Household Workers Profile System

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ABSTRACT: Estancia is well-known throughout the country as a commercial fishing center, so much so that it shares the name Alaska of the Philippines. It is located in the northern part of the province and is 131 kilometres (81 mi) from the provincial capital, Iloilo City. Estancia is politically subdivided into 25 barangays. According to the 2015 Census, it has a population of 48,546 people. This accounted for 2.51% of the total population of Iloilo province, or 0.64 percent of the Western Visayas region's total population.

As technology advances, so do the hectic schedules that leave little time for household chores. Aside from tasks, there are other aspects of our everyday lives that are significant. People don't have enough time to take care of their homes, so hiring a housekeeper can assist. Many families place too much emphasis on word-of-mouth referrals and basic background employment.

This project will be carried out in order to create a profiling system for all household workers in the twenty-five barangays of Estancia, Iloilo. A repository for all documents pertaining to household workers. The system can help to reduce the prevalence of scams, provide homeowners with security, and make it simple for them if a household worker causes trouble with their family. As a result, having a Household Workers Profile System is the smartest way to deal with a household worker's issues and information. The "Household Worker Profile System" a system that provides an accessible and user-friendly interface. The proposed web-based program has features such as household worker past and present job history and remarks towards their work, there will be a feature that gives reviews or ratings of a household worker's performance. The Household Workers Profile System was made to run and locally hosted inside the Barangay Hall. It was created in a web-based environment that can be accessed through a web browser. The n-tier architectural design was used as the system's framework, which can be launched in a client-server environment. The findings showed that the developed system could provide electronic profiling in real-time. The features, according to the respondents, were operational, user-friendly, and fully functional.

KEYWORDS: household worker, profile system, system, application, database, mobile

1. INTRODUCTION

Technology grows and so does the hectic schedules that there is hardly any time to do the various household activities. Apart from the chores there are other things in daily lives that are important. Hence, some gets very less time to look after their home, having household worker can help. A lot of families place too much emphasis on word-of-mouth recommendations and basic background employment checks. Certain background checks may lack crucial detail, or may not compile background information that would prove useful for the employer. There are many risks associated in keeping a household worker without totally knowing whether the person comes from a good background or not.

Related to this, through the help of technology the researchers want to develop a system that can store all household workers in Barangay Maya, Balasan, Iloilo where some of the household has household workers. A system that will serve as a repository and deals with the work remarks, performance' ratings that will be given by the employer to the household worker.

With the given personal information together with their downloaded files like barangay clearance the employer can trace whether the employee has no criminal and other kinds of records.

2. METHOD

This study is descriptive and developmental method of Research. It describes the used in development and evaluating the developed system.

Descriptive research is a study designed to depict the participants in an accurate way, describing people who takes part in the study. In this study this was applied by conducting a brief interview with the respondents and gave them ISO/IEC 25010 and McCall's questionnaire software characteristics which tested and evaluated the system and.

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Developmental research is particularly important in the field of information technology and has been defined as the systematic study of designing, developing and evaluating instructional programs, processes, and products that must meet criteria of internal consistency and effectiveness. The developed system will then analyzed and the final product is evaluated.

This research approach is well-suited for this kind of study because it focuses on the prevailing condition and assesses changes over an extended period of time. Descriptive research will be used to describes the functionality of the study which will be evaluate based on its components and criteria in terms of Accuracy, Reliability, Usability, Efficiency and User Friendly.

2.1 Participants of the study

Researchers identified two groups of users to evaluate the system. The first group was composed of three (3) experts in the field of study and the second group was composed of the end users. The second group of users was composed of a total population equivalent to forty-five (45), coming from household owners, household workers and Brgy. Secretary of Brgy. Maya, Balasan, Iloilo. Twenty-two(22) for the household workers, twenty-three (23) for the homeowners and one (1) Brgy. Secretary, as she will be the primary user of the system. This group of people was also given questionnaire based on ISO/IEC 25010 software.

2.2 Research Instrument

The first group of experts was given questionnaire based from McCall's software evaluation criteria to evaluate the system. The second group of people was also given questionnaire based on ISO/IEC 25010 software.

2.3 Validity and Reliability

Three (3) experts coming from the Institute of Information in Computer Studies which helped the researcher identify if it meets the users requirement and satisfaction, the user interface design, as well as to test the systems reliability, efficiency, and functionality of the developed system. This group of experts was given questionnaire based from McCall's software evaluation criteria to evaluate the system.

2.4 Coding and Analysis of data

Cutover phase resembles the final tasks in the System Development Life Cycle (SDLC) implementation phase, including the data conversion, testing to the new system, and users training. Compared with traditional methods, the entire process was compressed.

As a result, the new system was built, delivered, and placed in a faster operation.

After the beta testing of the system prototype by the selected jury, it will be subjected to conformity test with the Brgy. Secretary, household workers and home owners will now be the end users of the developed system. Revisions and changes were made based on the feedbacks and suggestions coming from the experts and from the end users. Minimal revisions were applied to meet the exact time frame.

After a successful testing was the deployment of the finished product to the Brgy. Secretary of the Brgy. Maya, Balasan, Iloilo. This includes the hardware requirements and network infrastructures. The user's manual was prepared by the researcher and turned over to the user as well. Series of testing was made to enable them to be familiar with the developed system.

2.5 Data Gathering Procedure

In this study, the researchers identified two groups of users to evaluate the system. The first group was composed of three (3) experts in the field of study and the second group was composed of the end users. Three (3) experts coming from the Institute of Information in Computer Studies which helped the researcher identify if it meets the users requirement and satisfaction, the user interface design, as well as to test the systems reliability, efficiency, and functionality of the developed system. This group of experts was given questionnaire based from McCall's software evaluation criteria to evaluate the system.

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The following were the evaluators during expert and user acceptance testing:

Table 1. Actual Distribution of Software Evaluators/Respondent

Evaluators	No. of Evaluators
• Household Workers	22
• Household Owners	23
• Barangay Secretary	1
User Acceptance Testing	___ 45
Expert Testing	3

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(a) Finalizing the System Product. After each beta testing of the system prototype, it was subjected to conformity test with the target users. However, the researchers allowed up to three major revisions so that the project timeframe will not be a drag by excessive revisions. After the third major revision, the final system product was presented for acceptance and became ready for deployment.

Cutover Phase

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Maintenance

The developed system lies in the availability of the Information Technology personnel who possess programming skills for the maintenance of the system. A user's manual was made for the end users reference.

3. RESULTS AND DISCUSSION

The table reflects the mean score on determining the usability of the developed Household Workers Profile System among the identified users group.

Table 2. The usability of the developed features of Household Workers Profile System.

Objective	Mean	Verbal Interpretation
Determine level of usability of the Household Workers Profile System as used by the barangay secretary, employer, and household worker.	**4.80**	Very good

The result showed that the developed features of the Household Workers Profile System have computed the mean of 4.80 interpreted as Very Good. 4.80 came up from the total results of under the Usability Characteristics.

Table 3 indicates the individual results of characteristics under the usability.

Table 3. Usability Characteristics

Usability Characteristics	Mean	Verbal Interpretation
Appropriateness recognisability	**4.65**	**Very Good**
Learnability	**4.76**	**Very Good**
Operability	**4.89**	**Very Good**
User error protection	**4.76**	**Very Good**
User interface aesthetics	**4.83**	**Very Good**
Accessibility	**4.93**	**Very Good**

Level of performance of the developed Household Workers Profile System in terms of accessibility, functionality and reliability.

The table reflects the mean score in evaluating the performance of the developed Household Workers Profile System in terms of functionality, reliability, and efficiency.

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Table 4.The performance of the developed Household Workers Profile System in terms of accessibility, functionality and Reliability to the end-users.

Objective	Mean	Verbal Interpretation
Evaluate the performance of the performance of the developed Household Workers Profile System in terms of efficiency, functionality and reliability.	4.85	Very Good

The result showed that the evaluation of the performance of the developed Household Workers Profile System in terms of functionality, reliability, and efficiency have the mean result of 4.85 which is interpreted as Very Good. Table 5 indicates the each means of the functionality, reliability and efficiency.

Table 5.On evaluating the performance of the developed Household Workers Profile System in terms of efficiency, functionality and reliability.

Areas	Mean	Verbal Interpretation
Reliability	4.80	
Functionality	4.89	Very Good
Efficiency	4.87	
Overall Mean	4.85	

On the evaluation of the expert with regards to the developed system based on McCall's Software Quality Model

The following table presents the evaluation of the experts to the developed system. The table reflects the mean score rated by the experts:

Table 5. The evaluation of the expert with regard to the developed system

	Mean	Verbal Interpretation
The evaluation of the Experts based on McCalls Quality Model	4.64	Very Good

The rating of the experts with regards to the Household Workers Profile System is 4.64 has the computed mean and interpreted as **Very Good**. These findings revealed that the System is equipped with the features needed to provide information needed by the one barangay secretary,household workers that are currently employed in Barangay Maya and homeowners. It also implied that the degree in which using using the features of Household Workers Profile System can be used by specified users to achieve specified goals with effectiveness, efficiency, freedom from risk and satisfaction in a specified context. Features were easy to operate and controlled, wherein reports generated by the system such as profile viewing, retrieved and can be printed in real-time.

The end-users also believed that through these systems features would help lessen the possibilities of different scams and scammers in such barangay.

CONCLUSION

The present investigation has the following findings:

The result of the developed system is 4.89 which is interpreted as Very Good. The findings implied that the degree in which the functions facilitate had accomplished the specified tasks and objectives of the developed system of the specified users in profiling the household workers at Brgy. Maya, Balasan, Iloilo.

The usability of the developed features of Household Workers Profile System has a computed mean of 4.80 which is interpreted as Very Good. The findings implied that the degree in which using the features of Household Workers Profile System can be used by specified users to achieve specified goals with effectiveness, efficiency, freedom from risk and satisfaction in a specified context of use.

Features are easy to operate, it can also generate reports for external purposes, whether the household workers needed it or the homeowners for reference.

The performance of the developed system in terms of functionality, reliability and efficiency have the computed mean of4.85 interpreted as Very good. This simply implied that the degree in which the response and processing time throughout rates of the system, in performing its functions, meet the requirements by using the developed Household Worker Profile System is Very good.

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The end-users also believed that through these systems features would help lessen the possibilities of different scams and scammers in such barangay.

The developed Household Worker Profile System based on the result and findings of the surveys, electronic profiling were accessible for users, it is user-friendly and fully functional.

The usability of the feature of the developed system is operational with effectiveness and efficiency was appropriate for the need of the users. The specified goals are easy to operate and control in which the design interface enables the pleasing and satisfying interaction for the user.The performance of the developed system and the processing time throughout rates meet the end-users requirements.

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