	SYSTEM INTEGRATION ARCHITECTURE PANGASINAN STATE UNIVERSITY

BASIC INFORMATION	

TITLE ☐ MIDTERM ☐ FINAL	**Ordonez Veterinary Services (OrdonezVet)**		
SUSTAINABLE DEVELOPMENT GOAL (SDG) ADDRESSED	*Please check all that apply:* ☐ No Poverty ☐ Zero Hunger ☐ Good Health and Well-Being ☐ Quality Education ☐ Gender Equality ☐ Clean Water and Sanitation	☐ Affordable and Clean Energy ☐ Decent Work and Economic Growth ☐ Industry, Innovation, and Infrastructure ☐ Reduce Inequalities ☐ Sustainable Cities and Communities ☐ Consumable Consumption and Production	☐ Climate Action ☐ Life Below Water ☐ Life on Land ☐ Peace, Justice and Strong Institution ☐ Partnerships for the Goals
RESEARCH AGENDA/ RESEARCH PRIORITY AREA	The Research Agenda/Research Priority Area for the Ordonez Veterinary App focuses on enhancing the efficiency and user experience. The main objective of this research is to evaluate how effective and satisfactory the OrdonezVet app is, in modernizing and improving the appointment system in clinics. Specifically we will be focusing on the user experience when scheduling appointments through the apps QR code based system. Our study will examine how this innovative approach improves efficiency for both users and veterinary doctors by comparing the time it takes to schedule appointments using the app versus methods. Additionally we will assess how well the apps notification and reminder features keep users informed about appointments reducing the likelihood of missed appointments. By conducting these evaluations our research aims to offer insights into how the OrdonezVet app revolutionizes appointment systems and its overall impact on performance.		
PROPONENTS	Leader: ☐ Program ☐ Project ☐ Study		
	Members:	Justine Leung C. Furugganan	
		Carlloyd Viray	
IMPLEMENTING AGENCY	Ordonez Veterinary Services		
PROJECT DURATION	24 Days		
SITE(S) OR LOCALE OF PROGRAM/PROJECT/STUDY	The OrdonezVet project focuses on creating a user-friendly app designed to streamline appointment processes. With a QR code system for user appointments, the app facilitates efficient scheduling, providing a seamless experience for both users and veterinary doctors. The emphasis is on enhancing accessibility, incorporating admin functions for appointment management and ensuring a smooth flow for incoming patients. The project aims to support veterinary professionals in managing their schedules effectively while prioritizing user experience through technology integration.		
ESTIMATED BUDGET			

FUNDING SOURCE	☐ Institutional ☐ NGA (DILG,NEDA,DENR, DOST, DTI,CHR)	☐ Industry/Private Organization ☐ NGO	☐ International Organization ☐ LGU ☐ Others (specify) _____
COOPERATING/COLLABORATING AGENCIES/ORGANIZATIONS	☐ Other HEIs ☐ NGA (DILG,NEDA,DENR, DOST, DTI,CHR)	☐ Industry/Private Organization ☐ NGO	☐ International Organization ☐ LGU ☐ Others (specify)_____

TECHNICAL DESCRIPTION	
RATIONALE	The development of OrdonezVet stems from the need to modernize and optimize the appointment system within veterinary clinics. Traditional appointment methods can be hard and prone to inefficiencies. By implementing a QR code-based system the app aims to enhance the overall efficiency of appointment scheduling for both users and veterinary doctors. This solution seeks to address current challenges in managing appointments, ensuring a more streamlined and user-friendly experience.
OBJECTIVES	• Develop a QR code-based system that allows users to easily schedule appointments, providing a convenient method for both users and veterinary doctors. • Implement administrative features that empower veterinary clinic staff to efficiently handle and confirm appointments. • Incorporate features such as notifications and reminders to keep users informed about upcoming appointments reducing the likelihood of missed appointments.
REVIEW OF LITERATURE (Research Gap/s)	Developing the Ordonez Veterinary Appointment App with QR code holds immense importance in modernizing and optimizing the veterinary care process for both pet owners and clinics. For pet owners, the app ensures convenience, allowing them to schedule appointments 24/7 from anywhere. The booking feature eliminates the need for physical visits or phone calls offering a seamless and flexible experience. The importance of having an application or system for Veterinaries by Ainin Azhari(2020) The study allows pet owners to access their pets' medical records, request online appointments and receive notifications. It is designed to reduce the workload for clinic staff by eliminating manual file management and facilitating the generation of clinic reports. The mobile application provides a convenient platform for pet owners to view details of vaccination appointments, improving accessibility and minimizing the risk of errors. According to the study of R.E. Doyle et.al.(2021) It showcase the importance of veterinary services in ensuring animal welfare, contributing to sustainable agriculture, and aligning with global development goals. It underscores the diverse roles that veterinary professionals play in addressing challenges and improving the well-being of animals, emphasizing the need for collaborative efforts at various levels. The World Organisation for Animal Health (OIE) defines animal welfare as an animal's ability to cope with its living conditions, emphasizing health, comfort, nutrition, safety, and the expression of natural behaviors (OIE, 2008). The "Five Welfare Freedoms," endorsed by the World Veterinary Association, outline

	fundamental principles, including freedom from hunger, discomfort, pain, the ability to express normal behavior, and freedom from fear and distress. Veterinarians, uniquely positioned in the tripartite association of animals, owners, and society, hold a science-based objective, ensuring the well-being of animals through disease prevention, medical treatment, shelter, management, nutrition, humane handling, transportation, and euthanasia (Edwards and Schneider, 2005). Their role extends to daily practices, advocacy to animal owners, public education, scientific research, participation in legislations and programs, and collaboration with various stakeholders, contributing to the broader goal of improving animal welfare globally.
METHODOLOGY	To ensure a well-informed initiation the Application OrdonezVet process begins with comprehensive assessments. This involves conducting surveys and interviews with the owner of the veterinary clinic and pet owners to identify points and areas for improvement. The next phase is defining the specific goals and classifying them according to importance, functions and possible effects on admin side and pet owners. Defining the QR code appointment system, user interface for pet owners and the Admin side and secure authentication mechanisms. Implement QR code generation, scanning functionality, and a secure database for appointment management. Provide a user-friendly interface that is intuitive for veterinary experts as well as pet owners. Detailed planning ensues, encompassing infrastructure design, technology integration and addressing physical layout and technological necessities identified during the needs assessment. Implementation is executed in phases to manage resources efficiently and minimize disruptions, accompanied by staff training and a consistent feedback mechanism. Also a monitoring and evaluation process like a user feedback is implemented to track progress and identify areas for adjustment. This approach places a high value on ongoing development to make sure the OrdonezVet App develops and become a solution that can keep up with new developments in technology and veterinary care.
REFERENCES	Ainin Azhari (2020) Veterinary Clinic Management System https://ir.unimas.my/id/eprint/33985/1/Ainin%20Sofea%20Binti%20Azhari%20-%2024%20pgs.pdf R.E. Doyle et.al. (2021) The importance of animal welfare and Veterinary Services in a changing world https://www.woah.org/app/uploads/2021/08/402-10-doyle.pdf OIE Terrestrial Animal Health Code. (2008) Terrestrial Animal Health Code. World Organisation for Animal Health. https://www.woah.org/en/what-we-do/standards/codes-and-manuals/terrestrial-code-online-access/ Edwards, D. S., & Schneider, D. (2005). Veterinary medical ethics: Journal of the American Veterinary Medical Association https://doi.org/10.2460/javma.2005.227.676.

KNOWLEDGE PRODUCT/S	*Please check all that apply:* ☐ Journal Articles/ Conference Proceedings ☐ Book/Monograph ☐ Pamphlet/Other IEC Materials ☐ Poster Presentation ☐ Art Exhibit ☐ Policy Brief ☐ Indigenous People/Local Knowledge Documentation ☐ Manual/Module ☐ Others (specify)_____	
POTENTIAL IMPACT (STEEP)	☐ Social Impact ☐ Technological Impact ☐ Economic Impact ☐ Ecological (Environmental) Impact ☐ Political Impact ☐ Others specify: _____	
RESEARCH UTILIZATION	*Please check all that apply:* ☐ Instructional Development ☐ Community Development ☐ Institutional Development ☐ Demonstration Project	☐ Government/Industry Application ☐ Product/Software Development ☐ Patent/Utility Model Application ☐ Others (specify)_____

	Activity	Target Date
MILESTONE	**Development and Planning** – Initial Planning to discuss project requirements and task among the team.	November 18, 2023
	Project Initiation – Defining the project scope, objectives and stakeholders.	November 19, 2023
	Design and Architecture – Create the system architecture and designing the user interface.	November 20, 2023
	Database Setup – Establishing the Firebase as the database for storing, organizing and managing all the data.	November 25, 2023
	System Development – Coding and construction of the system in Android Studio using flutter for the framework and Dart for the language.	December 4, 2023
	Admin Development – Implementing the Admin module, login functionality and navigation through different sections.	December 4, 2023
	Testing and Quality Assurance – Pilot testing for user experience and concerns to identify and fix bugs or issues.	December 8, 2023
	Documentation and User Manual Creation – Prepare Documentation for the developers and a user manual for both admin and users.	December 11, 2023
	Deployment – Deploying the Application for the actual use.	December 12, 2023
	Maintenance and Support – Careful monitoring and patch updates	

TARGET USERS OR BENEFICIARIES	Ordonez Veterinary Services Owner and Clients	
DETAILED BUDGET REQUIREMENT	**Amount**	**Description**
	₱ 1396.40	Deployment of the Application
	₱ 500	Printing for User Manuals

BRIEF PROFILE OF PROPONENTS

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SUBMITTED BY:

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NOTED BY:

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