

Assignment 2 COMP466

Part 1 Documentation

Following the cover page will be the required documentation on your work for each part of the assignment, which should include:

- the original description and requirements of the project
- your interpretation of the assignment project and requirements
- your analysis and design of the web application
- documentation of your implementation
- a guide for users (your tutor, who will mark the assignment) to set up, to run, and to use the web application
- a hyperlink to the web applications you design for the project
- anything else you want to say to your tutor

The original description and requirements of the project:

For this project, you will be using MySQL and PHP to develop a web application that provides an online bookmarking service to users on the Internet. The requirements are as follows:

- The web application should have a good thoughtful interface, with menus and navigation buttons as needed.
- It should have a name or logo shown across all the pages.
- It should begin with a welcome or greeting message and a list of ten most popular websites that people have bookmarked.
- Once signed in, a list of bookmarks should be displayed, and the user can browse any web site in the list in a new browser tab or window by clicking the URL.
- The user will also be able to add new websites to the list and edit and delete any of the existing ones in the list;
- When adding or editing, user input needs to be validated using JavaScript, to make sure the URLs are correct and active.

My interpretation of the assignment project and requirements

Basically, I was required to develop a website where the users can save their favorite websites and then access them from their accounts. In order to implement the website, I had to learn how MySQL database management system works as well as PHP programming language. This part of the assignment requires USERS and BOOKMARKS instances. I'll explain this in more details in the next section of this document.

My analysis and design of the web application

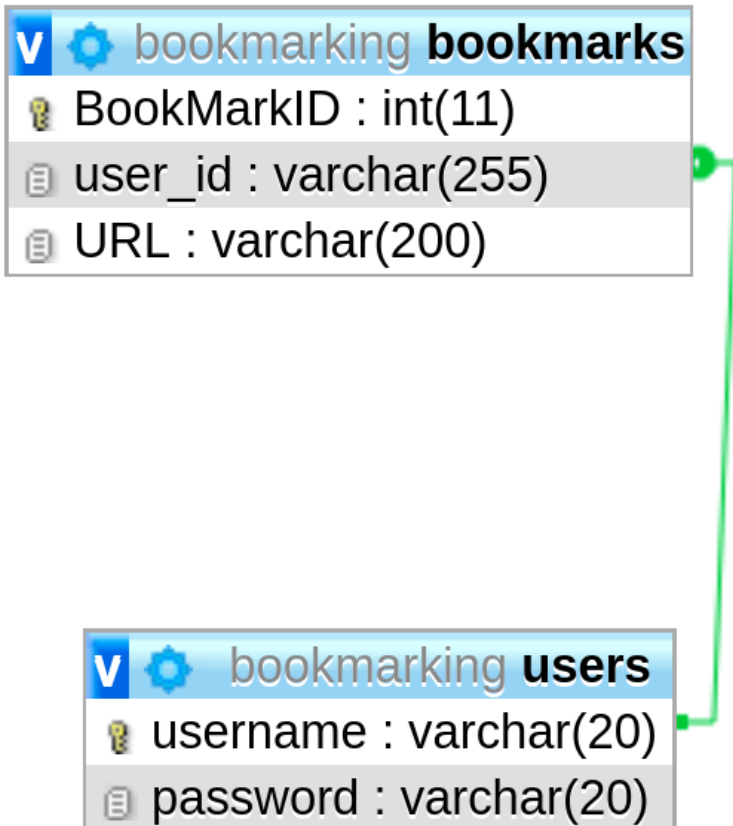
Firstly, I've realized that LOGIN and SIGNUP system has to be created since each user would only see the websites, they've saved for themselves. I've done research on how the system should work. There exists such thing as SESSIONS, and by using PHP I could always specify when a user logs in into the system and when he/she leaves the system. I've used `$_SESSION['username']` to set the username who currently uses the system. Once the user wants to log out, the session is destroyed and the user is redirected to

the main page of my webpage application. The user has a choice either to log in or sign up in order to access the bookmarks. Also, PHP used to retrieve the most popular website using MySQL database and sql_code.

Documentation of your implementation

Let's start with database design. The only two instances I need are USER and BOOKMARKS.

This is the design of my database for this app. User_id works as a foreign key for each bookmark.



The file structure of the application is straightforward.

The list of the files in my application:

- Add_bookmark.php - adds a new bookmark into the database for logged in user.
- Add_user.php - add a new user into the database and checks whether the username is already taken(if that's the case redirects back to welcome_page.php)
- Bookmarks.php - this page contains all the bookmarks of the logged in user where a user can edit or delete the bookmark of his choice.
- Delete_bookmark.php - deletes the bookmark that was requested by the user
- Edit-bookmark.php - edits the bookmark that was requested by the user

- Login.php - check whether a user exists and if it does the user is logged in into the account.
- Logout.php - destroys the session of logged in user.
- Welcome_page.php - the main page of the application where a user can sign up or sign in.
- ../Shared/Script.js - handles marking the quiz, edit, deleting, adding bookmarks using AJAX.

Guide for users (your tutor, who will mark the assignment) to set up, to run, and to use the web application.

I'm using Apache server. You can simply unzip the TMA2.zip and place it into /htdocs. Then open TMA2.html page. From there you can access all the parts of the assignment.

Hyperlink to the web applications you design for the project

Copy and paste it in your browser:

<https://35.196.37.129/a2/tma2.html>

You will see the hyperlink once you open TMA2.html file.