

G-App: Guidance Application for the General Management of Student Information and Services

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Abstract: *Guidance services play a significant role in student's lives as they encourage students' academic, social, emotional, and personal development. This study aimed to develop an effective management of students' information and services in the Guidance office that supports the student's academic, social, emotional, and personal development. The study made use of the Rapid Application Development process and a survey questionnaire to evaluate the perceived performance of the system. The findings of the study revealed that it has satisfied the features of the system in managing the student information and services in the Guidance office and was found to be functional, usable, and secured and likewise lessened the burden of the Guidance Counsellor in managing the student record.*

Keywords: *Guidance management system, application development, Guidance Student Services*

INTRODUCTION

Guidance services play a significant role in the lives of the students. It encourages students' academic, social, emotional, and personal development where all of this information is kept in the Guidance office. Diez et al. (2010)^[1] concluded in their study that guidance services are in a "dynamic situation to be more cost-effective and to adapt to a more varied student population". With this, the Guidance and Counseling Office is responsible for managing the student information such as personal information, seminars/training, the result of the entrance exam, student activities in the university, entrance application, and also services like academic counseling, referral, request for Good Moral Character (GMC), parent's/guardian's appointment and group appointment. Currently, the Guidance office at ISU Cagayan uses the manual method to manage the said student information and services. With thousands of student records to manage and services to be provided, this kind of setup is tedious and consumes so much time and effort. Due to the manual process of managing the student information and services, problems have been encountered like misplaced files of students, slow transactions, and inaccuracy in updating, retrieving, and recording the student information.

Pertinent to the above, it is imperative to address the concern of the Guidance office and that an application will be developed in order to improve its services in managing the student information and services to be provided to the students. Grduate.com enumerated a list of benefits of computerization in the development of an application to specifically address the needs of an organization such as speed, accuracy, efficiency, storage capacity, management information for decision-making, reduction in paperwork, and reduced cost and manpower requirement. With all the benefits that could be derived with the help of the application, managing the student information and services in the Guidance office will be done faster, convenient in storing, updating, retrieving, and searching records of the student, and will likewise lessen the burden of the Guidance counselor in managing the student record, hence, this study. The research generally aimed to enhance the effective management of students' information and services in the Guidance Office for quality education.

Specifically, it aimed to:

Develop a G-App: Guidance Application for the General Management of Student Information and Services with the following features: Personal Information; Seminars / Trainings; Student Activities; Result of Entrance Exam; Student Entrance Application in the University; Academic Counseling; Request for Good Moral Character (GMC); and Parent's/Guardian Appointment;

Determine the effectiveness of the G-App as perceived by the system users in terms of usability, functional suitability, and security of the system.

The study utilized the Developmental research as well as the Descriptive method of research. Developmental research as it involves the analysis, design, and development of the systems as well as testing

and evaluation of the same. On the other hand, it is Descriptive research as it involves gathering data on the effectiveness of the G-App and analyzing and describing such based on the data gathered.

Fig.1 presents the agile application development methodology that was adopted in the development of the application. A survey questionnaire was used to gather data on the perceived usability, functional suitability, and security of the system. The weighted mean was used as a statistical tool for data analysis.



Fig. 1: Gapp Development Methodology

Agile method follows an iterative approach to the delivery of software as it builds software components incrementally over time, rather than trying to deliver it all at once. Its a development tool that has minimal requirements gathering, flexibility to make changes at any stage, reduced dependence on thorough documentation, and quality output after each iteration.

2. RESULT AND DISCUSSION

The results presented established the potential for the effective management of students' information and services in the Guidance Office for quality education.

Features of G-App:

Fig. 2 shows the student information. It allows for the general management of the student's personal information.

Fig. 2: Personal Information

Fig. 3 shows the training and seminars attended by the students. It allows for the general management of the students' training and seminars attended.

Fig. 3: Seminars/Trainings Attended

Fig. 4 shows the activities attended by the students. It allows for the general management of the students' activities undertaken/attended.

Fig. 4: Student Activities

Fig. 5 shows the college entrance exam of the students. It allows for the general management of the results of the college entrance exam.

Fig. 5: Result of Entrance Exam

Fig. 6 shows the academic counseling services attended by the guidance counselor. It allows for the general management of the counseling services attended.

Fig. 6: Academic Counseling

Fig. 7 shows the request for good moral character attended by the guidance counselor. It allows for the general management of the request of good moral character attended.

Fig. 7: Request for Good Moral Character (GMC)

Fig. 8 shows the parent/guardian appointments attended by the guidance counselor. It allows for the general management of the counseling attended by the parent/guardian of the students.

Fig. 8: Parent's/Guardian Appointment

Fig. 9 shows the courses enrolled by the students. It allows for the general management of courses enrolled by the students.

Fig. 9: Course Enrolled

Fig. 10 shows the exam results of the students who took the college entrance examination. It allows for the general management of college examination results.

Figure 9. Entrance Exam Result

Fig. 11 shows the Good Moral Requested by the students. It allows for the general management of Good Moral Character of students.

Fig. 11. Good Moral

Fig. 12 shows the Guardian Information of the student. This allows for the general management of guardian information.



Fig.12: Guardian Information

Fig. 13 shows the list of school activities attended by the students. It allows for the general management of student activities.



Fig. 13: List of School Activities

Fig. 14 shows the List of Parent/Guardian Appointments. It allows for the display of the list of parent/guardian appointments conducted for counseling among the students.



Fig. 14: List of Parents/Guardian Appointment

Fig. 15 shows the List of Seminars/Training attended by the students. It shows the seminars/trainings attended by the students based on the date selected and ready for printing.

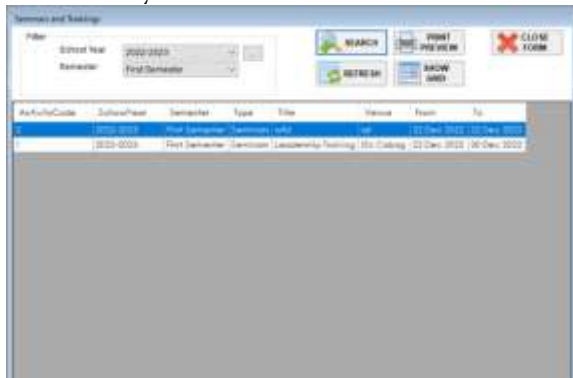


Fig. 15: Seminars/Trainings

Fig. 15 shows the Student Information that allows searching of the name of the student and it is ready for printing.

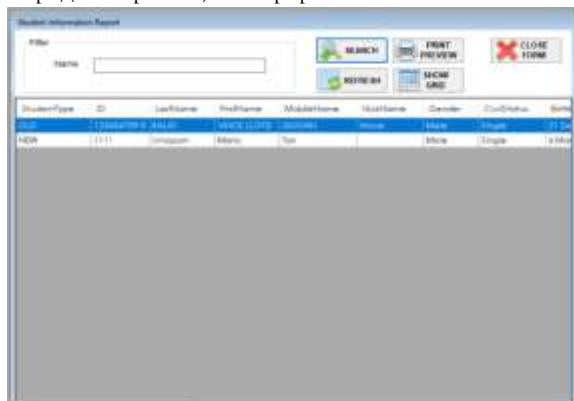


Fig. 15: Student Information

Effectiveness of the G-App

Table 1: Evaluation of the System in Terms of Functional Suitability

Indicators	IT Experts		Guidance Counselors		Overall Mean	
	X	DI	X	DI	X	DI
The system performs its functions efficiently even if it is moved to another environment.	4.93	VHE	4.90	VHE	4.92	VHE
The system can be installed easily.	4.93	VHE	4.90	VHE	4.92	VHE
The system complies with the portability standards.	4.93	VHE	4.90	VHE	4.92	VHE
Category Mean	4.93	VHE	4.90	VHE	4.92	VHE

Table 1 presents the result of the platform's functional suitability. Generally, the IT experts and Guidance Counselors evaluated the platform as compliant to a Very High Extent with an overall weighted mean of 4.93 and 4.90, respectively. Cechich et al. 2007^[1] found that functionality evaluation improves the whole process of Commercial Off-The-Shelf development and is more cost-effective.

Table 2: Evaluation of the System in Terms of Usability

Indicators	IT Experts		Guidance Counselors		Overall Mean	
	X	DI	X	DI	X	DI
The system is easy to use.	4.93	VHE	4.90	VHE	4.92	VHE
The system enables the user to learn how to use it.	4.86	VHE	4.80	VHE	4.83	VHE
The system has an attractive interface.	4.86	VHE	4.80	VHE	4.83	VHE
The system is easy to understand.	4.93	VHE	4.90	VHE	4.92	VHE
The system is fit to be used by both ICT coordinator and database administrator assigned by the Dep. Ed. schools.	4.93	VHE	4.90	VHE	4.92	VHE
Category Mean	4.90	VHE	4.86	VHE	4.88	VHE

Table 2 presents the result of the platform's usability. It could be gleaned from the table that the IT experts and the Guidance Counselors evaluated the platform as compliant to a Very High Extent with an overall

weighted mean of 4.90 and 4.86, respectively. Usability was also used in the study of Nayebi et al. (2012)^[2] which explored the usability methods to evaluate mobile applications and methods to evaluate it.

Table 3. Evaluation on the System in Terms of Security

Indicators	IT Experts		Guidance Counselors		Overall Mean	
	X	DI	X	DI	X	DI
The system has its security level access with pre-determined action.	4.93	VHE	4.90	VHE	4.92	VHE
The data is secured as well as its associated records.	4.93	VHE	4.90	VHE	4.92	VHE
Access to top-level management data is topped with necessary security credentials.	4.93	VHE	4.60	VHE	4.77	VHE
Category Mean	4.93	VHE	4.80	VHE	4.87	VHE

Table 3 displays the result of the platform's security. Generally, the IT experts and Guidance Counselors evaluated the platform as compliant to a Very High Extent with an overall weighted mean of 4.93 and 4.80, respectively. Hunstad et al. (2004)^[3] describe the set of security functions needed in systems and state that the ability to assess IT security ability is vital.

3. CONCLUSION

Based on the findings of the study, the following conclusions were drawn: The development of the G-App satisfied all the features needed by the guidance counselor in the general management of student information from personal information, student entrance examination results, guidance counseling attended and issued good moral of the students providing an easy way of managing the students record; The developed G-App was found to be usable, functional, and secured. This is positive information that such systems are helpful in an organization.

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