

**IMPLEMENTATION OF THE FRONT-END IN MOBILE
APPLICATION “MY PANTRY” USING THE HUMAN
CENTERED DESIGN (HCD) METHOD
(CASE STUDY: RM. PONDOK DELIMA PURWOKERTO)**

21102132

Flolean Desvita Cindirahayu

ABSTRACT

Effective food inventory management is a key challenge for restaurant operations to prevent stock shortages or surpluses. This final project discusses the development of the mobile application “My Pantry” using the Human Centered Design (HCD) method, with a case study at Rumah Makan Pondok Delima Purwokerto. The study aims to address inventory data inaccuracies, facilitate real-time stock monitoring, and enhance the efficiency of food inventory management. The research methodology includes the stages of inspiration, ideation, implementation, and testing. During the inspiration stage, user needs were identified through interviews, resulting in key features such as real-time stock recording, expiration date tracking, and activity reporting. The ideation stage produced wireframes and application prototypes using Figma, followed by iterative design improvements based on user feedback. Implementation was carried out by developing the application’s front end using Flutter with the GetX architecture, enabling a responsive and user-friendly experience. Testing results, using the User Experience Questionnaire (UEQ), indicated that the application met the criteria for attractiveness, perspicuity, efficiency, accuracy, stimulation, and novelty in the “Excellent” category. The clarity dimension showed significant improvement after design iterations. Overall, the “My Pantry” application successfully enhanced the efficiency and accuracy of food inventory management in restaurants, offering a user-friendly interface and features tailored to user needs. This study demonstrates that the HCD approach yields optimal technological solutions to meet specific user requirements.

Keywords: *inventory management, HCD, and mobile application*