**REGISTRAR GRADE RECORD SYSTEM**

**Visual Studio**

Presented to Faculty of

**STI College-Malolos**

City of Malolos, Bulacan

In Partial fulfillment of

**Bachelor of Science in Computer Engineering**

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1. **INTRODUCTION**

As human beings, we always strive for a more convenient way of living. Further innovating technological advancements in order to ensure and to promote a more productive and sustainable future. Just like notable scientists, engineers, and researchers, the engineering students of STI Malolos at the full extent of our abilities and efforts, are showing our competitiveness in our chosen field to further push our boundaries to the limit and create a more suitable kind of environment. As students, it is our responsibility to make our knowledge and skills useful in creating functional tools that will help schools do their tasks in a much more productive and convenient way. Our main goal is to give the institution an easier way of storing, sorting and managing files and student records to ensure a preeminent system of data management. In this way, arduous tasks such as enrolments and releasing of student academic records will require a much lesser effort and can be done within a shorter period of time.

Nowadays one of the most serious problems that may encounter of the institution is about security. Without any technological tools to help, ensuring confidentiality in student profiles may prove a difficult task. But with the use of our advancement in the field of programming, our concerns about security will be eliminated. Our tools are also equipped with dynamic databases that will allow the program to adapt to the growing number of enrolling students as year progresses, and a friendly user interface that will allow any user to easily understand and use the software. Thus, not even a great number of students will cause the registrar staffs difficulties in doing their jobs.

In these days, schools in advanced countries are already using technologies for a more convenient working environment. As a way of showing out competitiveness, we are already making our way in improving our tools in highest quality possible that will benefit those institutions that will use it.

21st century is already regarded as a computer age. It is already a necessity for any institution to utilize and harness the benefits of technology. Equipping schools with our innovative tools that will give its enrolment and data management system a huge advantage in terms of accuracy and productivity.

**1.1. BACKGROUND OF THE PROBLEM**

For many centuries since the establishment of the modern education, it’s been inconceivable for us to attain the solution for the problem of poor student record management in many schools. It is a shame that the government and schools can’t control the high enrolment and the tendency of a complex and intricate problem of recording and guiding those students who enrolled in different levels and sections.

There is also a problem of focusing in many students when there is a lesser teachers and staff to record all of them. It can also become a complicated situation where there is a possibility of errors in grade system where the passing have a tendency to fail and the failing students can become passed and has a chance to graduate which is not based in their performance and their actual capabilities. This is why we aim to develop a highly beneficial project that will effortlessly manipulate student record in a more technological and timely manner.

**1.2. OVERVIEW OF THE CURRENT STATE OF TECHNOLOGY**

Since its establishment, Hangga Elementary School is still using the traditional way of recording student data. Writing student grades manually by hand is a very time consuming and outdated way of keeping records. Causing the teachers to lose a lot of their precious time from writing records on form. Furthermore, insuring the confidentiality of student records without proper storage and security is a risky job. The records and grades can be forgotten, lost or it can be stolen that is why that the students and their parents can lose their trust in the school.

Nowadays, our technology is constantly improving, and we must cope up with these changes. Hangga Elementary School could have a more efficient and effective medium of safe keeping record of grades and student data using our system.

Our registrar grade record system can provide a high-quality service, a more systematic and a more productive method of storing data compared to a traditional one.

To ensure the full efficiency of our product, we will continuously provide functionality and security updates to Hangga Elementary School. In doing so, we can ensure that our system will be at its full potential. Based on the above information, it would take a certain amount of time and focus in order to develop the software and become a useful resolution for the school.

**1.3. SIGNIFICANCE OF THE STUDY**

This study may help the school registrar make registration easier by recording, storing, and computing grades in a more organized and systematic manner, even with large number of students in each section. Our registrar system is a modern application that cam prove that our technology has no limits and has been improving every day that our human minds can’t fathom. We made this system for the school and for hardworking teachers who record and teach their beloved students. This study will give benefit to the following:

* Students

Our system can benefit the students in a way that they can request a copy of their grades, if not instantly, in a short period of time.

* Teachers

The teachers can submit and record their students grades faster and easier using our registrar system and will not become hinder to teach their students effectively.

* School

School with our advanced registration system may become popular to many because it takes less time and proven beneficial that will help a lot of people including the school. The school that use our system may be known to people that they value time and energy and the school will be recommended and appreciated for it.

* Principal

The principal will have a access of all the grades. The principal can monitor all the updates of the system. The principal will have the authority to all data.

**1.3.1. PROJECT RATIONALE**

People are using Technology to do their job faster. This includes the Schools that need a System to lessen their work. Most students having a problem with getting their grade records from the school. It takes time to find their records if they don't have a System. If their records cannot be found, it will result in the delay of their enrollments or it can be worse, it may be held. Some problems are getting a request of grades that take a long time to process. The Schools need a System that will make their work faster and easier. They need a program that will get the student grades in an instant.

This problem for Schools and students will be changed, the record of the grades can be input through the system and if they need to modify an error in the record, it can be easily changed through the system. There will be a backup of the records to secure the data.

Students can now request their grades instantly. Teachers can view their students past and present grades by using the system. It will minimize the jobs of the teachers. The Faculty and Admin will get a full access to the system. They are in charge of putting the grades, adding students, showing the students. The system has an ability to backup files to ensure that the data is secured. This will result in a safe system that can provide of secured record of grades.

**2. PROJECT DESCRIPTION**

**2.1. PROBLEM STATEMENT**

How to make the best possible registration system using our modern technology that will make schools provide faster registration form and also make grading of students error free that is properly secured in our program.

**2.2. PROPOSED RESEARCH PROJECT**

**2.2.1. GENERAL OBJECTIVES**

To create a Grade Record System that will help Hangga Elementary School's work to be lessened. Our motive to do this study is to create a system that will help our client to have a better solution to their problem in keeping the student records, which will help them record the grades easily, modify and show the grades to the students easily.

**2.2.2. SPECIFIC OBJECTIVES**

\* To create a system that can store the grade records of the student easily.

\* To create a system that can secure the student's grade from being lost.

\* To create a system that lessens the work of the teachers.

**2.2.3. SCOPE AND LIMITATIONS**

**Scope**

* Admission
* Student Entry

The school have an ability to add new students, edit, remove, delete, select, update and even to search all the basic information of the students in this system.

* Assessment

In this module, you will able to search the list of the student’s required academic subjects for a grade level.

* Subjects Information

In this module, the user will able to add, edit, delete and search all the academic subject of a grade level.

* + Grades

In this module, the user will able to export the grades in excel and also able to view and print the grades of the students.

* Administrator

This resolves the following reports such as:

* Account

This module can change, add, and delete login credentials to the system.

* + Security

This will allow you to logged in and to logged out.

* Student Master List

In this module, the user can view all the students listed and can be marked or filtered as enrolled, unenrolled, transferred, dropped and graduated.

**Limitation**

* The system does not allow students to access the system.
* The emailed files like files of grades, students and instructors are not accessible in this system.

**2.2.4 METHODOLOGY OF THE STUDY**

The Spiral Model

The spiral model is an evolutionary Software process model that couples the iterative nature of prototyping with the controlled and systematic aspects of the waterfall model.

It has two distinguishing features:

a. A cyclic approach for incrementally growing a system’s degree of definition and implementation while decreasing its degree of risk.

b. A set of anchor point milestones for ensuring stakeholder commitment to feasible and mutually satisfactory solutions.

Using the spiral model, the Software is developed in a series of evolutionary releases.

During early stages, the release might be a paper model or prototype.

During later iterations, increasingly more complete versions of the engineered system are produced.

A spiral model is divided into a set of framework activities divided by the Software engineering team. As this evolutionary process begins, the Software team performs activities that are implied by a circuit around the spiral in a clockwise direction, beginning at the center.

A risk is considered as each revolution is made.

Anchor-point milestones – a combination of work products and conditions that are attained along the path of the spiral- are noted for each evolutionary pass.

The first circuit around the spiral might result in the development of a product specification; subsequent passes around the spiral might be used to develop a prototype and then progressively more sophisticated versions of the Software.

Each pass through the planning region results in adjustments to the project plan. Cost and schedule are adjusted based on feedback derived from the customer after delivery.

Unlike other process models that end when Software is delivered, the spiral model can be adapted to apply throughout the life of the Software.

• School communication task

• Survey – The proponent conducted a survey of the school which an electronic and centralized grade record system is needed.

• Interview – As the result of the survey, the proponent proceed to conduct an interview with the class adviser and the school principal to establish effective communication between the team and the school.

• The planning task – To identify the goals or objectives to be achieved, formulates a strategy to achieve them, arranges or creates the means required, and implements, directs and monitors all steps in their proper sequence.

1. Data Planning –After the interview, the proponent evaluate the data and requirements given by the school. The team then proceed with the preparation necessary for the system which is planned to improve efficiency in the student data collection and storing.

• The risk analysis task – to evaluate both technical and management risks.  
*The proponent examined the system and determined all the possible problems, risks and faults that may be faced while developing the system.*

1. Error Brain Storming – the team will analyze the circumstances that may follow during the development of the system the error either its technical or human error.

• The Engineering task – to build one or more statements of the request. The team improves the system established by the step by step phases.

1. Data Application – the proponent applied what was prepared during the data planning and risk analysis. The team started developing the system, adding the planned features and capabilities of the system.

2. Interface design – the proponent designed and arranged the user interface of the system to which is efficient to the work flow while maintaining ease of use.

• The construction and release task – to build, test, mount and deliver user support.

1. System Testing - The team test and verified the system to look for probable errors left in the system.

2. Release and Installation - Once the team confirms that the system has free from error and ready for release, they will now issue a final build of the system to the subject school and install it.

• The School evaluation task – based on the evaluation of the software representation created during the engineering stage and applied during the install stage.

*The team gave the proposed system to Hangga Elementary School in order to further determine their comments and ideas.*

1. Technical Support - the proponent will provide contact information to the school for any technical concerns.

The evolutionary process begins at the center position and moves in a clockwise direction. Each traversal of the spiral typically results in a deliverable. For example, the first and second spiral traversals may result in the production of a product specification and a prototype, respectively. Subsequent traversals may then produce more sophisticated versions of the software.

**3. PROJECT MANAGEMENT**

**3.1 CALENDAR OF ACTIVITIES**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** | **Sunday** |
| **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** |
| **8.** | **9.** | **10.** | **11.** | **12.** | **13.** | **14.** |
| **15.** | **16.** | **17.** | **18.** | **19.** | **20.** | **21.** |
| **22.** | **23.** | **24.** | **25.** | **26.** | **27.** | **28.** |
| **29.** | **30.** | **31.** |  |  |  |  |

**December 2017**

**January 2018**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** | **Sunday** |
|  |  |  | **1.** | **2.** | **3.** | **4.** |
| **5.** | **6.** | **7.** | **8.** | **9.** | **10.** | **11.** |
| **12.** | **13.** | **14.** | **15.** | **16.** | **17.** | **18.** |
| **19.** | **20.** | **21.** | **22.** | **23.** | **24.** | **25.** |
| **26.** | **27.** | **28.** | **29.** | **30.** |  |  |

**3.1.1 DESCRIPTION OF ACTIVITIES**

**3.1.2 GANTT CHART OF ACTIVITIES**

*Gantt chart is a graphical representation of the duration of task against the progression of Time. It is a useful tool for planning and scheduling projects. Proponents used Gantt chart in Order to them to monitor allotted time for the project. It consist of bars scheduled from Weeks of August and September.*

**3.2 RESOURCES**

**3.2.1 HARDWARE**

Operating System: Windows 10 HOME 64-Bit

Processor: Intel® Core® CPU i3 7100U @2.8GHz (4 CPUs)

Memory: 4.0 GB RAM

**3.2.2 SOFTWARE**

My SQL Community,

Microsoft Visual Studio 2017

**4. APPENDIX**

**4.1 REFERENCES**

**“**Codes and reference about Visual Basics .NET” in https://msdn.microsoft.com

“Related Codes” in http://stackoverflow.com/

“MySQL Reference and codes” in https://dev.mysql.com/doc/

**4.2 RESOURCE PERSON/S**

**4.3 PERSONAL TECHNICAL VITAE**