

ABSTRACT

The development of a swiftlet nest management application using the ICONIX Process is a structured approach to fulfilling the needs of the Swiftlead startup. The ICONIX Process, with its systematic steps of domain modeling, use case modeling, robustness analysis, and design modeling, ensures a well-documented and efficient software development cycle. By integrating IoT-based monitoring, the application enhances environmental control in swiftlet houses, ensuring optimal conditions for nest production. The structured methodology of ICONIX minimizes errors and aligns the application with user requirements effectively. The application has undergone rigorous design and testing phases, demonstrating the effectiveness of the ICONIX Process in developing a reliable and scalable solution. Based on testing, the application successfully meets its intended objectives and is ready for direct implementation in relevant institutions, offering a sustainable and technologically advanced solution for the swiftlet farming industry.

Keywords : Management Application, Website, IoT, Swiftlet, ICONIX Process