Project : AnyPaste

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***Abstract*—AnyPaste is an online service that allows users to paste text or images and generate a unique short URL for accessing the material. Anyone can read the content if the user shares the short URL.**

If the user who made it is logged in, he or she can also edit or alter the data.

***Index Terms*—Paste, php, html**

I. Introduction

In this day and age, we must share our code snippets with others or store them on the internet so that we can access them from anywhere at any time. As a result, as a solution, we devised the idea of creating a Paste-bin application where people can easily share their code snippet with others via a link. In addition, they should represent their code snippet as a format, such as language keyword.

II. Literature Review

By October 2011, the site's active pastes numbers exceeded 10 million. In July 2012, the owners of Pastebin.com tweeted that they had already surpassed the 20 million active pastes mark.[4] On June 9, 2015, they announced they had reached 65 million active pastes. They also mentioned that around 75 percent of pastes are either unlisted or private. During the 2014 Venezuelan protests, Pastebin.com was blocked by the country's government as one of the sites where activists were sharing information. In 2015, Pastebin.com reached 95 million active pastes, and more than 2 million members. In April 2020, Pastebin.com removed their built-in search feature and restricted their web scraping API, including for paid lifetime subscribers of Pastebin Pro. As an additional spam prevention measure, pastes from users not logged in are hidden from the list of recent pastes, visible in the site's side bar.

III. Methodology

Many features would be included in this project, such as

- Paste title
- Publicly paste
- Privately paste
- Type selection
- Custom URL
- View latest paste

There are two types of user Anonymous, Registered. Registered user will benefit from creating customs URL, private paste etc.

The development process has been divided into two parts: front end development and backend development. The front end consists of the visually visible components such as the home page, admin panel, contact page, and shopping cart page. The database and its interaction with the front end are housed in the back end.

IV. Requirements and Goals of the System

The prerequisites for our Anypaste service are as follows:

Functional Requirements

- Users should upload or "paste" their data and get a unique URL to access it.
- Users will only be able to upload text.
- Data and links will automatically expire after a specific timespan; users should also specify expiration time.
- Users should optionally be able to pick a custom alias for their paste.

Non-Functional Requirements

- The system should be highly reliable, any data uploaded should not be lost.
- The system should be highly available. This is required because if our service is down, users will not access their Pastes.
- Users should be able to access their Pastes in real-time with minimum latency.
- Paste links should not be guessable (not predictable).

V. Design Specification

Plan assurance of a structure demonstrates how the improvement methodology will go for a particular system and how head-ways are begin done. A structure assurance is a point by point report giving information about the considered dare to set criteria the planners should meet. In future, we will give the fronted and back-end structure of our site close to the instruments and stages used to develop the web application site.

A. Front End Development

Our website's front end was initially hand-coded in JavaScript. This is a client-side scripting language designed specifically for web development. The code was combined with the Hypertext Mark-up Language (HTML) to create a style sheet (CSS) language used for describing the look and formatting

of a mark-up language-written document.

B. Back End Development

The back end is supported by the Database Management System (DBMS). The database management system is essentially software that allows us to create databases, add, delete, alter, and update tables. Tables can store various types of data, such as integers, variable characters, and so on. We chose the MySQL DBMS to hold the database in our application.MySQL is a database management system that uses a relational model. The main reason is that the MySQL development project has made its source code available under the General Public License (GNU), which is an open source web application.

VI. Database Schema

Two tables would be required: one for Paste information and the other for user information.

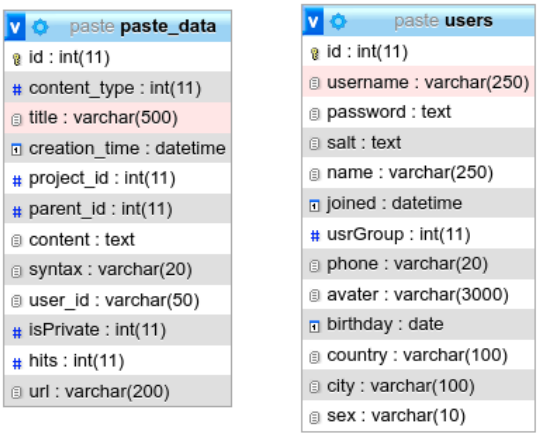

Fig. 1. Database Schema

VII. Low-level Design

The key component of this service relies on generating short URLs and storing the content. Let's discuss these in details:

Generate Short URL

Every time whenever a user makes a paste, the service needs to generate a unique new short URL. We can use BASE64 for encoding the URL as all the character of BASE64 are URL-safe characters(characters allowed [A-Z][a-z][0-9]
Since we have many requests we can easily do with a URL of length 6.

To generate the unique URL, we could take the MD5 has for the user's ip address+timestamps. We have various choices like ip address+timestamp or ip address+contest, but as contesnt would very large to handle hence we use the other. Alternatively, we could also take the MD5 hash of randomly generated data.

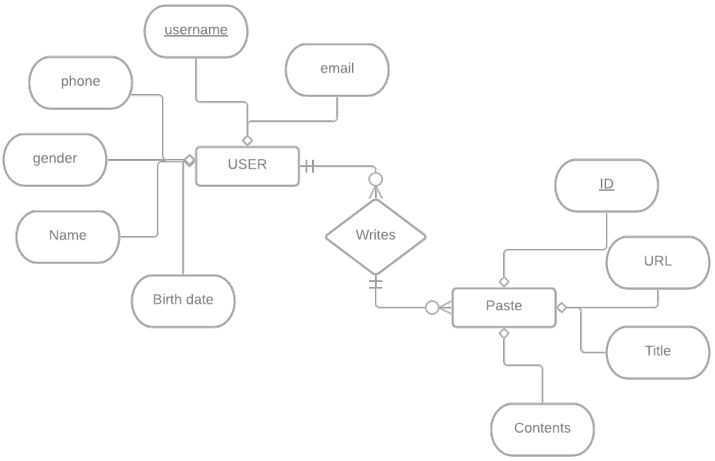

Fig. 2. ER Diagram

VIII. Requirements

Language

- Front-end : HTML, CSS and JavaScript
- Back-end : PHP and JavaScript
- Database : MySQL

Framework

- Front-end : Google MDL
- Back-end : phpCoreX

Environment

- apache
- MySQL Server
- XAMPP

IDE

- VSCode

IX. Conclusion and Future Work

This project could benefit from more features like Edit accessibility, More optimize and Delete Paste.
We strongly feel that our idea can solve these mentioned issues.That's why we are willing to develop AnyPaste Services which can handle these requirements.

Acknowledgment

I would like to thank my honourable **Khan Md. Hasib Sir** for his time, generosity and critical insights into this project.

References

[1] Pastebin.com
[2] paste.ubuntu.com