravel framework for the backend and the frontend. The reason why we use this technology stack is because our client works with the same technology stack and so it is their preference. Besides this, we all are in a way familiar with the framework as well.

Team organization

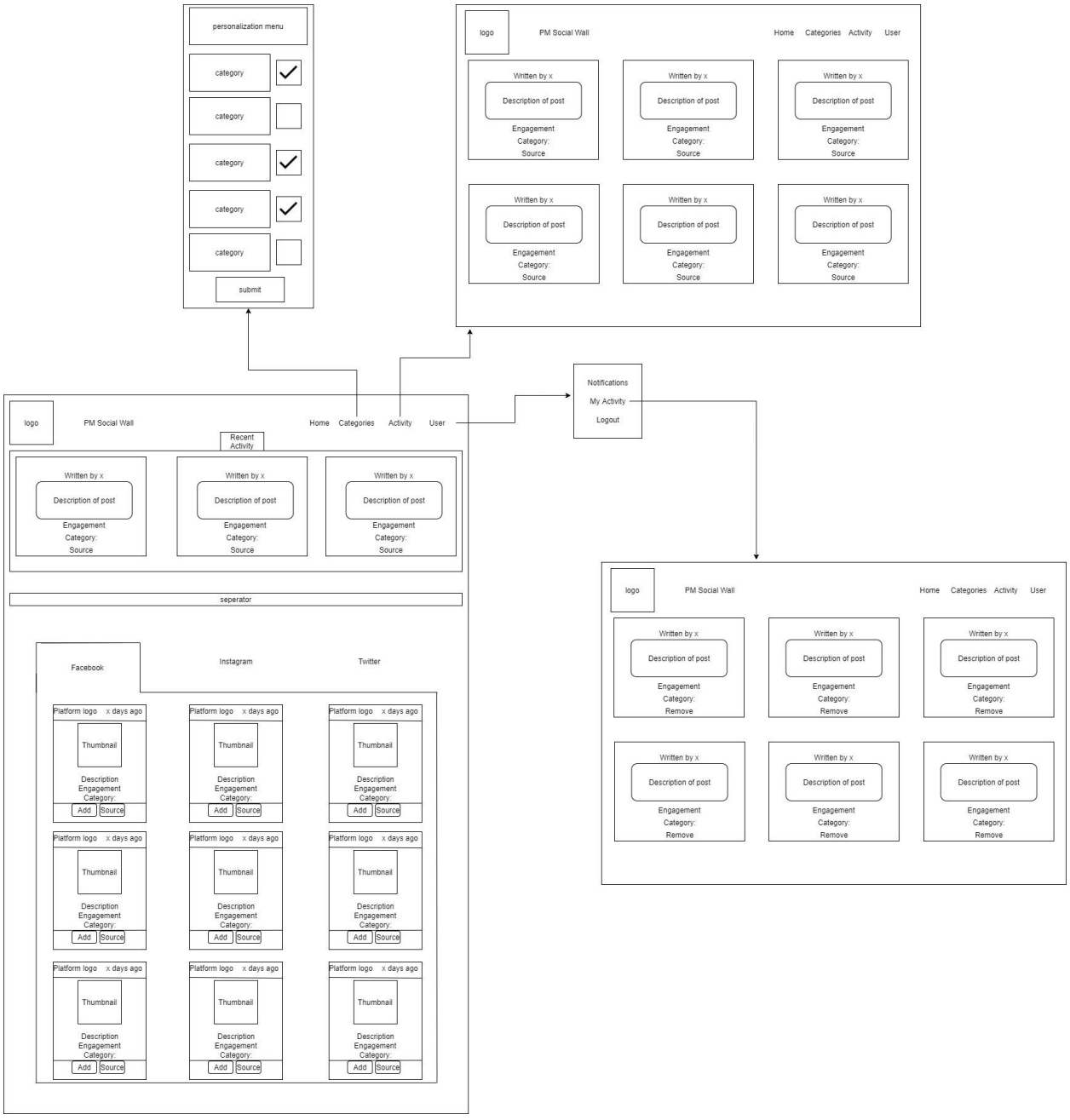
We have split the team up in the frontend, backend and the inbetween/connector. The frontend will be done by Julian Pasveer and Dilan Adel. The backend will be done by Daniël Scheepstra and Jeroen Klooster, everything will be connected by Medhat Kandil.

Change log

Date	**Changes**
Friday 05-03	First draft of the document
Sunday 07-03	Added team organization
Sunday 07-03	Added technology stack
Monday 29-03	Updated architectural overview (everything)

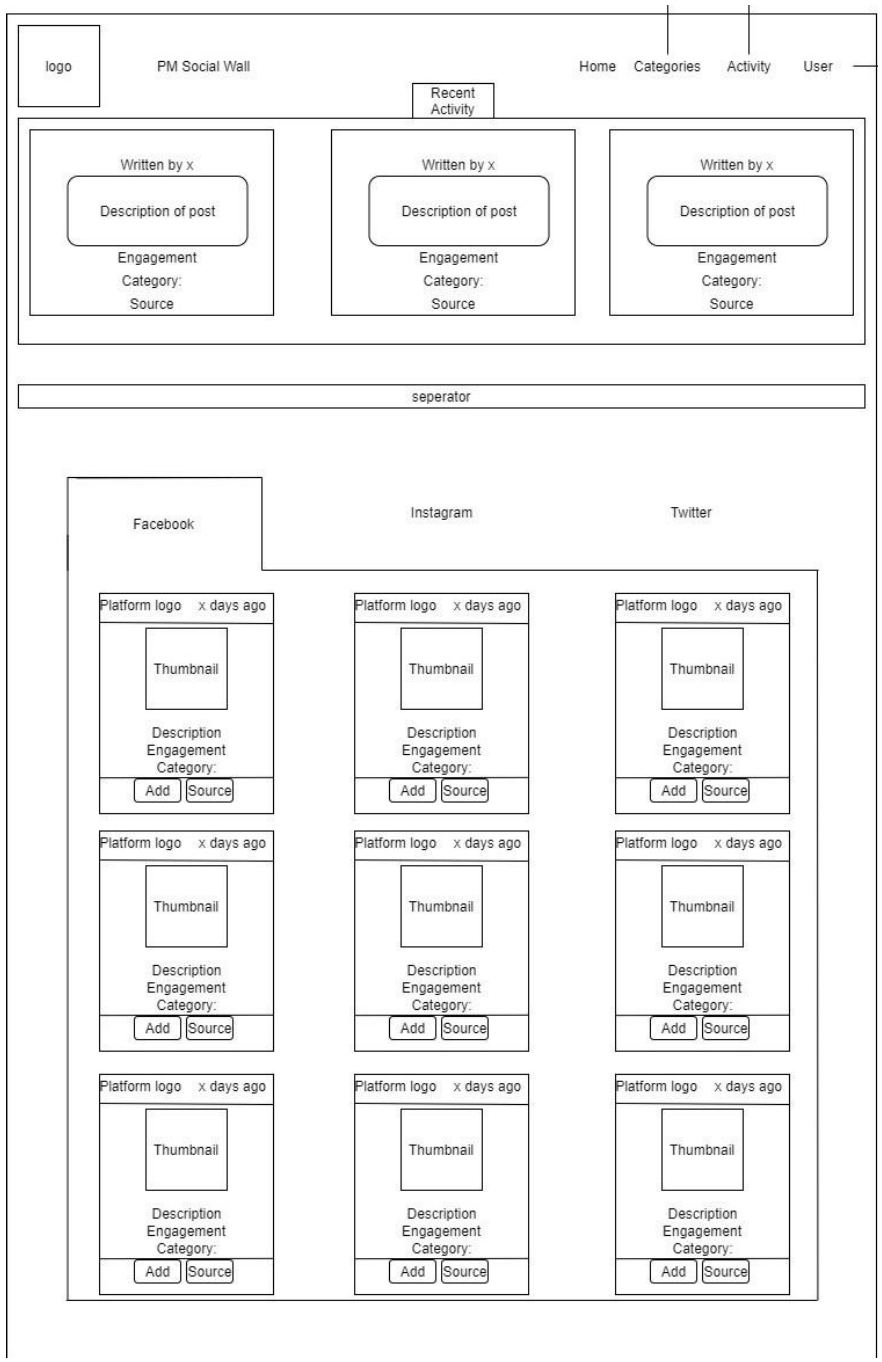
Appendix

The overall wireframe:

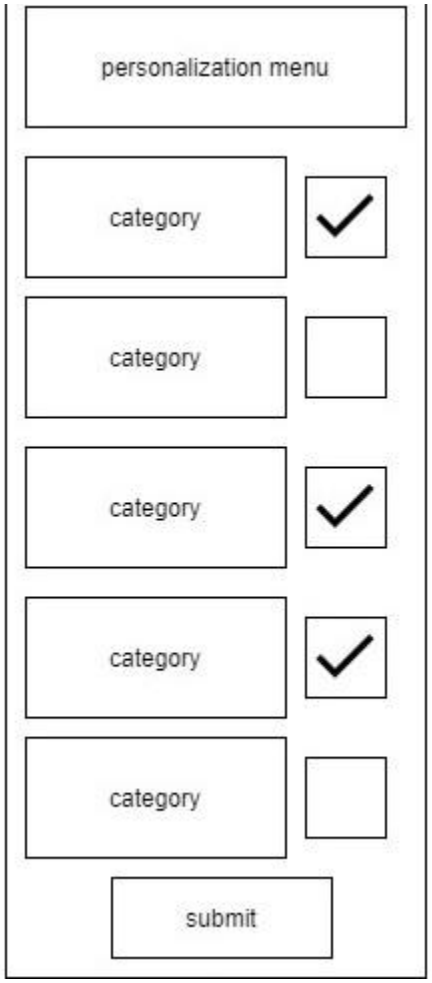


The above wireframe consists of the following components:

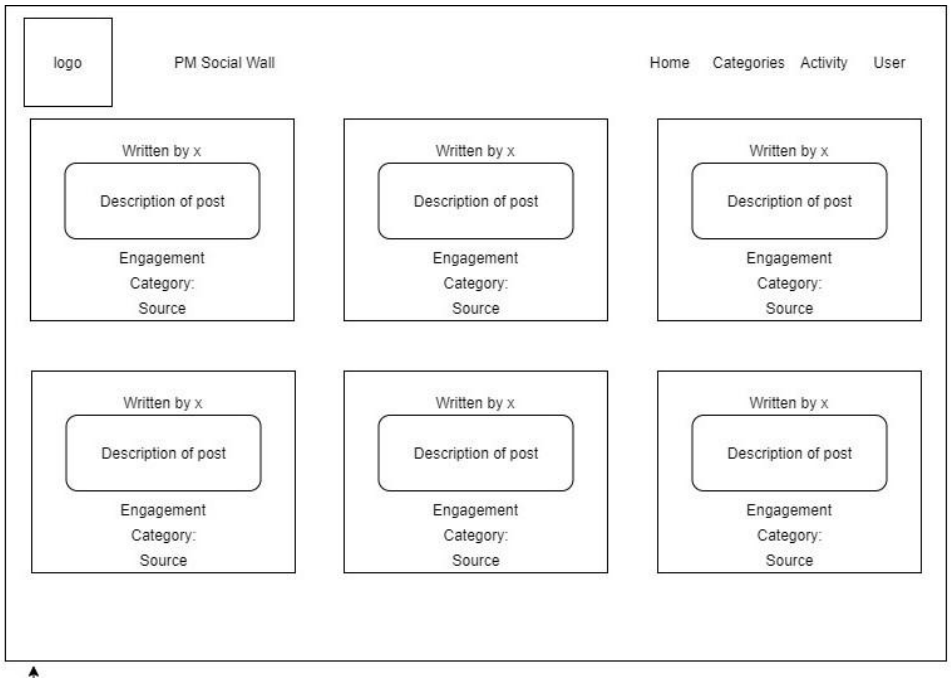
The homepage:



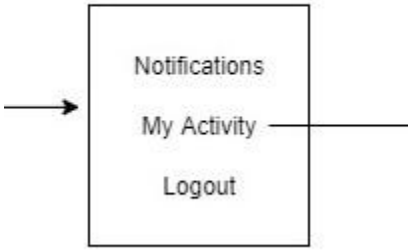
The categories dropdown menu:



The activity page:



The User dropdown menu:



The My Activity page (where x denotes the user's name):