## **ABSTRACT**

This research project aims to develop an innovative website-based application system with a specialized front-end module to enhance and streamline the visitor management system of xEV Center. The overarching goal is to provide invaluable assistance to the admin team in effectively handling and organizing incoming visitors, along with generating comprehensive reports that are vital for PT. Toyota Motor Manufacturing Indonesia (PT TMMIN), who serves as the esteemed manager and founder of xEV Center. The core functionality of this application is geared towards optimizing the visitor registration process and efficiently managing all pertinent data related to visitor visits. To accomplish this, the development process incorporates Figma for sophisticated UI design and the utilization of PHP programming language, synergistically integrated with the Laravel framework to implement the front-end prototype module for the visitor management system application. Methodologically, the research is rooted in the User-Centered Design approach, prioritizing the needs and preferences of the end-users, specifically xEV Center/PT TMMIN, ensuring an intuitive and userfriendly interface. Rigorous testing, such as Usability Testing and System Usability Scale assessments, was conducted to validate the effectiveness of the system, culminating in an affirmative "Acceptable" rating, definitively demonstrating that the system is highly usable and perfectly aligned with the diverse requirements of xEV Center/PT TMMIN.

Keywords: xEV Center, PT TMMIN, User-Centered Design, Front-End, Prototype, Usability Testing, System Usability Scale.