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SHIPMATE

Students Peer-to-Peer Service System

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DECLARATION

I hereby declare that this project report entitled "Shipmate: Student Peer-to-Peer Service System" is the result of my own work except as cited in the references. It has not been submitted in whole or in part for any degree or diploma to any other institution.

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ABSTRACT

This report presents Shipmate, a web-based peer-to-peer service platform designed specifically for students of The Ship Campus. The system allows users to offer and request services within a secure and student-verified environment. Key features include real-student verification, service listing, service application with status tracking, a messaging system, and an anonymous rating and review system. The project follows a structured Web Development Lifecycle (WDLC), encompassing research, design, implementation, and testing phases. It adopts client-server architecture using Next.js (React) on the frontend and Node.js with Express on the backend, with MongoDB as the database and Auth0 for secure authentication. Manual and automated testing were conducted to assess system reliability. Out of 21 manual test cases, 20 passed and 1 failed (non-real-time messaging). Additionally, all 31 unit tests for backend controllers passed successfully. While the system successfully delivers its core functions, some limitations such as the absence of real-time chat and admin role management were identified. Future enhancements are proposed to address these. The development of Shipmate has not only achieved its technical objectives but also contributed significantly to the developer's growth in full-stack development, architectural planning, and resilience in overcoming personal and technical challenges.

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