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Sathyabama Institute of Science and Technology
(Deemed to be University)

Submitted in partial fulfillment of the requirements for the award of
Bachelor of Engineering Degree in Computer Science and
Engineering

By

Tadekoru Dilip Gopi Chand
REG. 38110585



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SCHOOL OF COMPUTING

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY
JEPPIAAR NAGAR, RAJIV GANDHI SALAI,
CHENNAI – 600119, TAMILNADU.

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SATHYABAMA
INSTITUTE OF SCIENCE AND
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(DEEMED TO BE UNIVERSITY)
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CHENNAI– 600119
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **TADEKORU DILIP GOPI CHAND(Reg. No: 38110585)** who carried out the project entitled “**A SECURE G-CLOUD-BASED FRAMEWORK FOR GOVERNMENT HEALTHCARE SERVICES**” under my supervision from June 2021 to November 2021.

Internal Guide

Dr. S. Gowri.

Head of the Department

Dr. S.VIGNESHWARI, M.E., Ph.D.,

Dr. L.LAKSHMANAN, M.E., Ph.D.,

Submitted for Viva-voce Examination held on

Internal Examiner

External Examiner

DECLARATION

I, **Tadekoru Dilip Gopi Chand** hereby declare that the project report entitled “**A SECURE G-CLOUD-BASED FRAMEWORK FOR GOVERNMENT HEALTHCARE SERVICES**” done by us under the guidance of **Dr. S. Gowri.** is submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering Degree in Computer Science and Engineering.

Date:

T.Dilip Gopi Chand

Place:

Signature of the Candidate

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Abstract

Most of the schemes introduced by government go into the dustbin just because the officials who implement the schemes could not make them available to suitable people. So there is a secured and transparent system needed which enable an arbitrary person to directly apply for a scheme and track the status from time to time and know whether he is entitled to receive the fruit or his application is rejected by officials. In our system admin will add the scheme details to the system. And he can able to the view the registered user details. And he can able to accept or reject the scheme which is requested by the client. And user can able to view the status of his scheme request level.

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Chapter 1:

INTRODUCTION

The objective of the system is to develop a system which provides the details of government schemes and beneficiaries. The purpose is to design a system which automates the processes involved and allows users to perform various operations. The purpose is to design a system which automates the processes involved and allows users to perform various operations.

SCOPE OF THE PROJECT

The scope of Government Schemes Alerts is as follows: The Government Schemes Alerts provides an easier and save the time to register and use the scheme services. The scope of the government scheme alerts is to assure a transparent and secured system. The Government Schemes Alerts helps user to directly apply for a scheme and track the status from time to time. Through this site helps to know whether user is entitled to receive the fruit or his application is rejected by officials. This site is helpful to every individual to check their current status of their scheme request level.

EXISTING SYSTEM

In the present scenario, various government schemes are published in print media and advertised by the respective departments. It is often difficult for people to get the relevant information and approach the officials for availing the services. Due to lack of proper communication among various departments and officials, often the purpose of the schemes is not achieved. People do not get to know about the schemes and do not benefit from them.

PROPOSED SYSTEM

The proposed system is a web based application, which maintains a centralized repository of all scheme related information. This makes it easy to search for the desired information. Users and public can access the system to get the information and also apply online for the proposed schemes. The system allows coordination among all concerned departments and officials. The system also allows the regular monitoring and modification of information.

ADVANTAGES OF PROPOSED SYSTEM

- Provides all the schemes released by the Government.
- Announcing the every new schemes.
- Displaying the notifications on the main pages.
- User registration process.
- Login authentication.
- Allows users to check their status details.

Chapter 2:

LITERATURE SURVEY

Literature survey is the most important step in software development process. Before developing the tool it is necessary to determine the time factor, economy and company strength. Once these things are satisfied, then the next step is to determine which operating system and language can be used for developing the tool. Once the programmers start building the tool the programmers need lot of external support. This support can be obtained from senior programmers, from book or from websites. Before building the system the above consideration are taken into account for developing the proposed system. The major part of the project development sector considers and fully survey all the required needs for developing the project. For every project Literature survey is the most important sector in software development process. Before developing the tools and the associated designing it is necessary to determine and survey the time factor, resource requirement, man power, economy, and company strength. Once these things are satisfied and fully surveyed, then the next step is to determine about the software specifications in the respective system such as what type of operating system the project would require, and what are all the necessary software are needed to proceed with the next step such as developing the tools, and the associated operations.

The Incentive of Government Chief Officials at Grass-roots Level: An Analysis of the Political Tournament Model in Interagency Information Sharing

The lack of incentive mechanism for government chief officials is the key obstacle to improving interagency government information sharing. This paper considers the political tournament model as suitable to stimulate local governmental “top leaders” at district-level and county-level, and then puts forward some measures for the application of the model.

Research on the E-Government Scheme Based on Multi-Technologies and Bi-Directional Authentication

The authentication is the key part of the network security. It is also the main problem we should resolve. This scheme, which is bi-directional, using multi-mechanism to ensure safety authentication and providing a uniform authentication service to other e-government application system, meets the need of current e-government system. But authentication technology and e-government system are continually developing, there are still many problems need to be solved.

Analysis of E-government Services Outsourcing and Incentive Scheme

Relative theories, operation patterns and trends about e-government outsourcing are studied. Subsequently, the analyses on the incentive model and system for government and enterprise in the e-government outsourcing project are presented based on the theories of game and principal-agent, emphasizing on motivation and performance evaluation in managing out-sourcing business, in which the importance of incentive game in principal-agent is also derived. The state of incomplete and asymmetric information makes it important for government to implement reward and punishment before enough analyzing. From the aspect of validity analysis, the optimal proposal will have the characteristics of monotone, that is, the awards to the manager which are

provided by government should increase with the improvement of output level. It is eventually concluded that the reformation of e-government services outsourcing relationship requires incentive scheme.

A Risk Assessment Model Based-Business-Circle of E-Government Information System

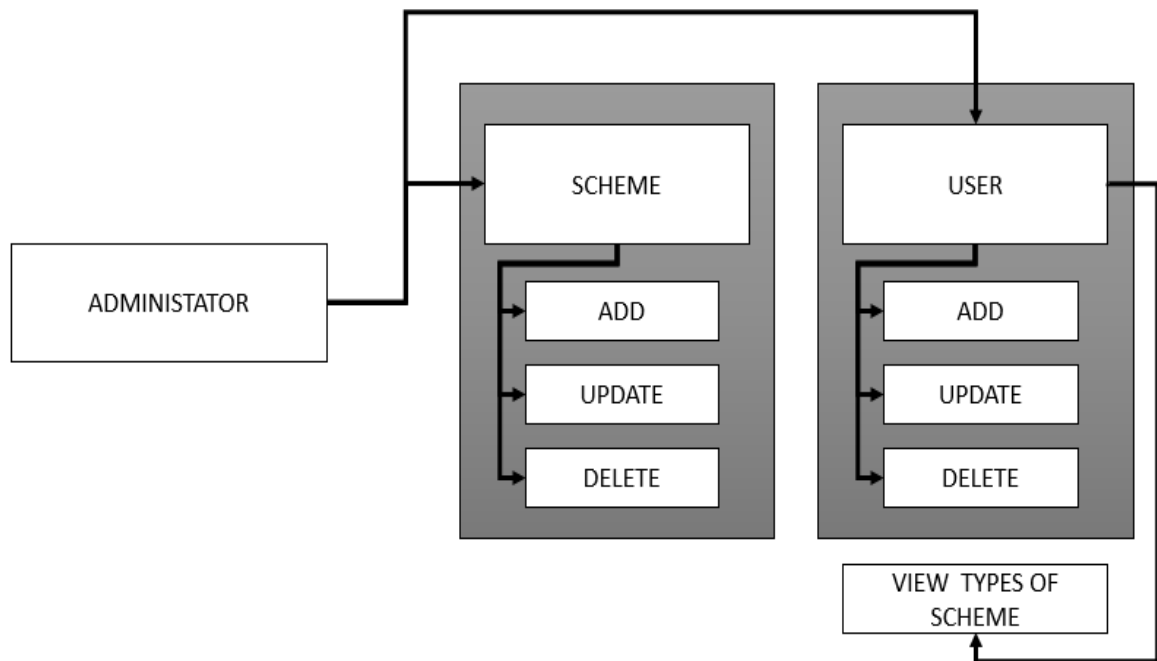
With the development of computer network and information technology rapidly, they are serving every walk of life in China. Chinese government is using widely the information and network technology for improving its work. So, Chinese E-Government information system is developing feety. However, in fact, E-Government information system has some its characters and some potential hazards in China, which affects E-Government information system's healthy and favorable development. It is insufficient that some secure products and tools are only used for the security system architecture of E-Government information system. To build secure and authentic system architecture of E-Government information system, the risk assessment and management is necessary for secure and reliable E-Government information system. A risk assessment model based-business-circle of E-Government information system is proposed in the article according to the characters of E-Government information system. In the model, some business circles are given according to the importance and features of E-Government information system. Moreover, the risk assessment is done in every business circle. The model introduces the idea of risk assessment, scheme of risk assessment, process of risk assessment and the computational method of risk.

A secure publishing scheme in e-Government

One of the most important functions of e-Government is publication through the Internet. Though digital signature can be exploited to protect the integrity and authenticity of published information, it can not effectively resist malicious replacement in scenarios where the published information consists of different files. A secure publishing scheme based on Merkle hash tree is proposed. The scheme is able to resist the malicious replacement of published information and its cost is modest.

Chapter 3:

ARCHITECTURE DIAGRAM



SYSTEM REQUIREMENTS

HARDWARE REQUIREMENTS:

- System - Windows 7/10
- Speed - 2.4GHZ
- Hard disk - 40GB
- Monitor - 15VGA color
- RAM - 4GB

SOFTWARE REQUIREMENTS:

- Operating System - Windows 10.

- Coding language - Java
- IDE - Netbeans
- Backend - Mysql

LANGUAGE OVERVIEW

Introduction to Java

Java is one of the world's most important and widely used computer languages, and it has held this distinction for many years. Unlike some other computer languages whose influence has wearied with passage of time, while Java's has grown.

Application of Java

Java is widely used in every corner of world and of human life. Java is not only used in software but is also widely used in designing hardware controlling software components. There are more than 930 million JRE downloads each year and 3 billion mobile phones run java.

Following are some other usage of Java:

- Developing Desktop Applications
- Web Applications like Linkedin.com, Snapdeal.com etc
- Mobile Operating System like Android
- Embedded Systems
- Robotics and games etc.

Features of Java

The prime reason behind creation of Java was to bring portability and security feature into a computer language. Beside these two major features, there were many other features that played an important role in moulding out the final form of this outstanding language. Those features are;

1) Simple

Java is easy to learn and its syntax is quite simple, clean and easy to understand. The confusing and ambiguous concepts of C++ are either left out in Java or they have been re-implemented in a cleaner way.

2) Object Oriented

In java everything is Object which has some data and behaviour. Java can be easily extended as it is based on Object Model.

3) Robust

Java makes an effort to eliminate error prone codes by emphasizing mainly on compile time error checking and runtime checking. But the main areas which Java improved were Memory Management and mishandled Exceptions by introducing automatic Garbage Collector and Exception Handling.

4) Platform Independent

Unlike other programming languages such as C, C++ etc. which are compiled into platform specific machines. Java is guaranteed to be write-once, run-anywhere language.

On compilation Java program is compiled into byte code. This byte code is platform independent and can be run on any machine, plus this byte code format also provide security. Any machine with Java Runtime Environment can run Java Programs.

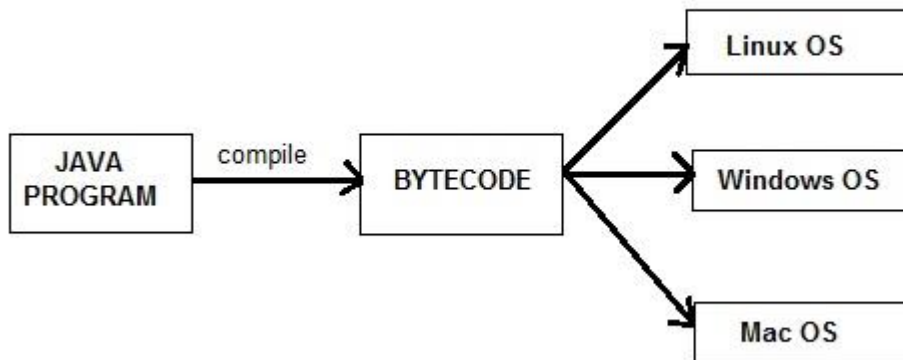


Fig 6.1 Java Compilation

5) Secure

When it comes to security, Java is always the first choice. With java secure features it enable us to develop virus free, temper free system. Java program always runs in Java runtime environment with almost null interaction with system OS, hence it is more secure.

6) Multi-Threading

Java multithreading feature makes it possible to write program that can do many tasks simultaneously. Benefit of multithreading is that it utilizes same memory and other resources to execute multiple threads at the same time, like While typing, grammatical errors are checked along.

7) Architectural Neutral

Compiler generates byte codes, which have nothing to do with a particular computer architecture, hence a Java program is easy to interpret on any machine.

8) Portable

Java Byte code can be carried to any platform. No implementation dependent features. Everything related to storage is predefined, example: size of primitive data types.

10) High Performance

Java is an interpreted language, so it will never be as fast as a compiled language like C or C++. But, Java enables high performance with the use of just-in-time compiler.

Collection Framework

Collection framework was not part of original Java release. Collections was added to J2SE 1.2. Prior to Java 2, Java provided adhoc classes such as Dictionary, Vector, Stack and Properties to store and manipulate groups of objects. Collection framework provides many important classes and interfaces to collect and organize group of alike objects.

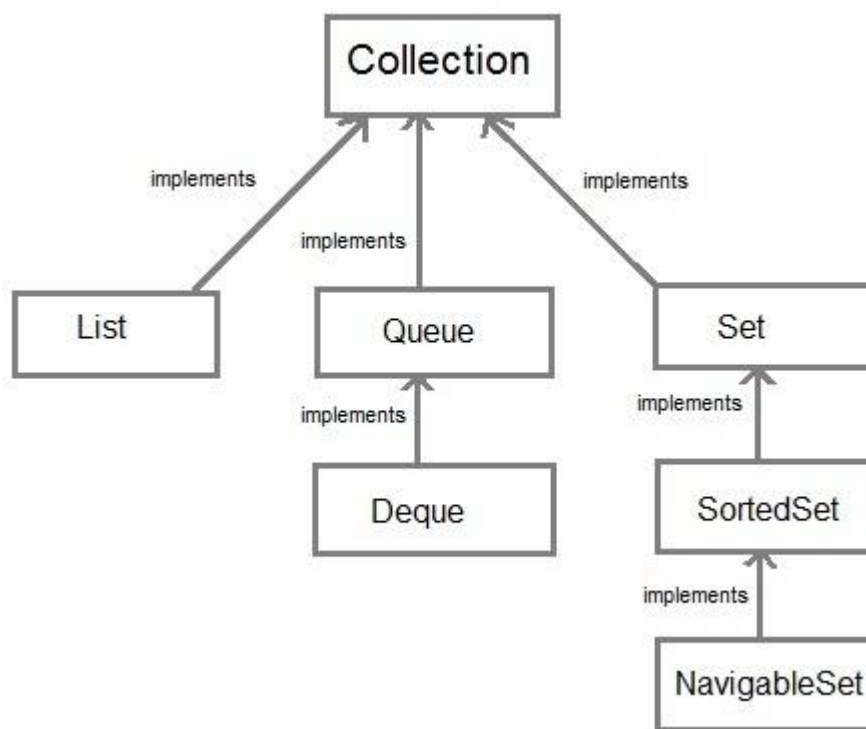


Fig Collection Framework

MY SQL

MySQL, officially, but also called "My Sequel" is the world's most widely used open-source relational database management system (RDBMS) that runs as a server providing multi-user access to a number of databases, though SQLite probably has more total embedded deployments. The SQL phrase stands for Structured Query Language.

The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. MySQL is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open source web application software stack (and other 'AMP' stacks).

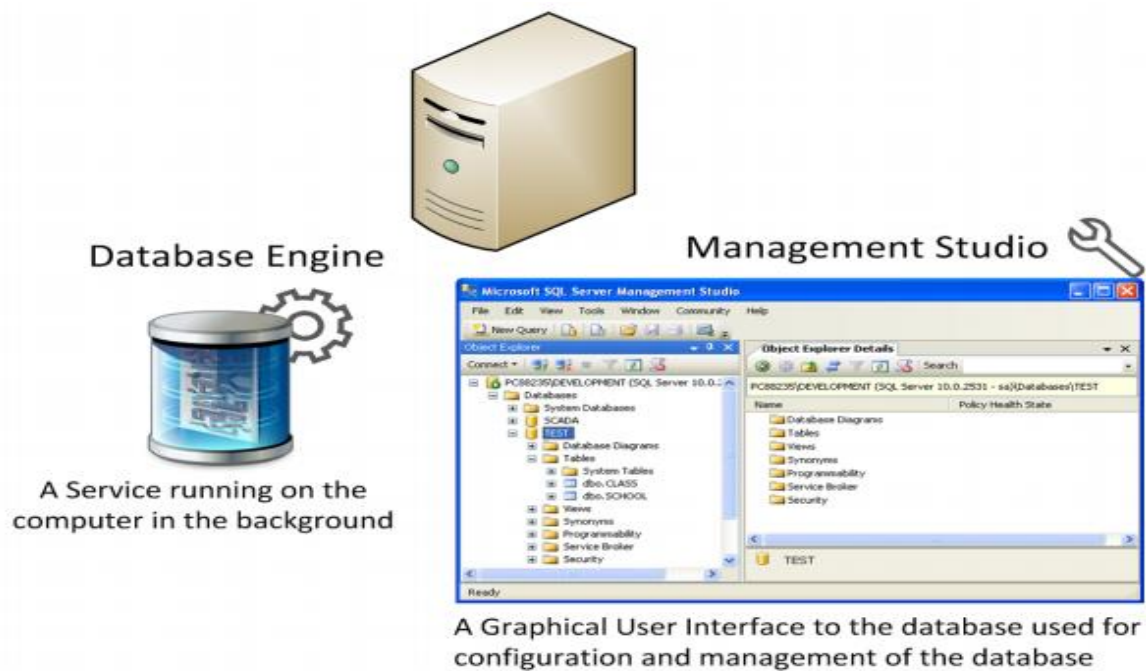
LAMP is an acronym for "Linux, Apache, MySQL and Perl/PHP/Python." Free software-open source projects that require a full-featured database management system often use MySQL.

For commercial use, several paid editions are available, and offer additional functionality. Applications which use MySQL databases include: TYPO3, MODx, Joomla, WordPress, phpBB, MyBB, Drupal and other software. MySQL is also used in many high-profile, large-scale websites, including Wikipedia, Google (though not for searches), Facebook, Twitter, Flickr and YouTube.

T-SQL expands on the SQL standard to include procedural programming, local variables, and various support functions for string processing, date processing, mathematics, etc. SQL Server consists of a Database Engine and a Management Studio (and lots of other stuff which we will not mention here). The Database engine has no graphical interface - it is just a service running in the background of your computer (preferable on the server). The Management Studio is graphical tool for configuring and viewing the information in the database. It

can be installed on the server or on the client (or both).

SQL Server Management Studio can also be used to create a new database, alter any existing database schema by adding or modifying tables and indexes, or analyze performance. It includes the query windows which provide a GUI based interface to write and execute queries.



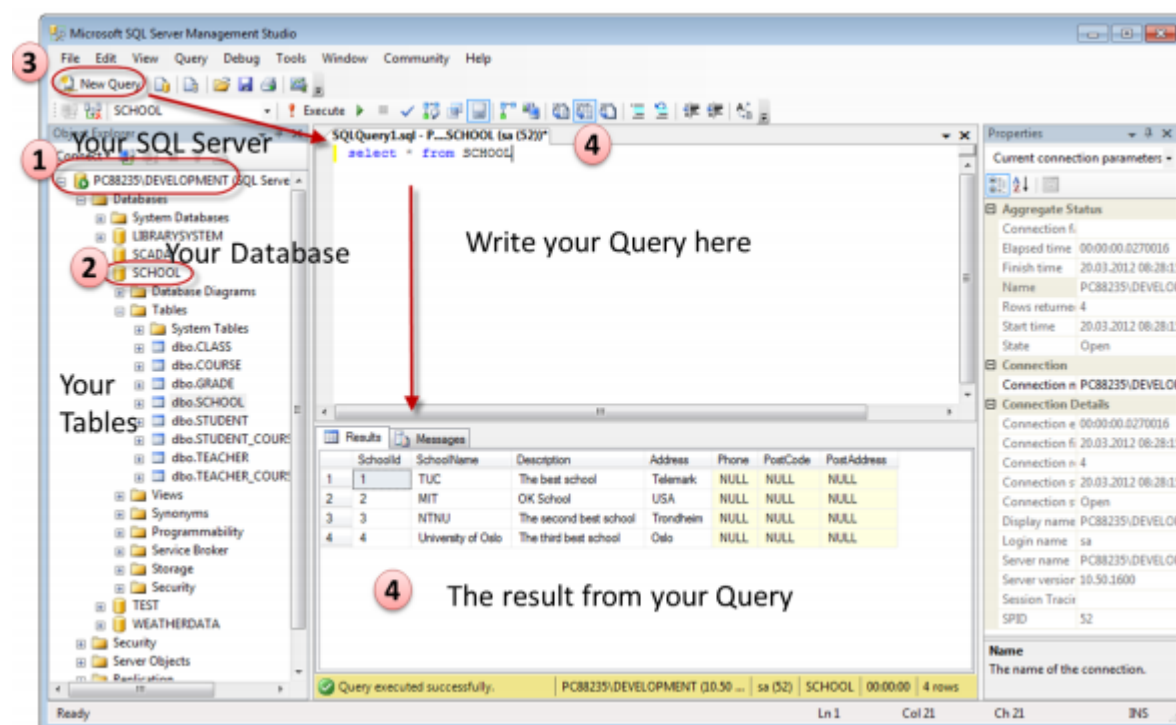
2.3.1 SQL SERVER MANAGEMENT STUDIO

SQL Server Management Studio is a GUI tool included with SQL Server for configuring, managing, and administering all components within Microsoft SQL Server. The tool includes both script editors and graphical tools that work with objects and features of the server. As mentioned earlier, version of SQL Server Management Studio is also available for SQL Server Express Edition, for which it is known as SQL Server Management Studio Express.

A central feature of SQL Server Management Studio is the Object Explorer, which allows the user to browse, select, and act upon any of the

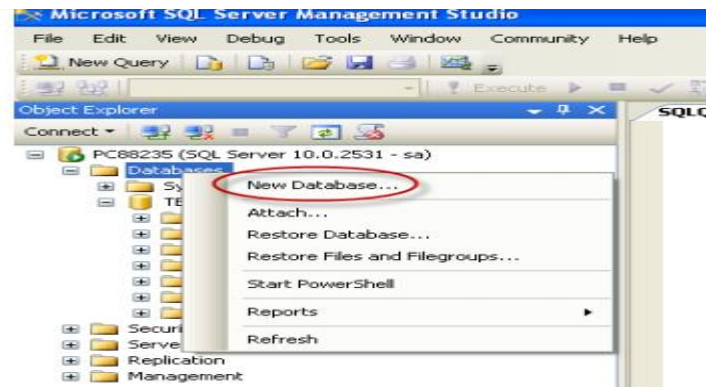
objects within the server. It can be used to visually observe and analyze query plans and optimize the database performance, among others. SQL Server Management Studio can also be used to create a new database, alter any existing database schema by adding or modifying tables and indexes, or analyze performance. It includes the query windows which provide a GUI based interface to write and execute queries.

When creating SQL commands and queries, the “Query Editor” (select “New Query” from the Toolbar) is used (shown in the figure above). With SQL and the “Query Editor” we can do almost everything with code, but sometimes it is also a good idea to use the different Designer tools in SQL to help us do the work without coding (so much).



2.3.2 Create a new Database

It is quite simple to create a new database in Microsoft SQL Server. Just right-click on the “Databases” node and select “New Database...”



The OLAP Services feature available in SQL Server version 7.0 is now called SQL Server 2000 Analysis Services. The term OLAP Services has been replaced with the term Analysis Services. Analysis Services also includes a new data mining component. The Repository component available in SQL Server version 7.0 is now called Microsoft SQL Server 2000 Meta Data Services. References to the component now use the term Meta Data Services. The term repository is used only in reference to the repository engine within Meta Data Services

SQL-SERVER database consist of six type of objects,

They are,

1. TABLE
2. QUERY
3. FORM
4. REPORT
5. MACRO

Table

A database is a collection of data about a specific topic.

Views of Table

We can work with a table in two types,

1. Design View
2. Datasheet View

Design View

To build or modify the structure of a table we work in the table design view. We can specify what kind of data will be hold.

Datasheet View

To add, edit or analyses the data itself we work in tables datasheet view mode.

Query

A query is a question that has to be asked the data. Access gathers data that answers the question from one or more table. The data that make up the answer is either dynaset (if you edit it) or a snapshot (it cannot be edited).Each time we run query, we get latest information in the dynaset. Access either displays the dynaset or snapshot for us to view or perform an action on it, such as deleting or updating.

NETBEANS

Net Beans IDE is the official IDE for Java 8. With its editors, code analyzers, and converters, you can quickly and smoothly upgrade your applications to use new Java 8 language constructs, such as lambdas, functional operations, and method references. Batch analyzers and converters are provided to search through multiple applications at the same time, matching patterns for conversion to new Java 8 language constructs. With its constantly improving Java Editor, many rich features and an extensive range of tools, templates and samples, Net Beans IDE sets the standard for developing with cutting edge technologies out of the box.

Java Networking

The term network programming refers to writing programs that execute across multiple devices (computers), in which the devices are all connected to each other using a network.

The java.net package provides support for the two common network protocols:

- **TCP:** TCP stands for Transmission Control Protocol, which allows for reliable communication between two applications. TCP is typically used over the Internet Protocol, which is referred to as TCP/IP.
- **UDP:** UDP stands for User Datagram Protocol, a connection-less protocol that allows for packets of data to be transmitted between applications.

This tutorial gives good understanding on the following two subjects:

- **Socket Programming:** This is most widely used concept in Networking and it has been explained in very detail.
- **URL Processing:** This would be covered separately. [Click here](#) to learn about URL Processing in Java language.

FEASIBILITY STUDY

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential.

The feasibility study investigates the problem and the information needs of the stakeholders. It seeks to determine the resources required to provide an information systems solution, the cost and benefits of such a solution, and the feasibility of such a solution.

The goal of the feasibility study is to consider alternative information systems solutions, evaluate their feasibility, and propose the alternative most suitable to the organization. The feasibility of a proposed solution is evaluated in terms of its components.

ECONOMICAL FEASIBILITY

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must justified. Thus the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customized products had to be purchased.

TECHNICAL FEASIBILITY

This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands on the available technical resources. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes are required for implementing this system.

SOCIAL FEASIBILITY

The aspect of study is to check the level of acceptance of the system by the user. This includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity.

REQUIREMENT ANALYSIS

Requirement analysis, also called requirement engineering, is the process of determining user expectations for a new modified product. It encompasses the tasks that determine the need for analysing, documenting, validating and managing software or system requirements. The requirements should be documentable, actionable, measurable, testable and traceable related to identified business needs or opportunities and define to a level of detail, sufficient for system design.

FUNCTIONAL REQUIREMENTS

It is a technical specification requirement for the software products. It is the first step in the requirement analysis process which lists the requirements of particular software systems including functional, performance and security requirements. The function of the system depends mainly on the quality hardware used to run the software with given functionality.

Usability

It specifies how easy the system must be use. It is easy to ask queries in any format which is short or long, porter stemming algorithm stimulates the desired response for user.

Robustness

It refers to a program that performs well not only under ordinary conditions but also under unusual conditions. It is the ability of the user to cope

with errors for irrelevant queries during execution.

Security

The state of providing protected access to resource is security. The system provides good security and unauthorized users cannot access the system there by providing high security.

Reliability

It is the probability of how often the software fails. The measurement is often expressed in MTBF (Mean Time Between Failures). The requirement is needed in order to ensure that the processes work correctly and completely without being aborted. It can handle any load and survive and survive and even capable of working around any failure.

Compatibility

It is supported by version above all web browsers. Using any web servers like localhost makes the system real-time experience.

Flexibility

The flexibility of the project is provided in such a way that is has the ability to run on different environments being executed by different users.

Safety

Safety is a measure taken to prevent trouble. Every query is processed in a secured manner without letting others to know one's personal information.

NON- FUNCTIONAL REQUIREMENTS

Portability

It is the usability of the same software in different environments. The project can be run in any operating system.

Performance

These requirements determine the resources required, time interval, throughput and everything that deals with the performance of the system.

Accuracy

The result of the requesting query is very accurate and high speed of retrieving information. The degree of security provided by the system is high and effective.

Maintainability

Project is simple as further updates can be easily done without affecting its stability. Maintainability basically defines that how easy it is to maintain the system. It means that how easy it is to maintain the system, analyse, change and test the application. Maintainability of this project is simple as further updates can be easily done without affecting its stability.

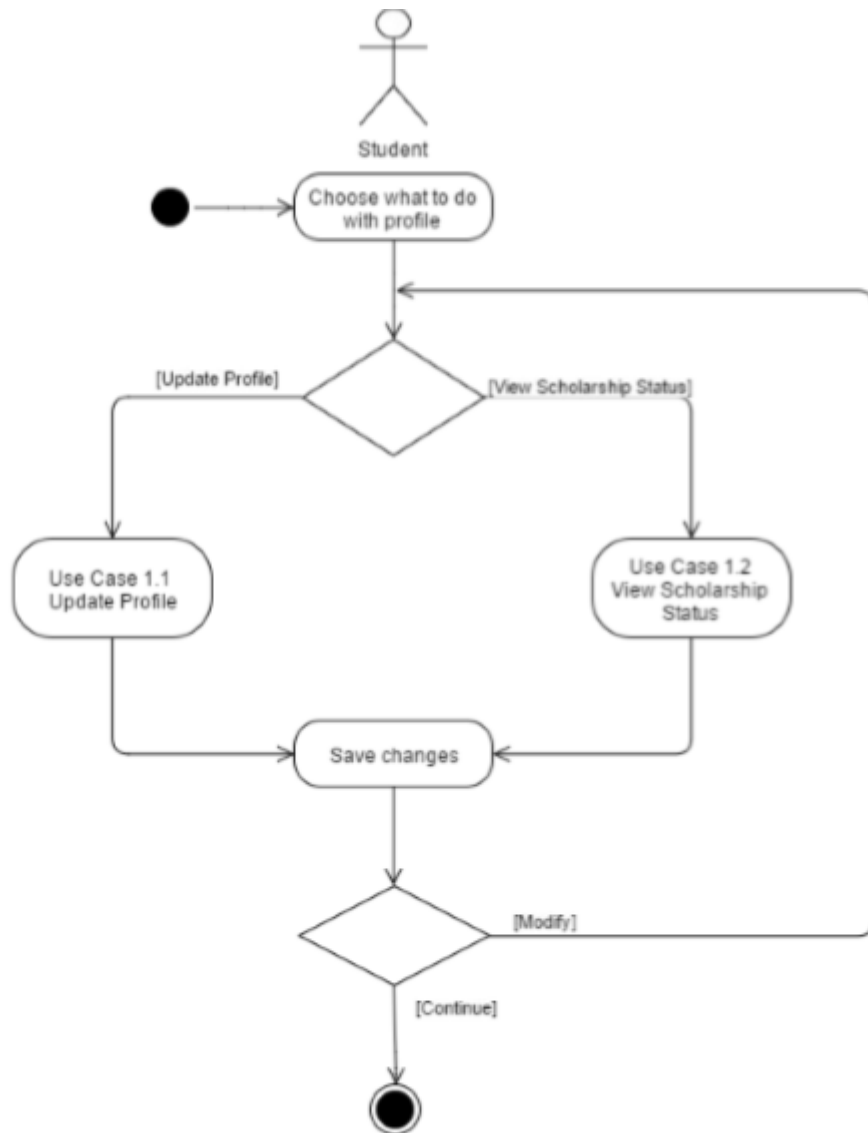
UML DIAGRAM

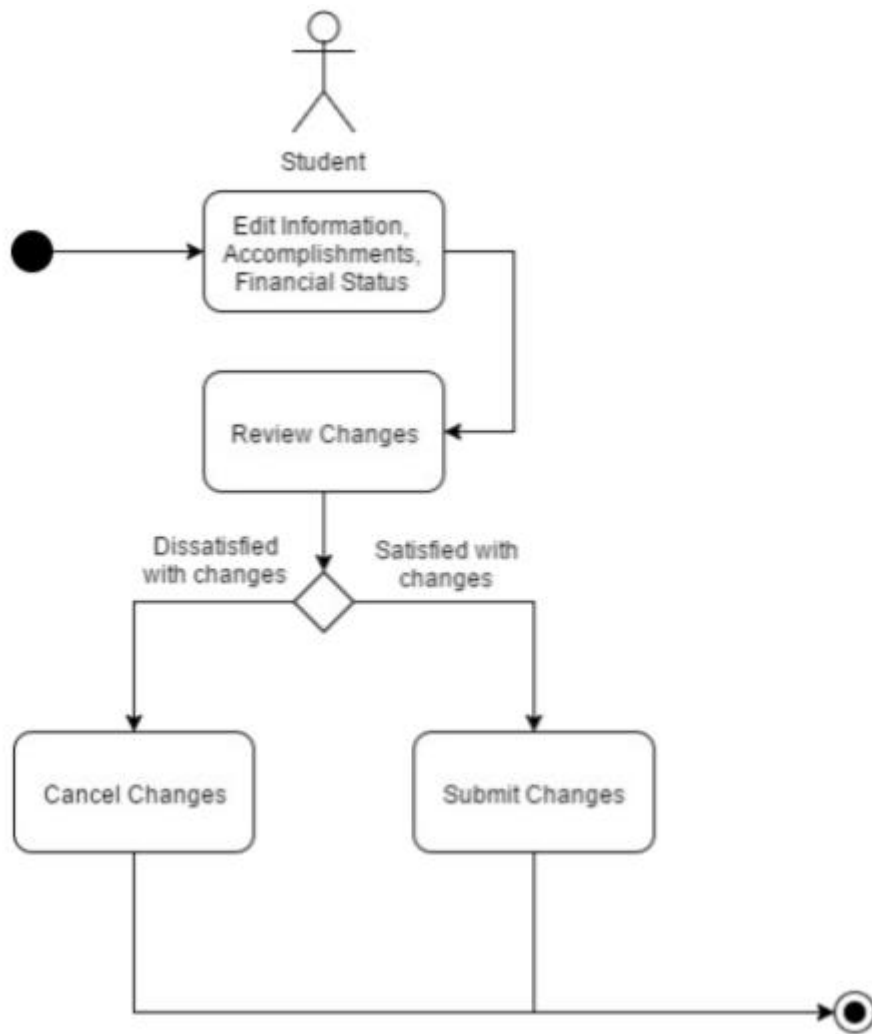
UML is a method for describing the system architecture in detail using the blueprint. UML represents a collection of best engineering practices that have proven successful in the modeling of large and complex systems. UML is a very important part of developing objects oriented software and the software development process. UML uses mostly graphical notations to express the design of software projects. Using the UML helps project teams communicate, explore potential designs, and validate the architectural design of the software.

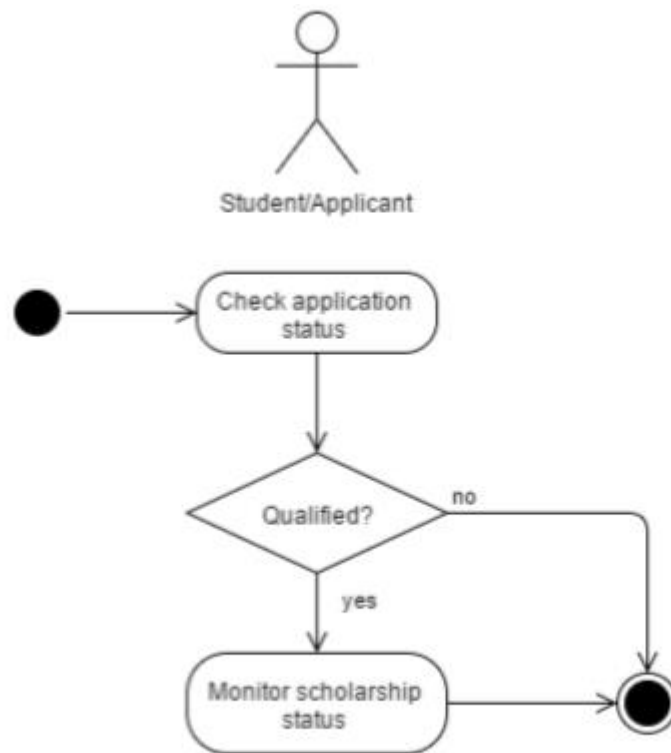
ACTIVITY DIAGRAM

Activity diagrams describe the workflow behavior of a system. Activity diagrams are similar to state diagrams because activities are the state of doing something. The diagrams describe the state of activities by showing the sequence of activities performed. Activity diagrams can show activities that are

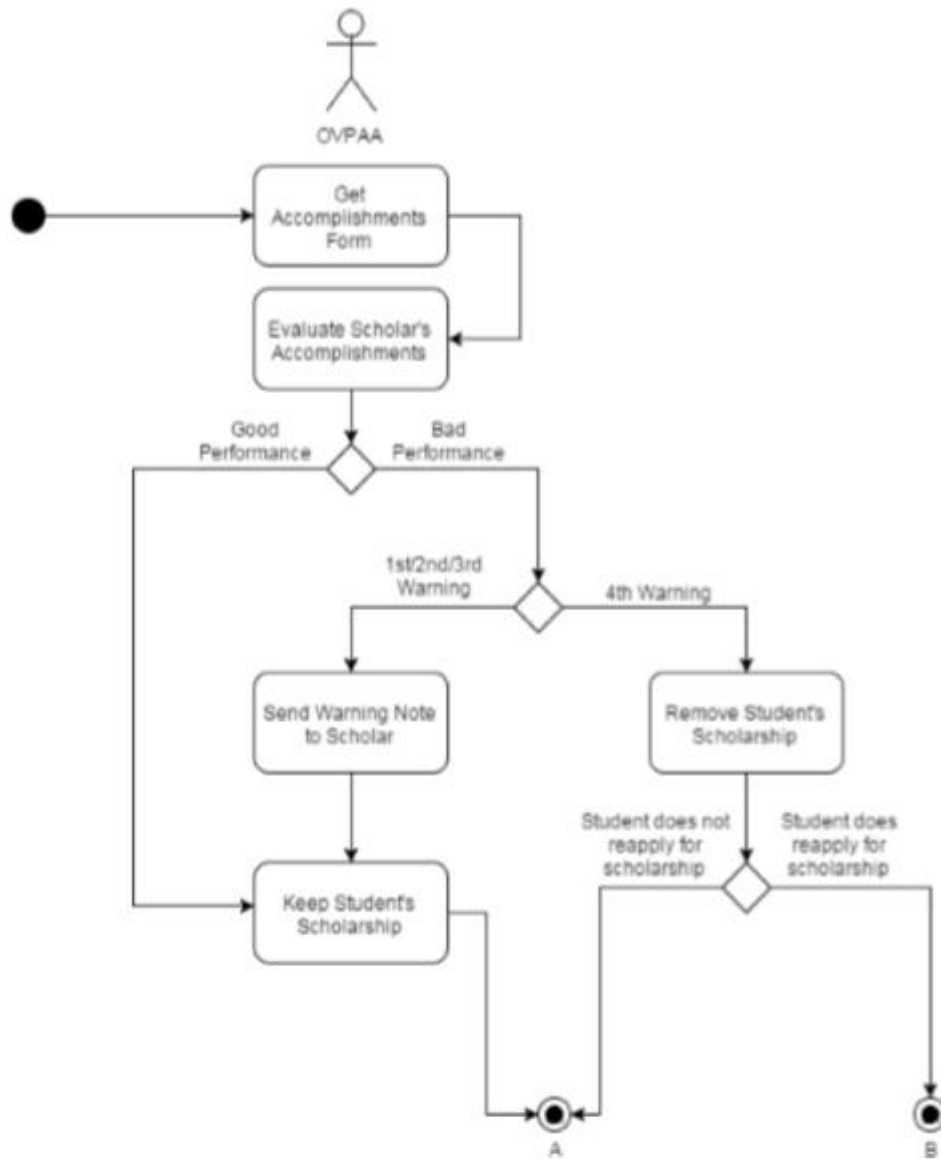
conditional or parallel.

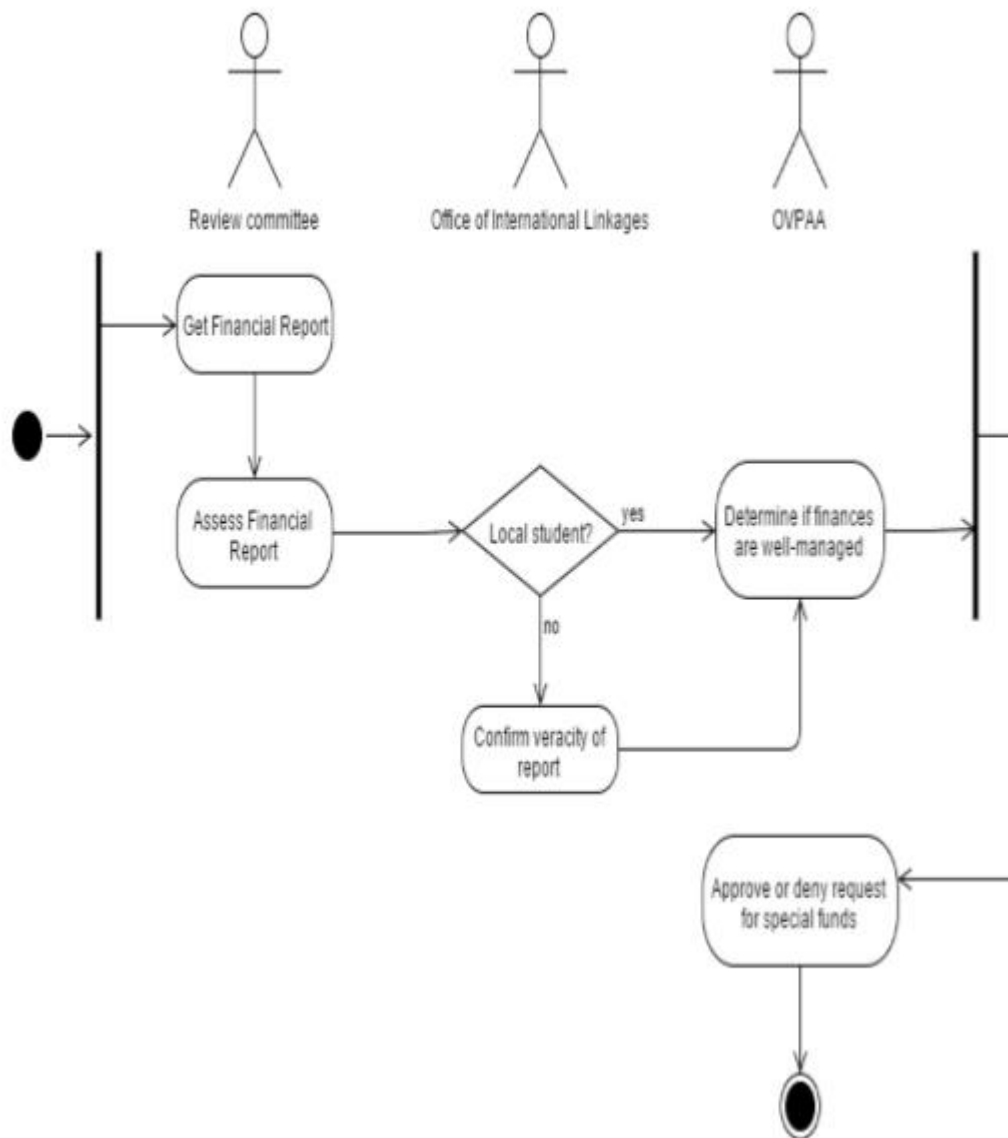






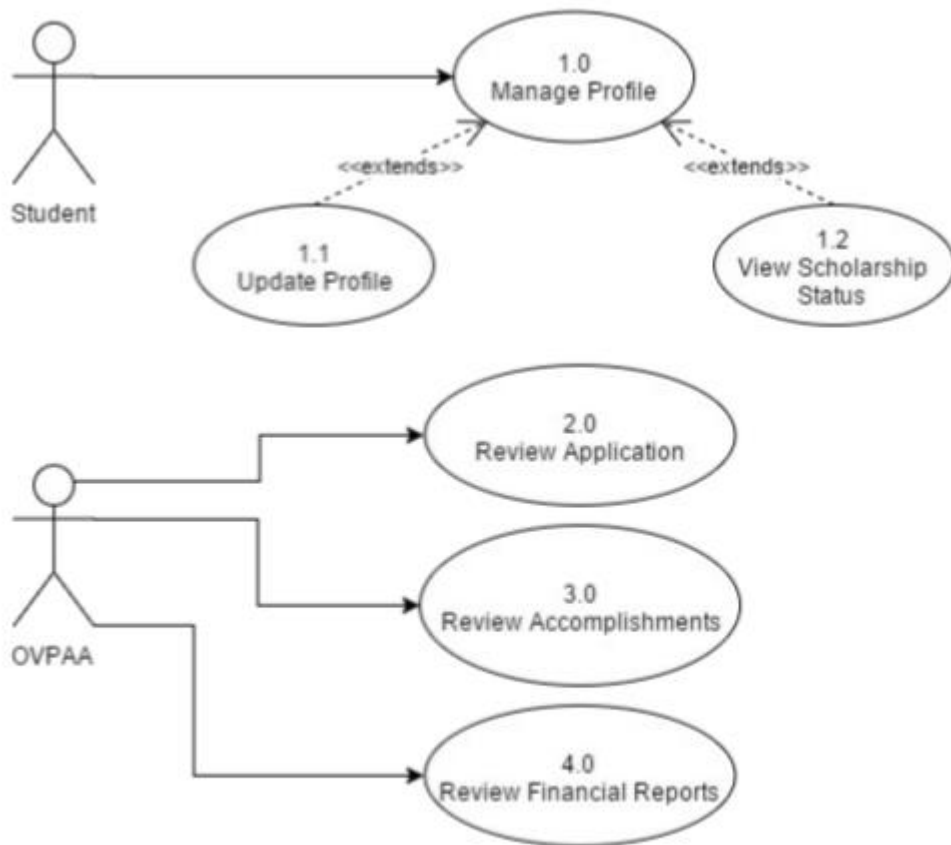






USECASE DIAGRAM

A use case diagram in the Unified Modeling Language (UML) is a type of behavioural diagram defined by and created from a Use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases.



CLASS DIAGRAM

Class diagrams are widely used to describe the types of objects in a system and their relationships. Class diagrams model class structure and contents using design elements such as classes, packages and objects. Class diagrams describe three different perspectives when designing a system, conceptual, specification, and implementation. These perspectives become evident as the diagram is created and help solidify the design. Class diagrams are arguably the most used UML diagram type. It is the main building block of any object oriented solution. It shows the classes in a system, attributes and operations of each class and the relationship between each class. In most modeling tools a class has three parts, name at the top, attributes in the middle and operations or methods at the bottom. In large systems with many classes related classes are grouped together to create class diagrams. Different relationships between diagrams are show by

different types of Arrows. Below is a image of a class diagram. Follow the link for more class diagram examples.



SYSTEM DESIGN

INPUT DESIGN

The input design is the link between the information system and the user. It comprises the developing specification and procedures for data preparation and those steps are necessary to put transaction data in to a usable form for processing can be achieved by inspecting the computer to read data from a written or printed document or it can occur by having people keying the data directly into the system. The design of input focuses on controlling the amount of input required, controlling the errors, avoiding delay, avoiding extra steps and keeping the process simple. The input is designed in such a way so that it provides security and ease of use with retaining the privacy. Input Design considered the following things:

- What data should be given as input?
- How the data should be arranged or coded?
- The dialog to guide the operating personnel in providing input.
- Methods for preparing input validations and steps to follow when error occur.

OUTPUT DESIGN

A quality output is one, which meets the requirements of the end user and presents the information clearly. In any system results of processing are communicated to the users and to other system through outputs. In output design it is determined how the information is to be displaced for immediate need and also the hard copy output. It is the most important and direct source information to the user. Efficient and intelligent output design improves the system's relationship to help user decision-making.

The output form of an information system should accomplish one or more of the following objectives.

- Convey information about past activities, current status or projections of the
- Future.
- Signal important events, opportunities, problems, or warnings.
- Trigger an action.
- Confirm an action

SYSTEM TESTING

TESTING PROCESS

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, sub-assemblies, assemblies and/or a finished product it is the process of exercising software with the intent of ensuring that the Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

TYPES OF TESTS

Unit Testing

Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program input produces valid outputs. All decision branches and internal code flow should be validated. It is the testing of individual software units of the application .it is done after the completion of an individual unit before integration. This is a structural testing, that relies on knowledge of its construction and is invasive. Unit tests perform basic tests at component level and test a specific business process, application, and/or system configuration. Unit tests ensure that each unique path of business process performs accurately to the documented specifications and contains clearly defined inputs and expected results.

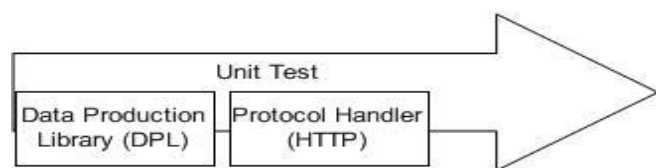


Fig. Unit Testing

Integration Testing

Integration tests are designed to test integrated software components to determine if they actually run as one program. Testing is event driven and is more concerned with the basic outcome of screens or fields. Integration tests demonstrate that although the components were individually satisfaction, as shown by successfully unit testing, the combination of components is correct and consistent. Integration testing is specifically aimed at exposing the problems that arise from the combination of components.

Functional Testing

Functional tests provide systematic demonstrations that functions tested are available as specified by the business and technical requirements, system documentation and user manuals.

Functional testing is centered on the following items:

Valid Input is used to identified classes of valid input must be accepted.

Invalid Input is used to identified classes of invalid input must be rejected.

Functions is used to identified functions must be exercised.

Output is used to identify classes of application outputs.

Systems/Procedures is used to interfacing systems or procedures must be invoked. Organization and preparation of functional tests is focused on requirements, key functions, or special test cases. In addition, systematic coverage pertaining to identify Business process flows; data fields, predefined processes, and successive Processes must be considered for testing. Before functional testing is complete, additional tests are identified and the effective value of current tests is determined.

System Testing

System testing ensures that the entire integrated software system meets requirements. It tests a configuration to ensure known and predictable results. An example of system testing is the configuration oriented system integration test. System testing is based on process descriptions and flows, emphasizing pre-driven process links and integration points.

White Box Testing

White Box Testing is a testing in which the software tester has knowledge of the inner workings, structure and language of the software, or at least its purpose. It is used to test areas that cannot be reached from a black box level.



Fig. White box Testing

Black Box Testing

Black Box Testing is testing the software without any knowledge of the inner workings, structure or language of the module being tested. Black box tests, as most other kinds of tests, must be written from a definitive source document, such as specification or requirements document, such as specification or requirements

document. It is a testing in which the software under test is treated, as a black box .you **cannot “see” into it. The test provides inputs and responds to outputs without**

Considering how the software works.



g. Black box Testing

TEST STRATEGY AND APPROACH

Field testing will be performed manually and functional tests will be written in detail.

Test Objectives

- ☐ All field entries must work properly.
- Pages must be activated from the identified link.
- The entry screen, messages and responses must not be delayed.
- Features to be tested

- Verify that the entries are of the correct format
- No duplicate entries should be allowed
- All links should take the user to the correct page.

Integration Testing

Software integration testing is the incremental integration testing of two or more integrated software components on a single platform to produce failures caused by interface defects.

The task of the integration test is to check that components or software applications.

Acceptance Testing

User Acceptance Testing is a critical phase of any project and requires significant participation by the end user. It also ensures that the system meets the functional requirements.

ALPHA TESTING

In software development, alpha test will be a test among the teams to confirm that your product works. Originally, the term alpha test meant the first phase of testing in a software development process. The first phase includes unit testing, component testing, and system testing. It also enables us to test the product on the lowest common denominator machines to make sure download times are acceptable and pre loaders work.

BETA TESTING

In software development, a beta test is the second phase of software testing in which a sampling of the intended audience tries the product out. Beta testing can be considered "pre-release testing." Beta test versions of software

are now distributed to curriculum specialists and teachers to give the program a "real world" test.

Chapter 4:

Government scheme Eligibility [Logout](#)

[Amma Vodi](#)

Fee Reimbursement

YSR Raithu Bharosa

[View Eligibility Rules](#) [Check Eligibility](#)

Current Education ▾

☐ White Ration Card

☐ Below Poverty Line

[✓ Check](#) [↻ Reset](#)

Login | C...

CRUD ap...

Setting u...

Listing E...

Getting S...

Elaborate...

H2 Cons...

java - Ho...

localhost...

localhost:8888/fee-reimbursement

AppsOne Fourth Labshttps://onlinecours...NPTEL - Computer...Expert Q&A | Cheg...

Government scheme Eligibility

Logout

Amma Vodi

Fee Reimbursement

YSR Raithu Bharosa

View Eligibility Rules

Check Eligibility

Rank *

Caste *

Parental Income *

☐ Parent Government Employee

☐ Physically Challenged

✓ Check

↻ Reset

Chapter 5:

CONCLUSION

The articulate the viability and efficacy of an RFID based system as a cell phone anti-lost and anti-theft measure. The system comprises of a smart phone equipped with a low-power RFID Reader that interrogates a body-worn passive tag to determine a private space which resides within 10 feet of the tagged owner. Besides, the cell phone can also function like a low-cost mobile RFID terminal. Moreover, the appealing results of current design show that our system can be referenced for academic learning and further experimentations on RFID-based communications.

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