INCOME TAX RETURN PROCESSING

Submitted in partial fulfillment of the requirements for the award of the degree of

Master of Computer Application (MCA)

to

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MCA-169

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SYNOPSIS
on
"INCOME TAX RETURN PROCESSING"

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TITLE OF THE PROJECT

"INCOME TAX RETURN PROCESSING"

Abstract:-

Income tax return processing is an application which will make the processing of income tax returns forms faster and provides the users to see all the advantages.

Introduction :-

Income tax return processing is a java based application where all the automated processing is introduced. By this application we can reduce our time and get accurate information. We can also know the processing of tax return in step by step manner.

By this application we can also improve the performance of the system. This system makes the processing of income tax returns forms faster and easier.

Objective:-

The main objective of this Income Tax return processing is

- To provide the information about tax return process in an easy way.
- It will reduce the load work.
- It will save paper work and save time.
- To change and update record is simple.
- It will also reduce Data redundancy.
- Centralized database system.

SCOPE

Many ways and it reduces manpower in the Income tax Department.

This application can be used by any user of file their income tax . It will help department

Methodology:-

TOOLS AND PLATFORM

Hardware Requirement:

Processor: intel CORE i5

RAM: 2GB or more

HD: 500 GB

Software Requirement:

Operating System : Windows 7

Database : Mysql

Java (NetBeans IDE)

Modules

1. Register yourself:- In this module the user can registration enter his details. First they select user type like Individual ,HUF or other. Then there are 4 steps Enter basic details, Registration form , Registration verification and Registration successful.

2. Login here:-This Module will check the user name and password for authentication**.**

3. Form available for e-Filing:-This modules contain form related to income tax.

4. Tax Information and Services:-The user can views all the information about income tax and services.

Chapter-1: Introduction/Problem Definition

1.1: Brief Description of the Organization

Income tax return processing is a java based application where all the automated processing is introduced. By this application we can reduce our time and get accurate information. We can also know the processing of tax return in step by step manner.

By this application we can also improve the performance of the system. This system makes the processing of income tax returns forms faster and easier.

The main objective of this Income Tax Return Processing Java Project is to provide the information about tax return process in an easy way.

1.2:General Description of the System under Study

The purpose of this describes the requirement of the external requirement for "INCOME TAX RETURN PROCESSING"

Income tax return processing is a java based application where all the automated processing is introduced. By this application we can reduce our time and get accurate information. We can also know the processing of tax return in step by step manner.

By this application we can also improve the performance of the system. This system makes the processing of income tax returns forms faster and easier.

1.3 :The need of the New system

Income tax return processing is a java based application where all the automated processing is introduced. By this application we can reduce our time and get accurate information. We can also know the processing of tax return in step by step manner.

By this application we can also improve the performance of the system. This system makes the processing of income tax returns forms faster and easier.

1.4: Objectives of the proposed System.

The main objective of this Income Tax return processing is

- To provide the information about tax return process in an easy way.
- It will reduce the load work.
- It will save paper work and save time.
- To change and update record is simple.
- It will also reduce Data redundancy.
- Centralized database system.

1.6: Methodology

We should need to analyze for the Income Tax the following things—

- Users of the **Income Tax Return Forms.**

- Forms and documents which are used for collecting the Income Tax.
- Various reports used in Income Tax Function. In our system we collect report from income tax office and law chamber.
- How is the current working procedure managed?
- What are the current problems that you are facing?
- Do you think any additional requirement can improve the current process?
- By taking opinion from the user that, how the system can be easier to access for the user?

1.7: Data required & data collection method

Information must be gathered from fitting sources. The advertising group can direct different information assortment exercises, for example, online reviews or center gatherings. ... For instance, leading polls and reviews would require the least assets while center gatherings require reasonably high assets.

Chapter-2: System Analysisof existing System

2.1: Existing System along with Limitations

1.This project is income tax

2.This system hence reduces the manual labor.

3.Manually it is difficult to upload all records time to time and there will be a chances of mistakes in management system .So this create a huge problem for the customers and this mistake affect the reputation of the company.

2.2:Proposed System along with intended objectives

2.2: Feasibility study

Feasibility is determination of whether or not project is worth doing i.e the system which is going to develop will be useful to the organization. The process followed in the making the determination is called feasibility study.

The five import tests are described below.

- Operational Feasibility
- Technical Feasibility
- Economical Feasibility
- Time Feasibility
- Legal Feasibility

Operational Feasibility- Proposed project is a which can be turned into information system that will meet the operation requirements of the user.

Technical Feasibility:-Technical feasibility is concerned with specifying equipments and software that will successfully satisfy the user. Some import techs are: **NetBeans IDE, Mysql.**

Economical Feasibility:- It looks at the financial aspects of the project.

Software cost:-

NetBeans IDE	**Free**
Mysql	**Free**

Manpower cost:-

Team cost	**0**
System cost	**65000**

Total cost:-

Total cost	**65000**

Time Feasibility:- We examine whether our proposed can be completed in specified time frame or not .

Duration of Project

Time Duration	
For study	**19 days**
Designing	**18 days**
For development	**21 days**
Testing	**18 days**

Total time	**76 days**

Chapter-3: System requirment analysis

3.1:Requirement analysis

We should need to analyze for the Income Tax the following things—

- Users of the **Income Tax Return Forms.**
- Forms and documents which are used for collecting the Income Tax.

INCOME TAX RETURN PROCESSING

- Various reports used in Income Tax Function. In our system we collect report from income tax office
- and law chamber.
- How is the current working procedure managed?
- What are the current problems that you are facing?
- Do you think any additional requirement can improve the current process?
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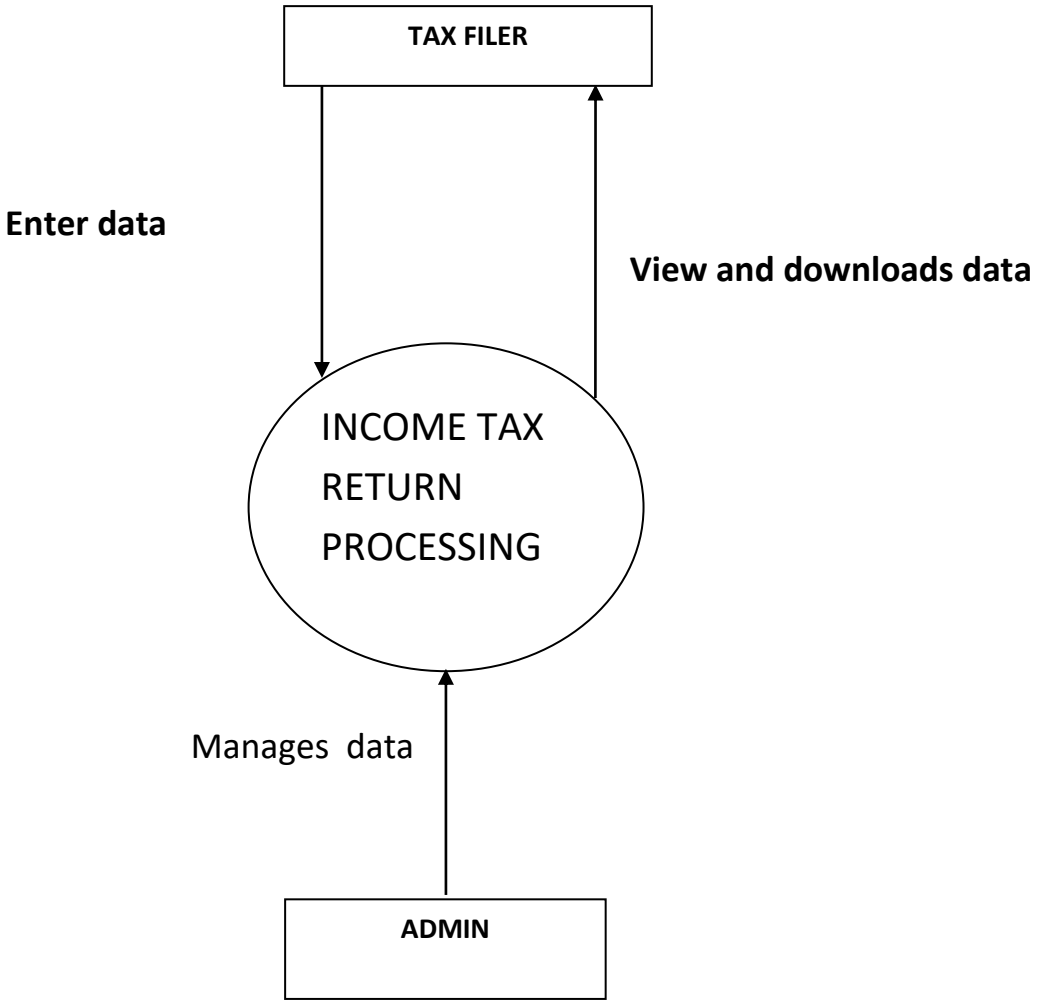
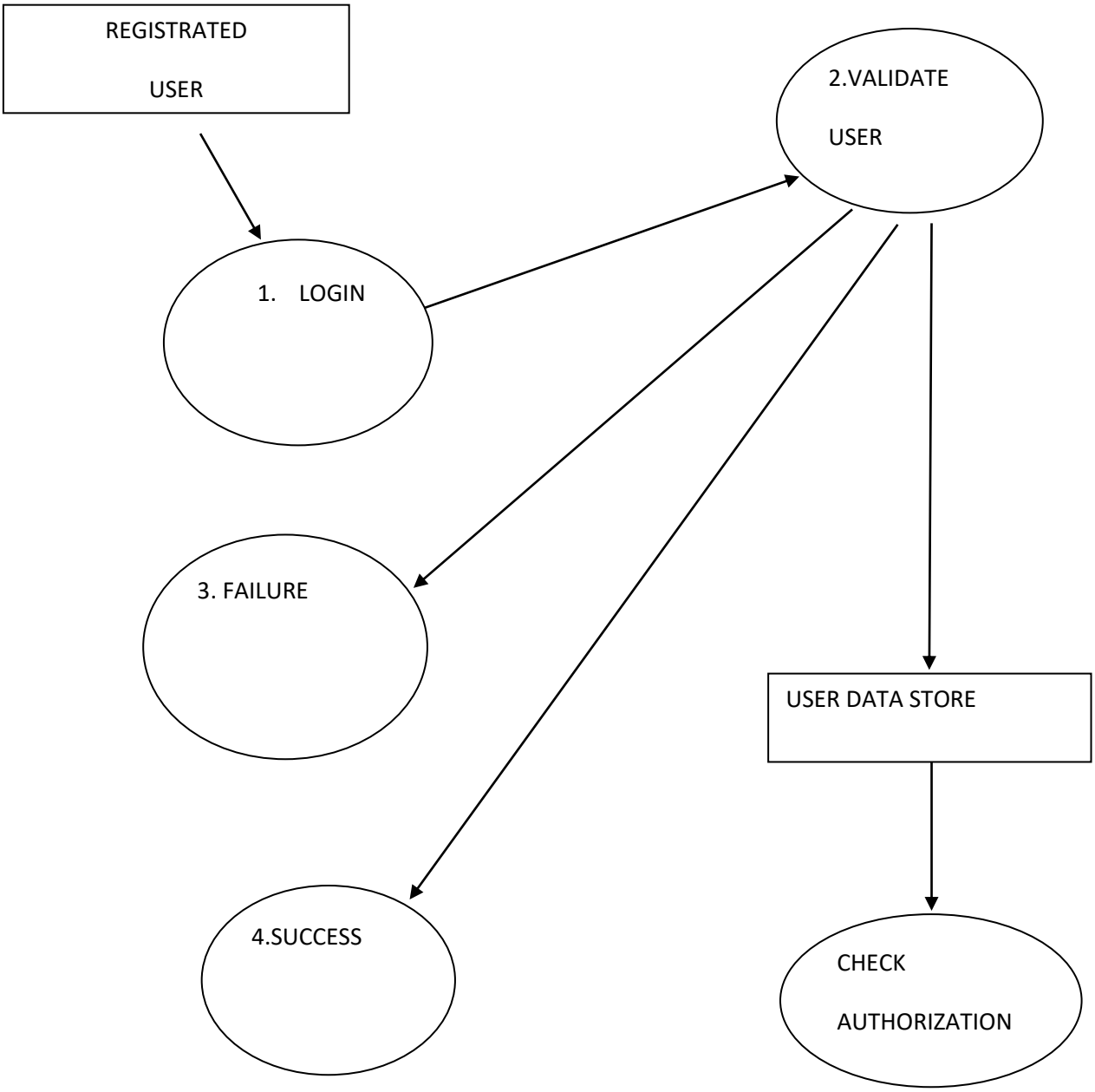
Chapter-4: System Design

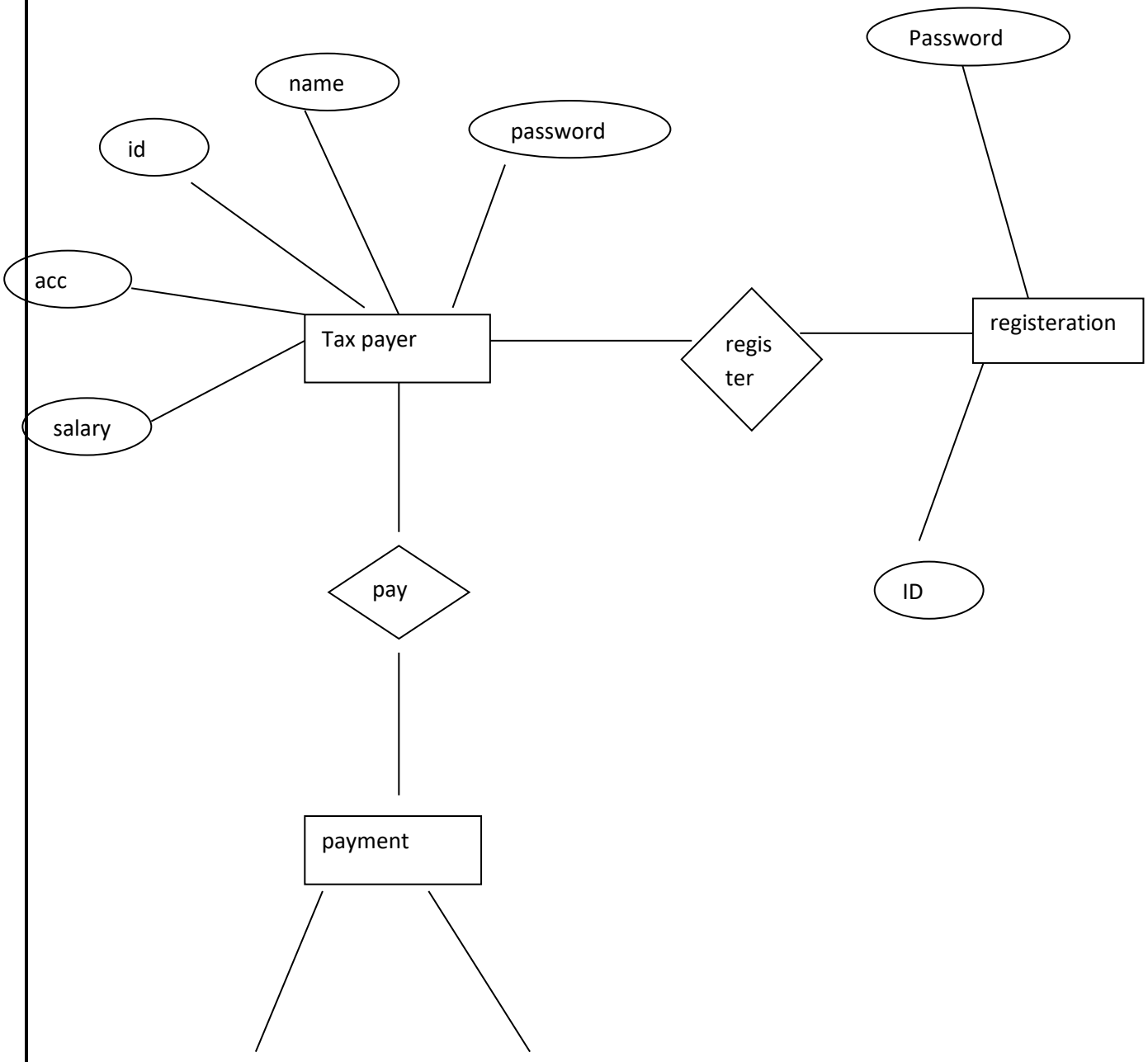
4.1: Data flow diagrams



DFD-1

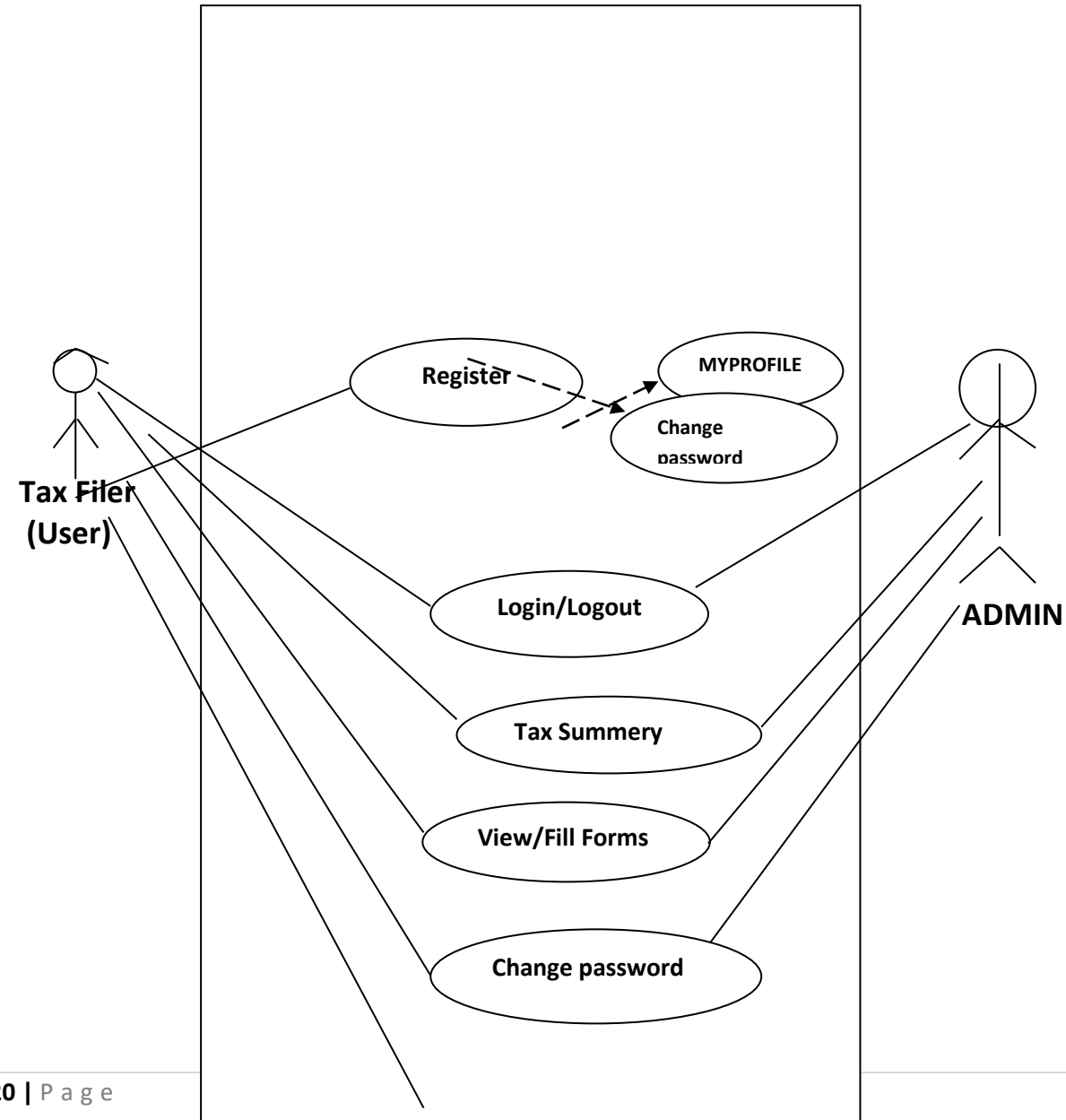

REGISTRATED
USER
2.VALIDATE
USER
1. LOGIN
3. FAILURE
USER DATA STORE
4.SUCCESS
CHECK
AUTHORIZATION

4.2: Entity-Relationship diagram



4.3: Use case Diagrams

4.4:Use case diagram



4.4: Class Diagram

4.5: Database & file Design

TABLE NAME : TAXREGISTRATION

FIELS NAME	DATATYPE
taxid	varchar
fname	varchar
mname	varchar
lname	varchar
phone	int
userid	varchar
pwd	varchar

Chapter-5: System Development

5.1: Program Development

Programming Improvement Life Cycle is the utilization of standard strategic policies to building programming applications. It's regularly isolated into six to eight stages: Arranging, Prerequisites, Plan, Fabricate, Record, Test, Convey, Keep up. Some venture directors will consolidate, split, or discard steps, contingent upon the undertaking's extension. These are the center parts suggested for all product improvement projects.

SDLC is an approach to quantify and improve the advancement cycle. It permits a fine-grain examination of each progression of the interaction. This, thus, assists organizations with boosting proficiency at each stage. As figuring power builds, it puts a more appeal on programming and designers. Organizations should lessen costs, convey programming quicker, and address or surpass their clients' issues. SDLC accomplishes these objectives by distinguishing shortcomings and greater expenses and fixing them to run easily.

5.2: Programming Platform

NetBeans IDE is a free, open source, integrated development environment (IDE) that enables you to develop desktop, mobile and web applications. The IDE supports application development in various languages, including Java, HTML5, PHP and C++. The IDE provides integrated support for the complete development cycle, from project creation through debugging, profiling and deployment. The IDE runs on Windows, Linux, Mac OS X, and other UNIX-based systems.

The IDE provides comprehensive support for JDK 7 technologies and the most recent Java enhancements. It is the first IDE that provides support for JDK 7, Java EE 7, and JavaFX 2. The IDE fully supports Java EE using the latest standards for Java, XML, Web services, and SQL and fully supports the GlassFish Server, the reference implementation of Java EE.

5.3: Query language

MySQL is the world's most popular open source database. With its proven performance, reliability and ease-of-use, MySQL has become the leading database choice for web-based applications, used by high profile web properties including Facebook, Twitter, YouTube, Yahoo! and many more.

Oracle drives MySQL innovation, delivering new capabilities to power next generation web, cloud, mobile and embedded applications.

Chapter-6: System Testing

Here the entire software system is tested. The reference document for this process is the requirements document and goal is to see if software meets its requirements.

Testing Techniques

Two Category of Software Testing

- Black Box Testing
- White Box Testing

Black box testing :System test falls under the **black box testing** category of software testing. This is applied during the later stage of testing. It enables the software developer to derive a set of input conditions that will

fully exercise the functional requirements of a program.

White Box Testing: This method also knows as glass box testing, is performed early in the testing process. Using the software engineer can derive a test that guarantees that all independent paths within the module have been exercised at lest once.

Chapter-7: Systems Implementation

Implementation (Techniques)

Structured Programming

In the process of coding, the lines of code keep multiplying, thus, size of the software increases. Gradually, it becomes next to impossible to remember the flow of program. Structured programming states how the program shall be coded. Structured programming uses three main concepts:

- **Top-down analysis** - A software is always made to perform some rational work. This rational work is known as problem in the software parlance. Thus it is very important that we understand how to solve the problem.
- **Modular Programming** - While programming, the code is broken down into smaller group of instructions. These groups are known as modules, subprograms or subroutines. Modular programming based on the understanding of top-down analysis.
- **Structured Coding** - In reference with top-down analysis, structured coding sub-divides the modules into further smaller units of code in the order of their execution.

Functional Programming

Functional programming is style of programming language, which uses the concepts of mathematical functions. A function in mathematics should always produce the same result on receiving the same argument. While control flow is transferring from one procedure to another, the program changes its state.

Functional programming provides means of computation as mathematical functions, which produces results irrespective of program state. This makes it possible to predict the behavior of the program.

Functional programming uses the following concepts:

- **First class and High-order functions** - These functions have capability to accept another function as argument or they return other functions as results.
- **Pure functions** - These functions do not include destructive updates, that is, they do not affect any I/O or memory and if they are not in use, they can easily be removed without hampering the rest of the program.
- **Recursion** - Recursion is a programming technique where a function calls itself and repeats the program code in it unless some pre-defined condition matches. Recursion is the way of creating loops in functional programming.
- **Strict evaluation** - It is a method of evaluating the expression passed to a function as an argument. Functional programming has two types of evaluation methods, strict (eager) or non-strict (lazy). Strict evaluation always evaluates the expression before invoking the function. Non-strict evaluation does not evaluate the expression unless it is needed.
- **λ-calculus** - Most functional programming languages use λ-calculus as their type systems. λ-expressions are executed by evaluating them as they occur.

Common Lisp, Scala, Haskell, Erlang and F# are some examples of functional programming languages.

1.1 Programming style

Programming style is set of coding rules followed by all the programmers to write the code. When multiple programmers work on the same software project, they frequently need to work with the program code written by some other developer. This becomes tedious or at times impossible, if all developers do not follow some standard programming style to code the program.

Coding Guidelines

Practice of coding style varies with organizations, operating systems and language of coding itself.

The following coding elements may be defined under coding guidelines of an organization:

- **Naming conventions** - This section defines how to name functions, variables, constants and global variables.
- **Indenting** - This is the space left at the beginning of line, usually 2-8 whitespace or single tab.
- **Whitespace** - It is generally omitted at the end of line.
- **Operators** - Defines the rules of writing mathematical, assignment and logical operators. For example, assignment operator '=' should have space before and after it, as in "x = 2".
- **Control Structures** - The rules of writing if-then-else, case-switch, while-until and for control flow statements solely and in nested fashion.
- **Line length and wrapping** - Defines how many characters should be there in one line, mostly a line is 80 characters long. Wrapping defines how a line should be wrapped, if is too long.

- **Functions** - This defines how functions should be declared and invoked, with and without parameters.
- **Variables** - This mentions how variables of different data types are declared and defined.
- **Comments** - This is one of the important coding components, as the comments included in the code describe what the code actually does and all other associated descriptions. This section also helps creating help documentations for other developers.

Software Documentation

Software documentation is an important part of software process. A well written document provides a great tool and means of information repository necessary to know about software process. Software documentation also provides information about how to use the product.

A well-maintained documentation should involve the following documents:

- **Requirement documentation** - This documentation works as key tool for software designer, developer and the test team to carry out their respective tasks. This document contains all the functional, non-functional and behavioural description of the intended software.
- **Software Design documentation** - These documentations contain all the necessary information, which are needed to build the software. It contains: High-level software architecture, Software design details, Data flow diagrams,
- **Technical documentation** - These documentations are maintained by the developers and actual coders. These documents, as a whole, represent information about the code. While writing the code, the programmers also mention objective of the code, who wrote it, where will it be required, what it does and how it does, what other resources the code uses, etc.

  There are various automated tools available and some comes with the programming language itself. For example java comes JavaDoc tool to generate technical documentation of code.
- **User documentation** - This documentation is different from all the above explained. All previous documentations are maintained to provide information about the software and its development process.

Software Implementation Challenges

There are some challenges faced by the development team while implementing the software. Some of them are mentioned below:

- **Code-reuse** - Programming interfaces of present-day languages are very sophisticated and are equipped huge library functions. Still, to bring the cost down of end product, the organization management prefers to re-use the code, which was created earlier for some other software. There are huge issues faced by programmers for compatibility checks and deciding how much code to re-use.

- **Version Management** - Every time a new software is issued to the customer, developers have to maintain version and configuration related documentation. This documentation needs to be highly accurate and available on time.
- **Target-Host** - The software program, which is being developed in the organization, needs to be designed for host machines at the customers end. But at times, it is impossible to design a software that works on the target machines.

Post Implementation (Implementation)

PIER is a tool or standard approach for evaluating the outcome of the project and determine whether the project is producing the expected benefits to the processes, products or services. It enables the user to verify that the project or system has achieved its desired outcome within specified time period and planned cost.

PIER ensures that the project has met its goals by evaluating the development and management processes of the project.

Objectives of PIER

The objectives of having a PIER are as follows −

- To determine the success of a project against the projected costs, benefits, and timelines.
- To identify the opportunities to add additional value to the project.
- To determine strengths and weaknesses of the project for future reference and appropriate action.
- To make recommendations on the future of the project by refining cost estimating techniques.

The following staff members should be included in the review process −

- Project team and Management
- User staff
- Strategic Management Staff
- External users

System Maintenance / Enhancement

Maintenance means restoring something to its original conditions. Enhancement means adding, modifying the code to support the changes in the user specification. System maintenance conforms the system to its original requirements and enhancement adds to system capability by incorporating new requirements.

Thus, maintenance changes the existing system, enhancement adds features to the existing system, and development replaces the existing system. It is an important part of system development that includes the activities which corrects errors in system design and implementation, updates the documents, and tests the data.

Maintenance Types

System maintenance can be classified into three types −

- **Corrective Maintenance** − Enables user to carry out the repairing and correcting leftover problems.
- **Adaptive Maintenance** − Enables user to replace the functions of the programs.
- **Perfective Maintenance** − Enables user to modify or enhance the programs according to the users' requirements and changing needs.

Summary/Conclusion

The **INCOME TAX RETURN PROCESSING** is looking to a more efficient and streamlined processing system and better coordination between customer and the income tax system to desired results in terms of quality ,service , tax information and calculate tax.

Limitations of the project

1.This project is income tax

2.This system hence reduces the manual labor.

3.Manually it is difficult to upload all records time to time and there will be a chances of mistakes in management system .So this create a huge problem for the customers and this mistake affect the reputation of the company.

Future Directions

1. The scope of this project is to provide an easy option for the customer who is willing to check online.

2.It saves time and labor.

3. Such that labor of staff is reduced. Project is flexible enough to meet the requirements of the customer.

4.This system can be accessed anywhere who has net connection at any time of day or night, thus providing customer's comfort.

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