

Table of Contents

| | |
|---|-----------|
| System Introduction..... | 3 |
| System Design..... | 4 |
| Development Software, Language, Tools..... | 6 |
| Database Design..... | 7 |
| Development Steps..... | 9 |
| System Interface for All Users..... | 10 |
| Localhost Setup..... | 12 |
| URL..... | 13 |
| User Credentials..... | 14 |

System Introduction

The Task Management System (TMS) is a web based application that addresses the diverse needs of users that are seeking for an efficient solution to organise and monitor their tasks. In response to dynamically changing demands of task management, TMS offers a set of features that enable users to register, log in, create, modify, and mark tasks as completed. The main objective of the system is to provide a platform that is user-friendly which will then promote users to enhance their task organisation and productivity.

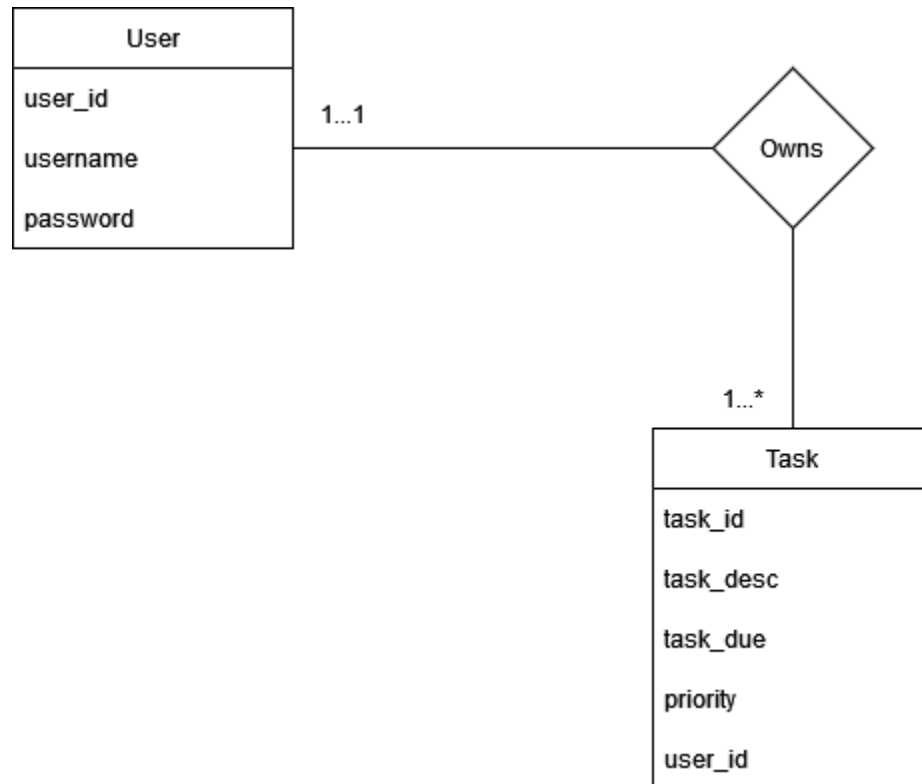
After registering and logging into the system, individual users will gain access to a personalised space where they are able to record and manage their tasks. The design of the system facilitates the addition of new tasks into the list. Users are able to input details such as task description, the due date of the task, and priority levels. Task completion is easily indicated by the deletion process which offers users a clear visual representation of that they have accomplished their goals.

Next, one of the functionalities of the TMS that deserves to be pointed out is the ability to filter tasks. Users can choose to sort the tasks that they have in the list based on the due dates which will ensure a focused and time-sensitive approach to their workload. Other than that, the different tasks can also be sorted based on priority levels. There are 3 main categories which are high, medium, and low priority. This enables users to identify the tasks that should be prioritised and completed earlier compared to the rest.

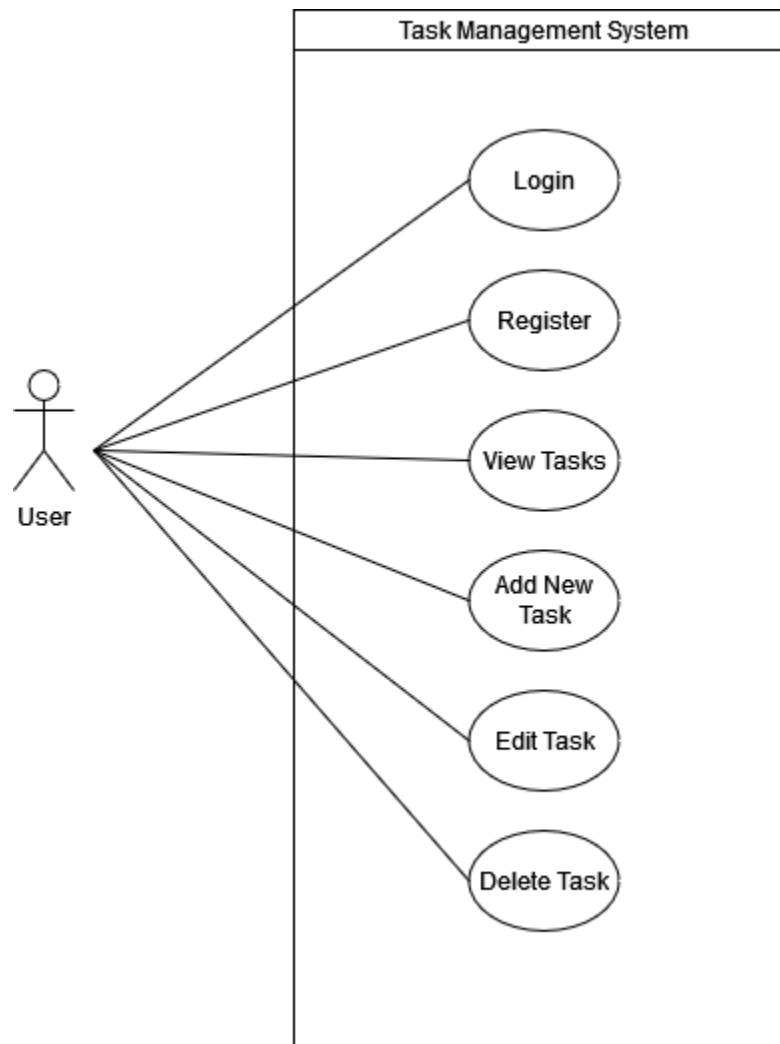
In conclusion, the Task Management System is not just a simple tool for listing out tasks but it is also an intelligent and user-centric approach that empowers users to take control of their daily activities, which promotes productivity and organisation in both their personal and professional realms.

System Design

ERD (Entity Relationship Diagram)



Use Case Diagram



Development Software, Language, Tools

| Item | Example |
|----------------------|---|
| Development Software | XAMPP (https://www.apachefriends.org/) |
| Language | PHP, HTML, CSS |
| Technology | MySQL |
| Tools | Bootstrap (https://getbootstrap.com/) |

Development Software

Software used throughout the development of our system:

| Software | Explanation |
|---------------------|--|
| XAMPP Control Panel | The XAMPP Control Panel helps programmers access the features of Apache and MySQL in a more accessible way. This software provides a local host for the users. The local host will be used to test the website before uploading it to the hosting. |
| Visual Studio Code | Visual Studio Code acts as the main IDE used for the development of the Data Management System for YouthVentures Asia. This software was used to debug the code and run the code on the local host. It was also used to edit the interfaces of the system. |

Programming Languages

| Language | Explanation |
|----------|--|
| HTML | Hyper Text Markup Language. This is the standard markup language that is used when creating web pages. |

| | |
|------------|--|
| CSS | Cascading Style Sheets (CSS) are used to describe how the HTML elements appear on the website. |
| Javascript | Javascript is used to create interactive web pages. |
| PHP | PHP is a Hypertext Preprocessor. It is also used as a server scripting language. It is often used to develop either static or dynamic web pages. |
| Bootstrap | A popular HTML, CSS, and Javascript framework that is used to design and customize responsive web pages. |

Database Design

Filters

Containing the word:

| Table | Action | Rows | Type | Collation | Size | Overhead |
|-------------------------------|------------|----------|---------------|---------------------------|-----------------|------------|
| <input type="checkbox"/> task | | 2 | InnoDB | utf8mb4_general_ci | 16.0 KiB | - |
| <input type="checkbox"/> user | | 2 | InnoDB | utf8mb4_general_ci | 16.0 KiB | - |
| 2 tables | Sum | 4 | InnoDB | utf8mb4_general_ci | 32.0 KiB | 0 B |

☐ Check all

Table 4.1 : Structure of the database named “tms”.

Table structure | Relation view

| # | Name | Type | Collation | Attributes | Null | Default | Comments | Extra | Action |
|----------------------------|-----------|---------------|--------------------|------------|------|---------|----------|----------------|--------------------|
| <input type="checkbox"/> 1 | task_id | int(11) | | | No | None | | AUTO_INCREMENT | Change Drop More |
| <input type="checkbox"/> 2 | task_desc | varchar(1000) | utf8mb4_general_ci | | No | None | | | Change Drop More |
| <input type="checkbox"/> 3 | task_due | date | | | No | None | | | Change Drop More |
| <input type="checkbox"/> 4 | priority | varchar(255) | utf8mb4_general_ci | | Yes | N/A | | | Change Drop More |
| <input type="checkbox"/> 5 | user_id | int(11) | | | No | None | | | Change Drop More |

Figure 4.2 : Structure of the table named “task” inside the database.

Table structure | Relation view

| # | Name | Type | Collation | Attributes | Null | Default | Comments | Extra | Action |
|----------------------------|----------|--------------|--------------------|------------|------|---------|----------|----------------|--------------------|
| <input type="checkbox"/> 1 | user_id | int(11) | | | No | None | | AUTO_INCREMENT | Change Drop More |
| <input type="checkbox"/> 2 | username | varchar(250) | utf8mb4_general_ci | | No | None | | | Change Drop More |
| <input type="checkbox"/> 3 | password | varchar(250) | utf8mb4_general_ci | | No | None | | | Change Drop More |

Figure 4.3 : Structure of the table named “user” inside the database.

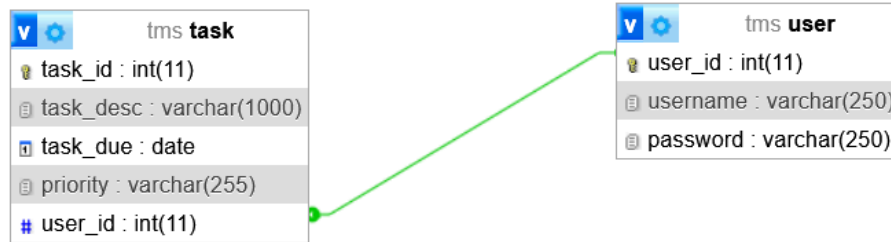


Figure 4.4 : After clicking the “Designer” button for the “tms” database.

Development Steps

Step 1 : Plan the Task Management System and Requirements Gathering.

After reading through and understanding the case study given to me for the Task Management System. I was able to determine the purpose, and objectives of the system. The goal of the system is to create a system where the user can add the task or things that they need to complete so that they can be more organised and make use of their time to complete the tasks efficiently.

Step 2 : Design

I created the Use Case Diagram and the Entity Relationship Diagram (ERD). After that, I developed interfaces for the system using suitable programming languages and tools for web development such as HTML, CSS, Javascript, and also Bootstrap.

Step 3 : Development

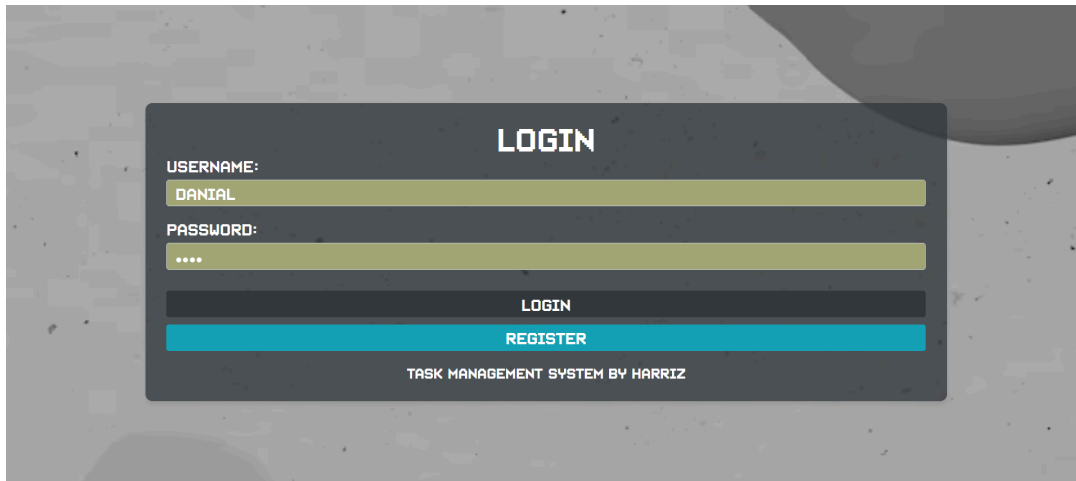
For the development phase, I started working on the Task Management System. By using the information that I gathered from Step 1, I created a functional web-based application. During this process, I paid close attention to the fundamental functionalities that are required for efficient task management.

When creating the system, I made sure to take into account the essential security measures. This involved the implementation of security features such as password encryption using hashing. This is done so that user credentials are protected and guarding it against SQL injection vulnerabilities.

Step 4 : Testing

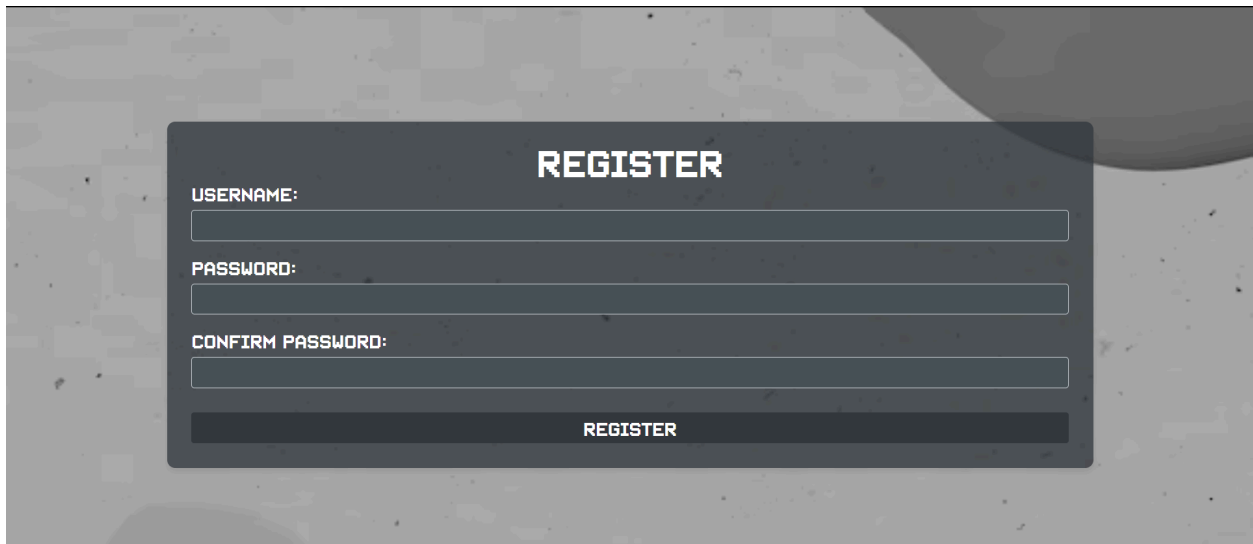
The testing phase was done so that the performance and overall functionalities of the Task Management System across various devices such as computers and mobile phones. Intensive testing was done to identify and address any bugs or glitches that will affect the user experience and system performance. This detailed testing is done not only so that the system meet its intended purpose but also to provide a seamless and user-friendly experience for the future users of the system.

System Interface for All Users



The login page features a dark gray rectangular form centered on a light gray background with a subtle wave pattern. At the top of the form, the word "LOGIN" is displayed in a bold, white, sans-serif font. Below this, there are two input fields: the first is labeled "USERNAME:" and contains the text "DANIAL"; the second is labeled "PASSWORD:" and contains four dots. Both input fields have a light olive-green border. Underneath the password field, there are two buttons: a dark gray button labeled "LOGIN" and a teal button labeled "REGISTER". At the bottom of the form, the text "TASK MANAGEMENT SYSTEM BY HARRIZ" is written in a small, white, sans-serif font.

Figure 6.1 : Login Page



The register page features a dark gray rectangular form centered on a light gray background with a subtle wave pattern. At the top of the form, the word "REGISTER" is displayed in a bold, white, sans-serif font. Below this, there are three input fields: the first is labeled "USERNAME:", the second "PASSWORD:", and the third "CONFIRM PASSWORD:". All three input fields are empty and have a light gray border. At the bottom of the form, there is a dark gray button labeled "REGISTER".

Figure 6.2 : Register Page

TASKS

FILTER BY DATE: DD/MM/YYYY

FILTER BY PRIORITY: ALL PRIORITIES

APPLY FILTER

| ID | TASK | DUE DATE | PRIORITY | ACTION |
|----|-------|------------|----------|--|
| 1 | TEST1 | 2003-10-27 | LOW | <div>EDIT TASK</div> <div>FINISHED</div> |
| 2 | TEST2 | 2002-10-28 | HIGH | <div>EDIT TASK</div> <div>FINISHED</div> |
| 3 | TEST3 | 2024-02-09 | HIGH | <div>EDIT TASK</div> <div>FINISHED</div> |

ADD UPCOMING TASK

LOGOUT

Figure 6.3 : Home Page

EDIT TASK

TASK

TEST1

DUE DATE

27/10/2003

PRIORITY

LOW

UPDATE TASK

BACK

Figure 6.4 : Edit Task Page

ADD TASK

TASK:

DUE DATE:

DD/MM/YYYY

PRIORITY:

LOW

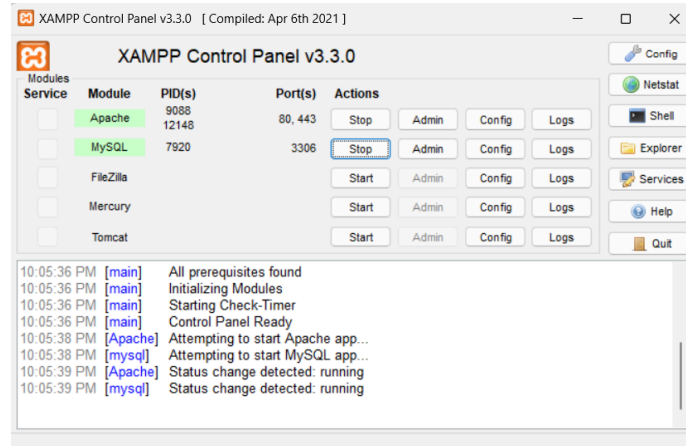
ADD TASK

BACK TO TASK LIST

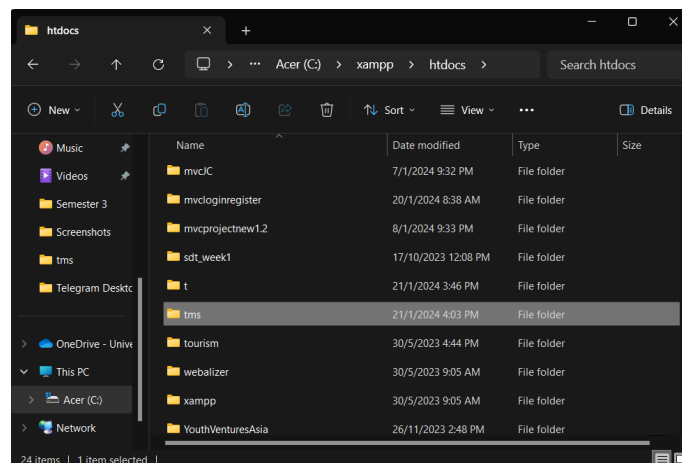
Figure 6.5 : Add Task Page

Localhost Setup

1. Download and install XAMPP from <https://www.apachefriends.org/>.
2. Start Apache and MySQL servers from the XAMPP control panel.



3. View the phpMyAdmin by clicking the “Admin” button on the “Actions” section of the MySQL module.
4. Extract the “tms.zip” file into xampp >htdocs file path.



5. Create a new database in phpMyAdmin called “tms”.

User Credentials

| Username | Password |
|----------|----------|
| Danial | danial |
| Harriz | harriz |