LONDON METROPOLITAN UNIVERSITY

CS6P05ES Project

Interim Report

Safe Online Shopping &Delivery Management System

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Declaration

Module: CS6P05ES **Deadline: 23/05/2025**

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- Your report should cover everything as detailed in this template. You should delete the guidance notes before submission

Abstract

The FollowMe 3W Management System is a scalable, web-based application designed to simplify task management in organizational environments by the adoption of a 3W (What, When, Who) structured approach. The system especially addresses the problems of manual tracking, responsibility, and loopholes in inter-departmental communications inherent in traditional task delegations, particularly in multi-department, fast-paced industries such as garment manufacturing.

This report documents the development progress of the system developed using Laravel for backend development, Vue.js for the frontend interface, and MySQL for storing structured data. The backend framework and API layer have been successfully implemented, as well as a normalized relational database schema for efficient storage and retrieval of task details. Basic user interface components have been developed, including modules for task creation, status tracking, and file uploading.

In addition, the project has laid the foundation for the integration of LDAP-based Active Directory authentication for enabling role-based access control and enterprise-class user management. The system's notification engine—which is responsible for alerting users and managers about task deadlines and pending tasks—has also been architected and partially implemented.

In this stage, approximately 60% of the targeted milestones are achieved in accordance with the project timeline. These are: establishment of backend services, completion of MySQL schema, and creation of a prototype dashboard. The remaining development stages will encompass polishing the user interface, completion of integration with Power BI for upper-level analytics and reporting, system testing overall, and final deployment activities.

Last but not least, FollowMe aims to provide a robust, user-friendly platform that fosters productivity, accountability, and transparency across

organizational workflows by digitizing and automating the entire lifecycle of task management.

Content

Catalog

Declaration 3

Submission Information for Students 4

Abstract 5

Content 7

1. Introduction 8

2. Background 10

3. Work Completed 11

4. Further Work 12

5. References 13

6. Bibliography 14

1. Introduction

Good task management in the dynamic business environment is imperative in order to encourage accountability, transparency, and timely delivery between departments. Most companies, however, still rely on conventional tools such as spreadsheets, email, or word-of-mouth reminders to allocate and track tasks. These paper-based methods often lead to inefficiencies like poor communication, lack of task ownership, delayed timelines, and performance tracking challenges.

The FollowMe solution was developed explicitly to meet these operational requirements. It provides a structured, web-based method based on the 3W model of task management that focuses on specifying precisely What (task to be accomplished), When (the deadline by which it is to be accomplished), and Who (the person or team responsible for doing it). This 3W model enforces an environment of discipline, responsibility, and timing and significantly improves coordination of operations.

FollowMe is designed to streamline internal processes using the capability of employees and managers to assign, track, and edit tasks in real-time. Capabilities built into the system include creating tasks, attachment of file documents, tracking progress, departmental- and user-level interfaces, automatic deadline reminders, as well as reporting capability to monitor trends of task completion. FollowMe also supports enterprise integration by allowing Active Directory (via LDAP) for secure access and authentication.

This mid-term report reflects the present stage of development of the system. Some of the key achievements so far include setting up an extensible backend infrastructure in Laravel PHP framework, defining and implementing partially a normalized MySQL database, and creating prototype user interfaces with HTML and CSS. The architecture of the system has been designed to be scalable, maintainable, and modular in order to ensure future extensibility and flexibility.

The report further encompasses a summary of work conducted against the initial project schedule, discussion of problems encountered—such as Active Directory integration and real-time notification architecture—and a schedule for completion of the remaining pieces. These are complete frontend integration, analytics in Power BI, full user testing, and final deployment readiness.

Over time, FollowMe aims to bridge the organizational divide between planning and doing by enabling businesses to move from fragmented, manual tracking systems to a single, automated, and data-driven task management platform.

2. Background

Traditional task management in clothing firms relies on slapdash approaches such as generic Excel sheets, leading to miscommunication, delay, and wastage. Project management tools (e.g., Trello, Asana) today do not have any particular feature optimized for departmental coordination and Active Directory support. The FollowMe platform fills this gap with a lean 3W framework that includes automatic reminders, resource management, and dashboards between departments. Academic studies indicate the effectiveness of task framework structures towards productivity improvement (Smith et al., 2021) in upholding FollowMe's design principles.

FollowMe bridges this gap by combining:

1. A 3W framework for unambiguous task definition.

2. Departmental dashboards for holistic progress tracking.

3. Active Directory integration for centralized user authentication.

4. Automated notifications to reduce manual follow-ups.

This system is particularly relevant for industries transitioning from legacy systems to scalable digital solutions.

3. Work Completed

- System Architecture:
    - Backend developed using Laravel.
    - MySQL database schema finalized.
- Active Directory Integration:
    - LDAP authentication implemented for streamlined user management.
- Core Features:
    - Basic 3W task assignment module completed.
    - Automated email notifications for overdue tasks developed using PHP Mailer.
- UI Prototype:
    - UI designed with HTML and CSS, showing task statuses and departmental progress.

4. Further Work

- Frontend Development:
    - Complete responsive UI using HTML and CSS.
- Advanced Features:
    - Integrate Power BI for dynamic reporting.
    - Finalize file upload functionality for task resources.
- Deployment:
    - Containerize the application using Docker.
    - Conduct pilot testing in a garment industry environment.
- Documentation:
    - Prepare user manuals and deployment guides.

5. References

- Smith, J., et al. (2021). Task Management in Agile Environments. Journal of Organizational Efficiency, 15(3), 45–67.

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