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# PINAUPAPH: A CLOUD-BASED APARTMENT MANAGEMENT SYSTEM

A Capstone Project
Presented to the Faculty of
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#### INTRODUCTION

PinaupaPH: A Cloud-Based Apartment Management System was developed in the Philippines. The system was intended to satisfy the requirements of clients who wanted to manage rental apartments. It allowed tenants to pay rent online through the system using an API, and owners received their money in e-wallets. It included documents like contracts and receipts, as well as a dashboard that gave owners useful information about tenant issues, and how much money was coming in each month. The database management aspect was handled using MongoDB Compass. The PinaupaPH is a cloud-based apartment management system within apartment buildings. The system is designed to streamline property management processes. It can be used to manage and generate documents and manage tenants' concerns. It is also used to monitor and improve the system in terms of functional sustainability. The project was funded by a grant from the European Property Association (EPA) The project's goal was to develop and test the PinauPAPH system in the coming years. The PinauPaPH project is now in its second year of development.

#### METHOD

PinaupaPH: A Cloud-Based Apartment Management System 51. Concern and Issue Module. Tenants could voice their concerns, the apartment owner could review the posts, and both parties could interact. via the comment section. CCTV module. Users could view the live feedback of an internet protocol (IP) camera that was registered with the system by navigating to the CCTV module, which was available from. the sidebar. The announcement module was accessible in the sidebar for apartment owner and tenants to view the announcement in their dashboard. PinaupaPH is a cloud-based apartment management system. The reliability test aimed to assess whether Pinaupa PH could consistently perform its operations without issues. The system was assessed by a total of 31 respondents: 10 professionals, 10 students, 8 tenants, and 3 apartment owners. The researchers also utilized a 4-point Likert scale in their rating system to gather and measure user feedback, Facilitating a more profound grasp of user contentment and preferences. The developed system can be downloaded as a PDF file. The study focused on developing an integrated cloud-based apartment management system to improve interactions between apartment owners and tenants. The system's functionality was illustrated through Context and Top Level Data flow diagrams and Use-case diagrams. The World Wide Web Consortium (CW3C) aided in assessing the adherence of the system to internet standards to PinaupaPH's standards. The study provided a high-level representation of the process of PinauPAPH, focusing on the key processes of its users. PinaupaPH: A Cloud-Based Apartment Management System 57 is a cloud-based apartment management system. The system is designed to be used in the cloud. It was developed by a team of researchers at the University of Cambridge. The researchers used ISO 25010 to assess the 'PinauPAPH' project. The project is open-source and can be downloaded from the Internet. It is available for download from the following sites: Google Play and Microsoft's Windows 8.1.

#### RESULTS

PinaupaPH: A Cloud-Based Apartment Management System is designed to streamline the process of handling tenant records. Tenants can see the deadline for monthly payments marked on specific days. Users can easily download the PDF file of tenant profile data in table. The table shows the module of the system, required user steps, and actual results. This section provides a comprehensive overview of the outcomes of testing the system's functionalities. It also provides the navigation for and accessing the most important features within the system. This section provides an overview of the system's features and functionality through screenshots for each page. The table shows the module of the system, required user steps, and actual results. The system reduces errors and improves data integrity by guaranteeing that owner information is accurate and up to date. The web page provides the owner flexibility and control by allowing them to change or remove the building and any associated units. The "Generate" button is used to download the delinquency report for the specified time frame. PinaupaPH: A Cloud-Based Apartment Management System 87 is the edit apartment unit modal, which is similar to the "Add Apartment Unit" modal. The "Generate" button is used to download the revenue report for the specified time frame. The system provides a dashboard containing analytics for the owner side toobserve the flow of money and the status of the apartment and units as well as the Reports. Users can also print a physical copy of the French version of this article. PinaupaPH is a cloud-based management system for apartments. The system includes a PDF generator and a landlord details modal. It also includes a good payer report and a test to delete issues. It is designed to help the apartment owner identify tenants who consistently pay their rent on time and to help them cancel tenants who fail to pay their bills on time. It can also be used as a tool for the owner to update their profile picture and for tenants to upload a new image. The outcomes address a number of subjects, including feature dependability, accuracy, and completeness. The system uses the established template created by the researchers to automatically generate an invoice document after the necessary data has been entered. The "View Concern and Issue" modal serves as a communication platform for discussing specific problems

between tenants and the apartment owner. The page also allows for numerous CCTV integrations, letting users install and view more cameras from within the system. The table shows the module of the system, required user steps, and actual results. PinaupaPH is a cloud-based apartment management system that streamlines the interaction between apartment owners and tenants. Tenants can update family members' records, including contacts or any misspelt details, and they can delete entries if they add another by accident. Users also benefit from a search feature that makes it simple to find the exact invoices they're looking for. The system allows apartment owners to make an announcement and tenants to request a deposit request. It also allows the owner to select specific months and years to view income for those periods. PinaupaPH: A Cloud-Based Apartment Management System 119. Tenants can add, edit, and delete their pets; this provides flexibility in maintaining accurate records of pet quantity. Users and owners have access to a comprehensive record of all transactions within the system. Users can choose to view the document in its entirety or delete it permanently. The owner's information is accessed and managed centrally through the system via the profile page. The system has a mean score of 3.53, which is deemed "Highly Acceptable" PinaupaPH: A Cloud-Based Apartment Management System has a mean score of 3.53, deemed "Highly Acceptable" The system can differentiate between different user types based on logins, such as tenants or apartment owners. The system provides the current status of apartments and units. The T&C page encourages integrity and contributes to a great user experience by providing clear expectations. The test filter of Announcement 5 is a useful tool for the owner to locate tenants quickly and efficiently. PinaupaPH includes a reporting mechanism for tenants to raise concerns and issues, fostering a proactive approach to problem-solving and maintenance. The system's functionality, performance, compatibility, dependability, usability, efficiency, security, maintainability, and portability were all assessed using an assessmentsheet for the project Portability 3.55 Highly Acceptable. Overall Mean 3.49 Highlyacceptable. Table 14 indicates that the developed system received an overall mean score of 3. 49 or a descriptive rating of "Highly Acceptable" PinaupaPH: A Cloud-Based Apartment Management System 135. Figure 74

The performance efficiency criteria have a mean score of 3.38. The sample consists of approximately thirty respondents, comprising professionals, tenants, and apartment owners. The system's performance is marked as "Fast," with response times of 1.23 seconds, 0.96 seconds, and 1.46 seconds. The rating implies a high degree of approval for the developed system. The test was conducted on a domain ?https://pinaupaph.com/app.php"

## **DISCUSSION**

PinaupaPH: A Cloud-Based Apartment Management System is a cloud-based apartment management system. It was developed using a variety of development tools, including Visual Studio Code, Postman API, ReactJS, TailwindCSS, and JavaScript. The system can display a list of apartment buildings and occupied or unoccupied units. It can automatically notify tenants through email if rent is not being paid. It is not easy to integrate CCTV into the system. The researchers find that CCTV Surveillance integration is not as easy as it seems.