

## ABSTRACT

*Smart Feeding is an efficient and controlled automated system for feeding pets or livestock. The rapid growth of fish farming as a hobby and business has led to traditional approaches to manual feeding. However, time and distance limitations often pose challenges, especially for breeders with busy schedules or remote locations. This project aims to develop an automated fish feeding system that can be controlled via an Android application using the Agile method. Requirement analysis was conducted for application design, including the creation of a fish feed container, an Internet of Things (IoT)-based Smart Feeding device, and application interface design. Development involves the implementation of the container and IoT-based Smart Feeding device with Arduino, as well as the connected Android application. Testing was performed to assess the overall system, with checks and tests to detect possible failures or errors. This project resulted in a Smart Feeding prototype that can control fish feeding through the Android application. Evaluation involved 18 respondents with an average usability score of 84.7% on the Likert scale, indicating positive user feedback. This solution is efficient for fish feeding, supporting both fish farming businesses and hobbies.*

*Keywords: Internet of Things (IoT) based Smart Feeding, Arduino, Agile Method, Application User Interface.*