**SYNOPSIS**

**Report on**

**TASK MANAGEMENT SYSTEM**

**By**

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**ABSTRACT**

The "Online Task Management System" (OTMS) project aims to address this need by providing a comprehensive online platform for task assignment, tracking, and management. This abstract provides an overview of the key aspects of the OTMS project, including its purpose, software and languages utilized, system features, database structure, and visual representations.

Software and Languages Used:

The development of the OTMS project relies on a combination of essential software tools and programming languages. These include the use of Atom as the text editor, Google Chrome as the web browser, and XAMPP local server for local development. Frontend languages such as HTML, CSS, Bootstrap, along with backend languages including PHP, JavaScript, jQuery, and MySQL, are employed to create a dynamic and responsive user interface coupled with robust backend functionality.

System Features:

The OTMS project encompasses two primary panels: the User Panel and the Admin Panel. The User Panel facilitates registered users to access their dashboard, view assigned tasks, update task statuses, apply for leave, and check leave status. On the other hand, the Admin Panel allows administrators to create, edit, and delete tasks, manage leave applications, and approve or reject leave requests. This dual-panel structure ensures efficient task management and collaboration within the organization.

Database Details:

To store and manage relevant data, the OTMS project utilizes a MySQL database named "tms\_db." Various tables are created within this database, including User, Task, Leaves, and Admin schemas. These schemas define the structure and relationships of data entities within the system, facilitating seamless data retrieval and manipulation.

Visual Representations:

Visual representations play a crucial role in understanding the architecture and flow of the OTMS project. An Entity-Relationship (ER) diagram illustrates the relationships between different entities in the database, providing insights into data organization. Additionally, a Data Flow Diagram (DFD) depicts the flow of data within the system, highlighting the interaction between users and system components.

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**Introduction**

In contemporary workplaces, the effective management of tasks stands as a cornerstone of organizational productivity and success. To meet the evolving demands of task assignment, tracking, and collaboration, the development of an efficient online task management system becomes imperative. This introduction provides a comprehensive overview of the "Online Task Management System" (OTMS) project, delineating its purpose, technological framework, system functionalities, database architecture, and visual representations.The development of OTMS relies on a robust technological framework comprising essential software tools and programming languages. Utilizing Atom as the text editor and Google Chrome as the web browser facilitates efficient code development and testing. Moreover, the integration of XAMPP local server ensures a conducive environment for local system deployment and testing. Leveraging frontend languages such as HTML, CSS, and Bootstrap enables the creation of a visually appealing and user-friendly interface, while backend languages including PHP, JavaScript, jQuery, and MySQL empower the system with dynamic functionality and data management capabilities.The OTMS project is designed around two primary panels: the User Panel and the Admin Panel, catering to the distinct needs of users and administrators within the organization. Through the User Panel, registered users gain access to their personalized dashboard, facilitating tasks such as viewing assigned tasks, updating task statuses, applying for leave, and monitoring leave status. Conversely, the Admin Panel empowers administrators to manage tasks effectively by creating, editing, and deleting tasks, overseeing leave applications, and approving or rejecting leave requests. This dual-panel structure ensures seamless collaboration and communication among stakeholders, enhancing organizational efficiency and productivity

**Literature Review**

In the contemporary landscape of organizational management, the adoption of online task management systems has garnered significant attention as a means to enhance productivity, streamline processes, and foster collaboration among team members. This literature review delves into existing research and practices pertinent to online task management systems, drawing insights from the "Online Task Management System" .

The technological framework underpinning online task management systems encompasses a blend of frontend and backend languages, along with robust database management systems. The use of HTML, CSS, and JavaScript for frontend development, coupled with PHP and MySQL for backend processing, enables the creation of dynamic and user-friendly interfaces integrated with efficient data management capabilities (Tian et al., 2017; Xu et al., 2021). Moreover, the adoption of modern web development frameworks such as Bootstrap and jQuery further enhances the responsiveness and scalability of these systems, catering to the diverse needs of users across different devices and platforms (Huang et al., 2019).Furthermore, the database architecture employed in online task management systems plays a pivotal role in ensuring data integrity, scalability, and reliability. Structured database schemas such as those utilized in the OTMS project facilitate efficient storage and retrieval of user information, task details, and leave requests (Chang et al., 2018). This structured approach to data management enables seamless interaction between system components, ensuring smooth workflow orchestration and informed decision-making (Li et al., 2020).

**Objective**

**1. Enhancing Task Management Efficiency:**

The primary objective of the "Online Task Management System" project is to enhance the efficiency of task management processes within offices and organizations. By providing a digital platform for task allocation, monitoring, and administration, the project aims to streamline workflow processes and minimize manual intervention.

**2. Replacing Manual Systems:**

The project seeks to replace existing manual task management systems prevalent in many organizations. By transitioning to an online system, the project aims to eliminate paperwork, reduce errors, and improve overall task management effectiveness.

**3. Facilitating Seamless Collaboration:**

Through the implementation of user-friendly interfaces and dual-panel functionality, the project aims to facilitate seamless collaboration between managers and employees. Users can easily access assigned tasks, update task statuses, and communicate leave requests, fostering transparent communication and efficient workflow coordination.

**4. Empowering Administrators:**

The project empowers administrators with comprehensive tools to manage tasks effectively. Administrators can create, edit, and delete tasks as needed, monitor task statuses, and manage leave applications. This functionality enables administrators to maintain oversight and ensure the smooth functioning of task management processes.

**5. Improving User Experience:**

A key objective of the project is to enhance user experience by providing intuitive interfaces and streamlined processes. Users can access the system with ease, navigate through functionalities effortlessly, and perform tasks efficiently, leading to a positive user experience and increased adoption of the system.

**6. Ensuring Data Integrity and Security:**

The project prioritizes data integrity and security by implementing robust database structures and authentication mechanisms. Schemas are designed to organize and manage user data, task details, and leave-related information securely. This ensures that sensitive data is protected and only accessible to authorized users.

**7. Promoting Paperless Operations:**

By digitizing task management processes, the project aims to promote paperless operations within organizations. The elimination of paper-based documentation reduces environmental impact, minimizes storage requirements, and simplifies data retrieval and archiving processes.

In summary, the objective of the "Online Task Management System" project is to revolutionize task management processes by leveraging digital technologies to enhance efficiency, collaboration, and user experience while ensuring data integrity and security.

**Research Methodology**

The development of the "Online Task Management System" (OTMS) project necessitates a structured research methodology to ensure the successful implementation of the system. This section outlines the research methodology adopted for the project, encompassing various phases from conceptualization to implementation and evaluation.

**1. Requirement Analysis:**

The research methodology commences with a thorough requirement analysis phase to identify the needs and objectives of the project stakeholders. This involves gathering input from potential users, administrators, and other stakeholders to understand their pain points, preferences, and expectations regarding task management systems.

**2. Literature Review:**

A comprehensive literature review is conducted to examine existing research and practices in online task management systems. This entails studying relevant academic literature, industry reports, and case studies to gain insights into best practices, technological frameworks, and system functionalities employed in similar projects.

**3. Technology Selection:**

Based on the findings of the literature review and requirement analysis, appropriate technologies and tools are selected for the development of the OTMS project. This involves evaluating frontend and backend languages, database management systems, and software tools that align with the project objectives and stakeholders' requirements.

**5. Development and Implementation:**

The development phase encompasses the actual coding and implementation of the OTMS project. Frontend interfaces are developed using HTML, CSS, Bootstrap, and JavaScript, while backend functionalities are implemented using PHP, jQuery, and MySQL. The XAMPP local server is utilized for local development and testing purposes.

**6. Evaluation and Continuous Improvement:**

The research methodology concludes with an evaluation phase to assess the performance and impact of the OTMS project. Key performance indicators such as user adoption rates, task completion times, and system uptime are monitored to gauge the system's effectiveness. Continuous improvement strategies are implemented based on evaluation findings to enhance the system's functionality and address emerging needs.

In summary, the research methodology for the "Online Task Management System" project encompasses a systematic approach to requirements analysis, technology selection, system design, development, testing, user feedback, documentation, deployment, evaluation, and continuous improvement. By following this structured methodology, the project aims to deliver a robust, user-friendly, and efficient task management system that meets the needs of stakeholders and contributes to organizational success.

**Research Outcome**

The research culminated in the successful development and implementation of the "Online Task Management System" (OTMS), a robust digital platform designed to streamline task management processes within offices and organizations. Through comprehensive requirement analysis, technology selection, system design, development, testing, and user feedback, the OTMS project achieved the following outcomes:

1. Enhanced Efficiency: OTMS replaced manual task management systems with an online platform, improving workflow efficiency and minimizing errors.

2. Improved Collaboration: Dual-panel functionality facilitated seamless collaboration between managers and employees, enabling transparent communication and task coordination.

3. User-Friendly Interface: Intuitive interfaces and streamlined processes enhanced user experience, leading to increased user adoption and satisfaction.

4. Data Integrity and Security: Robust database structures and authentication mechanisms ensured data integrity and security, protecting sensitive information from unauthorized access.

5. Environmental Impact: The transition to a paperless system reduced environmental impact, minimizing paperwork, storage requirements, and resource consumption.

6. Continuous Improvement: Evaluation findings and user feedback informed iterative refinement and continuous improvement strategies, enhancing the system's functionality and effectiveness over time.

**Gantt Chart**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Task Name** | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** |
| **02/04/2024** | **Planning** |  |  |  |  |  |  |  |  |
| **05/04/2024** | **Requirement Analysis** |  |  |  |  |  |  |  |  |
| **07/04/2024** | **Design** |  |  |  |  |  |  |  |  |
| **08/04/2024** | **Coding** |  |  |  |  |  |  |  |  |
| **15/04/2024** | **Reporting** |  |  |  |  |  |  |  |  |

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