

# [Technologies are important and helpful in everyone’s life essay](https://assignbuster.com/technologies-are-important-and-helpful-in-everyones-life-essay/)

Computers help people to make such things or undertakings easy and faster. Technology has a systematic and organized manner of maintaining informations records. calculating Numberss. carry throughing a batch of minutess and studies. A system of a library is made to hold a fast procedure of minutess for seeking book rubrics. borrowing books. returning books. calculating punishments and bring forthing an accurate study. Aguilar Catholic School. High school section is located at Poblacion Aguilar. Pangasinan.

It is a spiritual school and the faith of all the pupils and staffs is Roman Catholic and their library is unfastened for them. It has a aggregation of books. magazines. diaries. lexicons. encyclopaedias and other reading stuffs. The library is still utilizing a card catalogues in seeking books and the bibliothec is still utilizing manual dealing for borrowing. returning and bring forthing studies. Using a manual procedure is a difficult work and because of it the bibliothec is holding a job to function each pupils and modules who wish to utilize the library. Aguilar Catholic School is utilizing a record book to track borrowed books from the library.

The bibliothec will compose down the book being borrowed. borrower. book information. day of the month borrowed and the day of the month returned. A punishment is given to the borrower if he/she loses the book ; the due day of the month of returning of the book has ended. The punishment for losing a book depends on the sum of the book and if the borrower returned the book after its due day of the month the punishment is 10 pesos. The advocate observed a batch of mistakes happening in their manual system. The bibliothec is holding trouble working in the library and the borrowers are holding trouble in seeking the book.

General Objective The general aim of this undertaking is to develop and implement a LAN base library system with barcode for Aguilar Catholic School to better their procedures and operations that will do minutess and the coevals of studies accurate. fast and easy. Specific Objectives The specific aims of the undertaking are the undermentioned: \* To plan a paradigm that will be easy to voyage interface \* To develop a library system that will promote pupils to utilize the library as the chief beginning of information.

\* To develop a system that will be secured by using user ID and watchword so that authorised individuals can merely entree the of import undertakings. \* To develop a system that will do usage of barcode scanner. therefore take the make fulling up of different signifiers. for more quickly borrowing and returning minutess. \* To develop a system that will do cataloguing simpler. \* To develop a system that will do searching of the available books and other mention stuffs in the library easy for the pupils. \* To do a system that will do stock list of books and other mention stuffs cut down clip consuming.

\* To develop a system that will bring forth accurate one-year and quarterly statistical studies fast. \* To prove and measure the acceptableness of the system in footings of functionality. dependability. serviceability and so on by garnering feedback from prospective users and proficient experts. \* Scope of the Project Since Aguilar Catholic School doesn’t have any computerized system. the range of the undertaking will include the system will do usage of the barcode engineering so the pupils and employees will merely hold to utilize their Idaho when doing a dealing. which is more convenient.

The undertaking include ; the undermentioned characteristics: Easy to voyage Interface ; capableness to seek for the available rubric. writer and topic of the book ; calculate the mulct of the book when it is delinquent ; Inventory of books and other mention stuffs ; and the coevals of studies that they are doing which are one-year and quarterly statistical studies. The undertaking will include pupil. employee’s alumni leger. which will name all the mention stuffs that they borrowed. The study for the list of unreturned books will besides be included in the undertaking.

For the pupils to seek about the handiness of books and other mention stuffs inside the library the research workers will include a LAN-based Public Access Catalog. All information covered within the system is in conformity with the bing book mentions within the library of the school. The system will merely be implemented in the secondary library of Aguilar Catholic School. The system is LAN-based ; it can merely be accessed inside the campus. \* List of Deliverables \* User Manual

It contains guide and associated images in how plan should look like papers intended to give aid to people utilizing a peculiar system. the advocates will supply a brochure that can steer them in how the system works. \* Training Plan Training Plan is to specify the schemes. undertakings. and methods that will be used to run into the preparation demands. the advocates will develop the users and explicate to them how the system works. The advocates will besides detect and garner informations while the users are utilizing the new system. \* Deployment Plan.

Deployment Plan defines how package will be implemented into the organisation that will entree deployed applications. the advocates will do certain that the system will work decently and it will fulfill the company before allowing them to utilize it. In the deployment program the advocates will hold to utilize SQL waiter for the database. overseas telegrams for connexion. barcode scanner. pressman and computing machines for the LAN-based Public Access Catalog and for the workstations of the librarian. \* Maintenance Plan It is program that defines rate and range of disciplinary and preventive care for applications or package.

Corrective care is a reactive alteration of a package merchandise performed after bringing to rectify discovered jobs. Maintenance Plans are besides sometimes known as Standard Operating Procedures. The processs the advocates will be making are Recovery Plan and Backup. Recovery plans contain elaborate instructions for returning services to a working province. Backup program or the procedure of endorsing up refers to doing transcripts of informations so that these extra transcripts may be used to convey back the original after a information loss event that may be due to failure or accidentally deleted or corrupted file. Chapter II.

Analysis OF EXISTING SYSTEM Review of Existing System 0 Manual Library System Of Aguilar Catholic School Borrower Borrower Borrowers Info Book Borrowed Library card Library card Book Info Returned Book Fine info Librarian Newly acquired Books Librarian Penalty Info Reports Figure 1 Context Diagram of Existing System Figure 1 shows the general flow of the bing system within the Library of Roosevelt College. It includes different entities viz. : Borrower and Librarian. An besides It includes different inputs and end products. Input are Borrowers info. library card. book info returned book. freshly acquired books.

End products are borrowed book. library card mulct info. punishment info. studies. Figure 2. Diagram 0 of Existing System Figure 2 show the item informations procedure of bing system. First dealing begins with the borrower. Strengths \* Manual system can still work without electricity. \* A lesser sum of electrical equipment \* Users are more familiar with the manual system Weaknesses \* time-consuming minutess \* Inaccurate information of pupils and books \* Space occupied by the card catalog cabinet and steel shortss. Opportunities \* Increase figure of enrollees \* Increase figure that utilised library.

\* Make faster and accurate dealing utilizing computerized system Threats \* Users are non familiar with the computerized system \* Computerized system can non work without electricity \* Increase in outgos. particularly in electricity \* Files can be corrupted by malware and viruses REVIEW OF RELATED SYSTEMS The UE Library System is a web of 11 libraries. with the Main Library in the Manila Campus as the biggest. There are separate libraries for the Graduate School. CPA Review School. the Colleges of Law. Dentistry and Engineering. the Laboratory Schools and the Archives. every bit good as particular suites for audiovisual services.

There are two libraries in the Caloocan campus. the chief library which is the Benjamin G. Chua Jr. Library and one for the College of Engineering. The Main Library in Manila is the hub of the full system of libraries in the campus. It is the largest among the libraries in the system. It has subdivisions for Circulation. Reserve. CCSS Library. Acquisitions. Cataloging. Reference. Filipiniana. and Periodicals. which are housed on the 2nd. 3rd and 4th floors of the POD-CIT Building. Bibliographic entree to the library aggregations is through the Online Public Access Catalog ( OPAC ) terminuss available in all the libraries.

An Online Public Access Catalog or OPAC is an on-line database of stuffs held by a library or group of libraries. Users search a library catalog chiefly to turn up books and other stuff physically located at a library. Users can seek by inputting keywords and filter by capable. rubric. writer and sometimes publishing house and ISBN figure. Extra filter may be harmonizing to the type of stuff. for illustration if it is a book. diary. magazine. thesis. newspaper. etc. Another filter is by location. if the library system is composed of several libraries like in University of the East.

In the proposed system. the advocates will follow the characteristics similar to OPAC. but it will merely be LAN-based. The student’s employees and alumnas may seek for the information and handiness of the book harmonizing to the topic. rubric writer. etc. and may take to filtrate it by choosing the type of resource stuff. They may see if the book is on-shelf or non. Students and other borrowers may besides utilize it for easy mention in doing bibliography for their researches. University of San Carlos has a computerized library system.

The chief map of their library system is to rectify information. Fast dealing and procedure in borrowing library stuffs. the services responsive to the demands of all university sectors relative course of study and research. They are utilizing barcode engineering and swiping I. D in such an easy manner to borrow and return book. Their library system has an easy to voyage characteristic and supply accurate studies such as user statistical study. stock list of book. list of book borrowed. punishment for the month. twelvemonth. list of book per subdivision etc.

In the proposed system. the advocates will follow the characteristics similar to barcode engineering and easy to voyage interface and can give accurate studies and extinguishing human mistakes. Operational Definition of Footings Access Code \* A sequence of letters or Numberss that has to be read in to the allowed person to entree to something such a edifice or telephone notebook. Accession Number \* Usually car figure. it is a figure assigned by the main librarian to single books they have in the library. Barcode Reader \* It is an input device used to capture and read information contained in a saloon codification.

Cataloguing

\* Is the procedure of fixing a catalog. or of fixing bibliographic records that will go entries in a catalog. Circulation \* It engages dealing related to the circulation of periodical. books etc. and book cheque in and cheques out. Computer Network \* It is an interconnectedness of group of computing machines. Context Diagram \* It illustrates the input and end product between the systems. Database \* Is an application that manages informations and allows past storage and retrieval of informations Data flow diagram \* A process-modeling tool that depicts the flow of informations through a system and the work or processing performed by the specific system.

Keyword Searching \* Allows you to recover information in a database by looking for the word or combination of words. Keywords can be used in general or specific. such as rubric or $ capable Library Card \* It serves as a base on balls to the usage of the library and its resources Librarian \* Is a individual who assists and helps the users in utilizing the library services and manages all the library resources. Library \* topographic point where all books. newspaper and other reading stuffs were placed and a topographic point where pupils can efficaciously analyze and garner information they need.

Library card \* A paper card that contains student’s information together with his/ her image that serves as their base on balls to borrow a book in the library. Library System \* Is a library that comprises of the interconnected. computerized parts such as catalog and circulates that works together to efficaciously function the users. Manual System \* Processing used sum of dealing without the usage of computing machines Shelf \* It is a piece of furniture used to hive away books and other stuff which is utilizing in a research Student Number \* It is a alone designation of each pupil in school.

SWOT \* Is a tool for scrutinizing an organisation and its environment. It is the first phase of planning and helps sellers to concentrate on cardinal issues. SWOT stands for strength. failings. chances. and menaces. Strength and failings are internal factor. Opportunities and menaces are external factor. Chapter III SOFTWARE DEVELOPMENT METHODOLOGY Requirements specification Software Design & A ; coding Integration Testing Deployment Maintenance Figure Modified Waterfall Model The advocates take to utilize the modified waterfall theoretical account for the development of the package because it is simple and easy to follow.

Another ground is that modified waterfall theoretical account is suited when the specification and demands are clearly stated and inactive and the undertaking is smaller in size. Since Library systems have the same demand s as those of any other library systems. it is the ideal theoretical account to utilize. Modified waterfall theoretical account besides has advantage to travel back to old phase if there are errors done in any stage. Requirements Specification One of the most of import undertakings in the development of is garnering and specifying the demands for the undertaking.

Software demands specification means that research workers should hold a basic apprehension of what is traveling to be developed. The advocates conducted several interviews with the company to understand and place the jobs with their bing system and to stipulate what features they want the proposed system to hold. The research workers besides did surveies about the related systems in order to cognize the existent minutess and to hold an thought on how to plan the proposed system. Software design & A ; coding Determines the system’s model to run into the specified demands.

The design defines the major constituents and the interaction of those constituents. but the design does non specify the construction of each constituent. The advocates will make major coding in this stage. The advocates will split the system into subsystems so that cryptography will be done by little parts and will subsequently be integrated as a whole system. Integration Is the conveying together of the constituent subsystems into one system and guaranting that the subsystems function together as a system. It is besides the procedure of associating together different calculating systems and package applications physically or functionally.

The advocates in this stage will now link together the subsystems into one system. Testing Determines whether the package meets the specified demands and finds any mistakes present in the codification before deploying it. The advocates will prove wither the system is working decently as one system and to observe mistakes before showing it to Aguilar Catholic School. Deployment This is the stage of the undertaking where the developed package will be installed. certification will be delivered. and client preparation will happen. In this stage. the advocates will now deploy the equipment and the package in the library.

They will hold to link the workstation of librarian and LAN base public entree catalogue by the usage of overseas telegrams. Care After the undertaking is deployed. unexpected events can go on. This is why the advocates will go on care and support as portion of the package development procedure. This support will go an evolving procedure and is indispensable in doing certain that the package continues to execute as expected. Figure 4. System Framework of Proposed System Figure 4 shows the inside informations of the system. all its input and end products which will be portion of the system processes. Figure 5.

Context Diagram of Proposed System Figure 6. Diagram 0 of Proposed System Testing and Evaluation Procedure After developing the system. the following measure is to prove and measure its acceptableness. This subdivision discusses how testing and rating is done. Evaluation Instrument The followers were standards of the rating instrument which will function as the footing of the acceptable degree of the system. Numeric Rating| Range| Descriptive Equivalent| 5| 4. 51 – 5. 00| Highly Acceptable| 4| 3. 51 – 4. 50| Acceptable| 3| 2. 51 – 3. 50| Reasonably Acceptable| 2| 1. 51 – 2. 50| Slightly Acceptable| 1| 1. 00 – 1.

50| Not Acceptable| Content It will prove the truth of the proposed paradigm every bit good as its up to day of the month contents. Functionality It includes comprehensively the easiness from concerns or jobs in operation. proviso for comfort and convenience and easy to understand by the terminal – users. Reliability In conformity to want consequence. truth of public presentation. the system should be able to give the coveted consequence to the possible end-user of the system. Availability The system will be able to execute operations harmonizing to the specifications. proviso for security demands and holding all the required by the system.

Maintainability It includes the testability of the system. easiness of being maintained. proviso for diagnostic tools and process. and proviso sweetening. Statistical Treatment of Data In this subdivision the consequences gathered from proving and rating was being interpreted utilizing appropriate statistical tools. The advocates will put a standard that specifically address to the terminal users and proficient experts. 1 means Not Acceptable ; 2 agencies Slightly Acceptable ; 3 is for Moderately Acceptable ; 4 is for Acceptable ; and 5 Highly Acceptable.

The complete testing and rating signifiers will be collected for construing its consequence. To calculate the mean. Mean ( M ) = F ( x1 + x2 + xn ) / N Where F = Frequency of figure of clip that the given figure ( x ) was chosen by the respondents as evaluation for a given standard x1. x2. xn = represent any of the numerical evaluation 1. 2. 3. 4. 5. To calculate the leaden mean. WM = ? F ( x1 + x2 + xn ) / N Where? F ( x1 + x2 + xn ) / n = represents the amount of all agencies ( M ) of each standards. n = is the entire figure of standards of rating.