Six Weeks Project Report

On

Govt. Exams

At

Solitaire Infosys

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

IN

COMPUTER SCIENCE & ENGINEERING

Submitted To:- Submitted By:-

Mr. Rajendra Sharma Divyanshu shekhar

Lecturer of Computer Engineering dept. 180290800012



CDL Government Polytechnic College
Nathusari chopta .

INDEX			
S.No.	Topic	Page No.	
1	OVERVIEW OF COMPANY	3-5	
	Introduction		
2	PROFILE OF PROBLEM ASSIGNED	5-6	
3	STUDY OF EXISTING SYSTEM	6-6	
4	SYSTEM REQUIREMENT	7-11	
5	FEASIBILITY ANALYSIS	12-12	

6	PROJECT PLAN	13-13
7	DEVELOPMENT SCHEDULE	13-13
8	SYSTEM REQUIREMENT SPECIFICATIONS	14-18
9	DESIGN	18-25
10	TESTING	25-28
11	IMPLEMENTATION	28-30

Topic-1 OVERVIEW OF COMPANY

1.1 Introduction

AN OVERVIEW

SOLITAIRE INFOSYS is a leading Software and Web Application Development Company, based in Mohali (Chandigarh) that provides high quality comprehensive services to enterprises

across a wide range of platforms and technologies. Our major areas of expertise are in providing quality, cost effective software or web development.



Focus of the Company

The Company focuses on understanding the diverse and mission-critical needs of each of our clients. To understand is to be able to deliver. The competence and experience of our company gives us a competitive edge by making sure we provide the best services and products to our clients. Our high quality standards enable us to deliver reliable and error-free software applications, despite their complexity.

The Company provides Web design/Web development, B2B & B2C E-commerce solutions, SEO & Web Promotions strategies implementation consulting services to both domestic as well as international clients' at the most affordable rates.

Operating excellence

- A safe, fun and professional work environment
- Good relationships with industry and other partners
- Respect for the rights and ambitions of our employees
- Honorable, value-driven business relations

HISTORY OF THE COMPANY

Solitaire Infosys Inc. was a dream that came into existence over three years ago with a strong aspiration of becoming a best IT service provider around the globe. Presently, Solitaire Infosys is already leading the race with its competitors. Being nurtured by a team of experienced and sensitive people. We try to bond emotionally with our clients and love to go an extra mile to satisfy their needs, which is the reason that we hold the edge in the league.

At Solitaire Infosys Inc. we provide the experience, expertise and capabilities that enable organizations to accelerate their service processes, deliver more service value and realize breakthrough results in the markets they serve. Now our clients not only appreciate our comprehensive range of services, our innovative, streamlined and cost effective solutions, but more importantly, they appreciate our high level of excellent customer service which is unparalleled in the industry.

Topic-2

PROFILE OF PROBLEM ASSIGNED

2.1 Problem Definition

:-On the current web pages users can only find the single content it can be pdf, videos or notes. There is no website on which all the contents are available on a single site. If a user wants video, notes, questions and pdf users have to search for many sites because no site contains the videos, pdf, notes and question papers together.

2.1.1 Profile of The Problem Assigned

:-There are two modules assigned:

- 1. User Module
- 2. Admin Module

1. USER MODULE

The user module allows users to register, log in, and log out. Users benefit from being able to sign on because this associates content they create with their account and allows various permissions to be set for their roles. On this module user can do many things like viewing video lectures, downloading notes and questions in pdf format and users can also download the videos.

On the user module many of the pages available for example:

- 1.gallery
- 2.Notes

- A.Defence
- **B.Railway**
- C.Banking

3. Questions

- A.Defence
- **B.Railway**
- C.Banking

4.videos

- A.Defence
- **B.Railway**
- C.Banking

5.Contact us

6.logout

All of these pages are very easy for the user.

User can click on any of them like if he wants to click on notes then click on the category which you want and simply download the content.

1.1.Signup:-

In the user panel a user has to first signup into the user panel by clicking on signup. User will connect to the registration page after registration a user can use our site.

1.2.Login page:-

In the login page only registered users can login. No page can be accessed without login to open any of the page first users have to login.

1.3.User page:-

At this page users can access anything like video ,notes and question downloading and viewing videos. There are three options for study material Notes, video lecture, and question all the content has there own options according to its category. The Notes, Videos and Question contain these content given bellow

1.Defence

2.Railway

3Banking

By clicking on these fields a page appears. On that page the content's are given

The whole content is in table form there is an option for downloading. It is in the
form of an icon by clicking the icon user can download the content which the user
wants.

1.4.Logout:-

By clicking logout users can log out from the site and go back to the login page.

2. ADMIN MODULE

:-Admin module allows system administrators to set up the back-end of the system and perform basic system configuration, mainly definition of predefined drop-down fields, definition of classes time schedule, etc.an admin can make changes according to his need. An admin has authority that he can make changes on the admin panel.

All of the operations that an admin can do on pages are given below:-

1.Cateory

- 2.Contact
- 3.Notes
- 4. Question_papers
- 5.signup

The all work that an admin can do is:

- 1.Insert
- 2.View
- 3.Update
- 4.Delete

For example:-

If admin find something new and want to insert into the database or he just found some error and want to make changes like update something or want to delete he can do all these operations. If admin want to add a table into the page he can add it through the admin panel. all of these changes can be done similarly on every table the table can be Category, Contact, Notes, Question papers or signup.

Explanation:

1.insert:- it is the page through which admin can insert pdf and videos.

2. View:-it is the page where the admin can see all the contents which he inserted.

3.delete:-it is the page through which admin can delete the content which he don't want.

4.update:-it is the page through which the admin can make changes in content if he wants in future then.

2.1.Login page:-

In Admin Module there is a login page. This admin panel is only accessible by the admin who knows the id and password of the admin panel.

2.2.Log out page:-

It is just an option on the admin panel for securing the admin panel after that only admin can access the admin panel.

Topic-3

STUDY OF EXISTING SYSTEM

3.1 Proposed System

What is new:-

On my web page the complete preparation materials are available. The user has complete free service. After login the user can download and view our video content free of cost, very easy to use, all pages are clearly mentioned on the page that make the page more compatible for users. At this time not any site giving this facility. At this site all content available. The best thing about this site is that user have to access only one webpage for Notes, questions and videos and it is the best part of this site. Very usable contents are available on it highly rated videos full book notes and all the question papers of every subject for the preparation of

Defence ,Railway and banking.

Topic-4

SYSTEM REQUIREMENT

4.1 Problem Statement

This system is designed to the working on project reducing the potential risks and helping to ensure that the project is delivered on time. I serve, As a repository for all the documents ,drawings and communications relating to the project and are used by all project participants to access, read, print and edit material according to authorization setup by the project administrator. The essence of collaboration software is to develop a process where by documents are all electronic, thus enabling them to be located at a

Secure central location that can be accessed by those to whom access rights have been given.

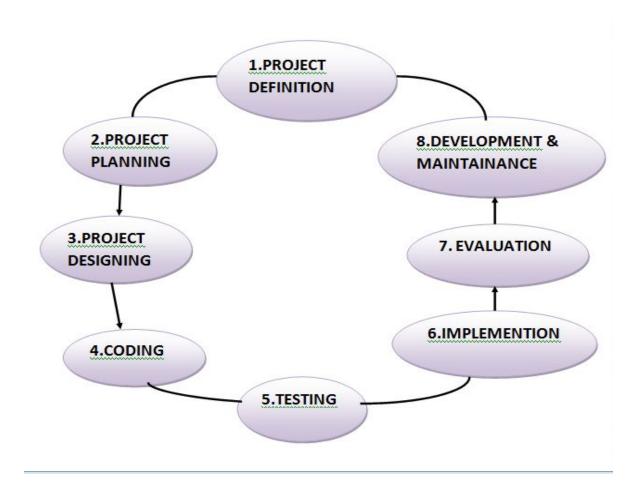


Figure: 4.1 Problem Statement

4.2 Functions To Be Provided

The main aim of this project is to know whether project is completed within tentative time. With the help of this project Organization come to know efficiency of their employees.

Provide online security by login facility.

User friendly.

Easy to operate.

4.3 Processing Environment

The Software Interface will be based on a standalone workstation concept. The front-end interface being used is designed in PHP. The back-end being used for database server is My-SQL.

Hardware Requirements

1	Core i3 Processors
2	256 MB of RAM
3	3.5GB of Hard Disk
4	One SQL based Server
5	Client Machine

4.4 Languages Used

4.4.1. PHP

PHP is an "HTML-embedded scripting language" primarily used for dynamic Web applications.



Figure:-4.4.1

PHP was written in the C programming language by Rasmus Lerdorf in 1994 for use in monitoring his online resume and related personal information. For this reason, **PHP** originally stood for "Personal Home Page". Hypertext Preprocessor is a server-side scripting language designed for web development but also used as a general-purpose programming language.

- PHP is an acronym for "PHP: Hypertext Preprocessor"
- PHP is a widely-used, open source scripting language
- PHP scripts are executed on the server
- PHP is free to download and use

4.4.2 HTML: Hyper Text Markup Language:

- HTML was invented in 1990 by a scientist called Tim Berners-Lee. The purpose was to
 make it easier for scientists at different universities to gain access to each other's research
 documents. The project became a bigger success than Tim Berners-Lee had ever
 imagined. By inventing HTML he laid the foundation for the web as we know it today.
- **HTML** is written in the form of HTML elements consisting of "tags" surrounded by angle brackets (like <html>) within the web page content. HTML tags normally come in pairs like and . The first tag in a pair is the *start tag*, the second tag is the *end tag* (they are also called *opening tags* and *closing tags*).

- **Hyper** is the opposite of linear.when the program had executed one action it went to the next line and after that, the next line and so on. But HTML is different you can go wherever you want and whenever you want.
- Mark-up is what you do with the text. You are marking up the text the same way you do in a text editing program with headings, bullets and bold text and so on.

4.4.3 CSS: Cascading Style Sheet

A CSS rule has two main parts: a selector, and one or more declarations: The selector is normally the HTML element you want to style. Each declaration consists of a property and a value. This page will be save with the extension .css. The property is the style attribute you want to change. Each property has a value. CSS enables us to make all pages of our website look similar and consistent. Allows us to make side-wide formatting changes from single location rather than having to edit each page individually.

CSS have 3 different levels:

- 1. Internal
- 2. External
- 3. Inline

4.4.4JavaScript:-

JavaScript is a scripting language that will allow you to add real programming to your WebPages. JavaScript was developed by **Brendan Eich** in **1995**. It is a **client side**, **interpreted**, **object oriented**, **high level scripting language**. However, there are more uses for JavaScript:

• **BrowserDetection**:-Detecting the browser used by a visitor at your page. Depending on the browser, another page specifically designed for that browser can then be loaded.

- Cookies:- Storing information on the visitor's computer, then retrieving this information automatically next time the user visits your page. This technique is called "cookies".
- **Control**:- BrowsersOpening pages in customized windows, where you specify if the browser's buttons, menu line, status line or whatever should be present.
- Validate:-FormsValidating inputs to fields before submitting a form.An example would be validating the entered email address to see if it has an @ in it, since if not, it's not a valid address.

Software Requirements

1	Operating system
2	Wamp as Web Server
3	Notepad++ as Editor
4	Mysql as Database
5	Google Chrome, Mozilla Firefox 3.5 or Internet Explorer 7 (or later) .

4.5 Solution Strategy

We have with us the details of the existing system and the requirements of the user for the new system. Designing is the most important part of the software development lifecycle. It requires careful planning and logical thinking on the part of the software designer. Designing the software means how the various parts of the software are going to meet the user requirement and goals. It should be done with utmost care as a simple mistake or miscalculation at this stage can result in errors which can be compounded manifold as the development process moves up the development hierarchy.

System Design attempts to accomplish the following:

- Improve productivity of analysts and programmers.
- Improve documentation and subsequent maintenance and enhancements.

- Cut down drastically on cost over runs and delays.
- Improved communication among the users ,analysts, designers and programmers
- Standardize the approach to analysis and design
- Simplify design by segmentation

Topic-5

FEASIBILITY ANALYSIS

Before the analysis is done, the feasibility study needs to be done so as to check whether
the system is feasible to run on the machines or not. Each and every aspect was judged
and after this study.

• 5.1 Operational Feasibility

Operational feasibility is a measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development. The operational feasibility assessment focuses on the degree to which the proposed development projects fits in with the existing business environment and objectives with regard to development schedule, delivery date, corporate culture, and existing business processes.

5.2 Technical Feasibility

The various schedules were assigned keeping in mind the cost and performance of the system. The hardware requirements were taken into consideration so that the system runs on the proper platform. SO it fulfills the technical feasibility. So, our project can be run any operating system like window 7,8etc...so it is technical feasible.

5.3 Economic Feasibility

Each and every system requires that the cost being taken into consideration. Our system too had considered this. Because, our project reduce the extra cost for the manual labour as well as costly software. That's why the system is considered best which is being

produced with better efficiency with reasonable cost and we have tried to achieve this target so as to make our system efficient in every aspect.

5.4 Behavioral Feasibility

Our project can be changed according to user's requirement at any time because it is dynamic in nature, so it is fulfill the behavioral feasibility.

Topic-6

PROJECT PLAN

Project planning establishes a plan to develop the project. It describes the technical tasks to be conducted, the risks that are likely, the resources that will be required the work item to be produced, and a work schedule.

6.2 Project Schedule

The following steps were followed in developing the application:

6.2.1 Study , Analysis and Requirement Specifications

The study of the existing system and its drawbacks gave an idea about what kind of interface was required. The study was conducted through information gathering and studying the existing system.

6.2.2 Design of the Proposed System

The next step was to design the web pages for my website. For example gallery and Notes pages. Then I added the images to the web pages. In this phase, the project was broken down into various modules.

6.2.3 Coding of the Design System

A modular approach was followed, where , in each module a well-defined procedure was developed independently. In this step different codes are used for insert , update and retrieve data from the database. In coding I use different validation codes and queries to fetch data.

Topic-7

DEVELOPMENT SCHEDULE

Project Schedule is a list of activities that need to be performed in order to fulfill the project scope. This list is organized in a logical sequence, also called the schedule network logic. The list consists of activity duration, constraints, inter-dependencies among the various activities, required to complete the schedule activity. Project schedule specifies the planned start and finish dates of each activity likely to be executed in a project. The project schedule serves as a baseline against which the project progress can be tracked.

Topic-8

SYSTEM REQUIREMENT SPECIFICATIONS

8.1External Interface and Data Flows

8.1.1 User Display and Report Format

The user display includes the various forms of the project. The user display should provide the user with a friendly environment so that it is easy for the user to use the system. The various user display forms used in the project are given below:

1. Sign up form

2.Login form

8.2 Data flow Diagram

Data flow diagramming is a graphical technique that depicts the information flow and the transform that are applied as data move from input to output. They are part of the structure model in the software development life cycle.

8.2.1 Basic Data Flow Notation

SYMBOL	MEANING
	Processing
	External Entity
	Data Flow
	Data Store

8.2.2 Constructing a DFD

Rules for drawing DFD's:

- Process should be named and numbered for easy reference. Each name should be representative of the process.
- The direction of flow is from top to bottom and from left to right. Data traditionally flows from source to the destination although they may flow back to the source. One way to indicate this is to draw a long flow line back to a source. An alternative way is to

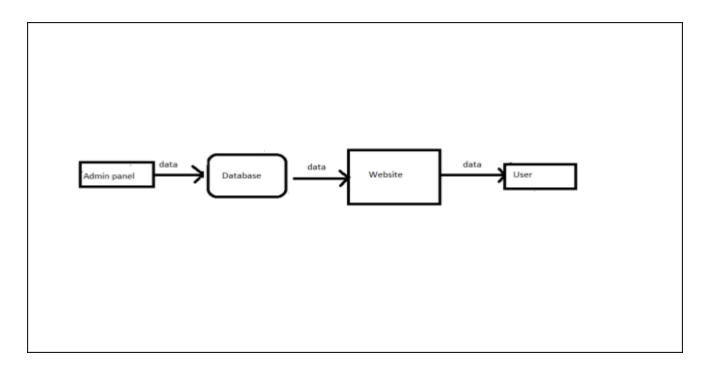
repeat the source symbol as a destination. Since it is used more than once in the DFD it is marked with a short diagonal.

- When a process explodes into lower level details, they are numbered.
- The names of data stores and destinations are written in capital letters. Process and data flow names have the first letter of each work capitalized.

8.2.3 Silent Features of DFD's

- The DFD shows flow of the data not to control loops and decision re controlled considerations do not appear on a DFD
- The DFD does not indicate the time factor involved in any process whether the data flows take place daily, weekly, monthly or yearly.
- The sequence of events is not brought out on the DFD

LEVEL-0 DFD



8.3.1 Data Dictionary

The data dictionary is used to create and store definitions of data, location, format for storage and other characteristics. The data dictionary can be used to retrieve the definition of data that has

already been used in an application. The data dictionary also stores some of the description of data structures, such as entities, attributes and relationships. It can also have software to update itself and to produce reports on its contents and to answer some of the queries.

They are:

- Asking or interviewing
- Determining from the existing system
- Analyzing the critical success factors
- Experimentation and modeling.

8.4 Functional and Performance Specifications Functional Performance

Specification(FPS) is a technique to define the requirements of a project, product or service, based on the required Functions and the specific needs related to those Functions. The Functional Performance Specification (FPS) technique enables the owner to document their performance requirements in terms of functions and needs without reference to a specific solution. For each function, needs are expressed in terms of assessment criteria, levels of performance and a flexibility for each level

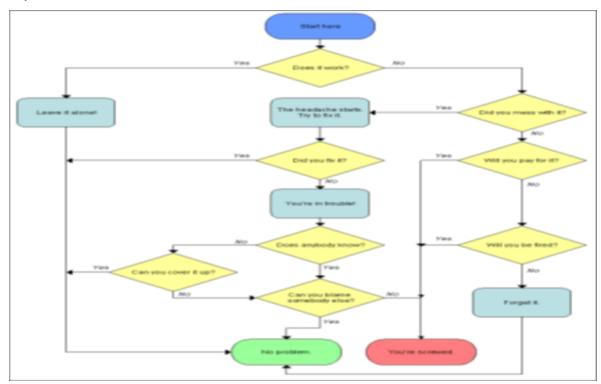


Figure 8.4

Using the FPS technique, Needs and expected performance are expressed without reference to a specific solution. The client defines the needs in terms of what the solution must **do**, rather than what it must **be**. The Functional Performance Specification document provides a common understanding of project needs between the client and the supplier and it allows for a broader range of innovative solutions that meet the client needs. Documenting needs through the FPS technique allows the owner to obtain innovative solutions that best meet the actual requirements.

The development of an FPS encourages constructive dialogue with the client and enables the provider to express greater creativity in the delivery of solutions. Using this technique to document needs changes the owner/supplier relationship from an obligation to respond to a predetermined technical specification to an obligation to achieve a result.

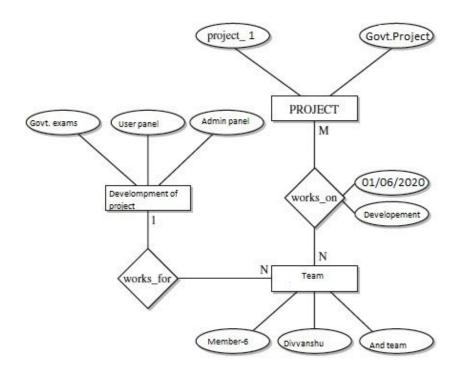
8.4.1 Use of FPS Technique

- Defining project goals and requirements.
- Identifying business needs to develop or improve business processes
- Restructuring organizations.
- Defining requirements for Design Build projects.

Topic-9

DESIGN

9.1Entity Relationship Diagrams:



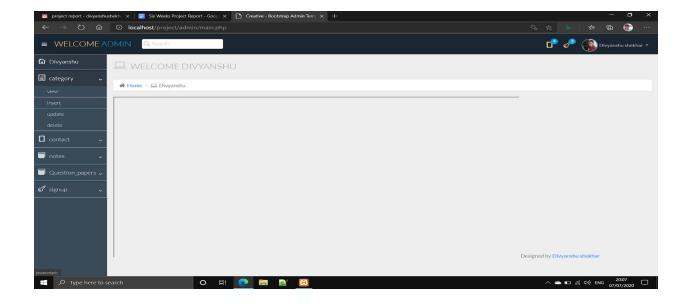
9.4 Screenshots of user,admin,database

Admin panel:-

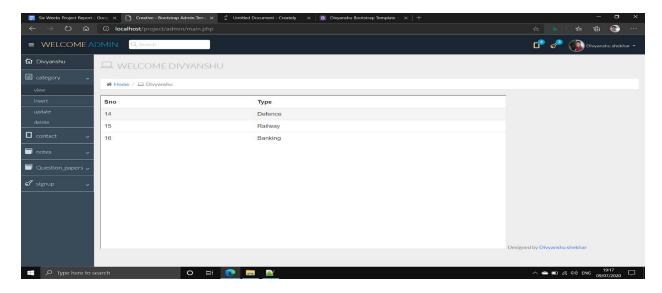


Login page:-This is the page through which admin can enter into the dashboard. To enter into the dashboard admin has to give proper user name and proper password.

Dashboard:-This is the page where admin can make changes.

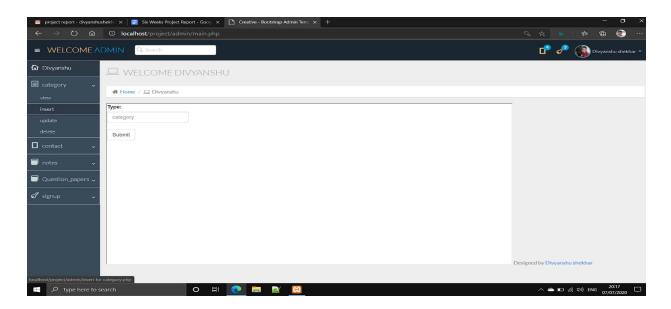


View:-It is the page where the admin can view the contents of the category.



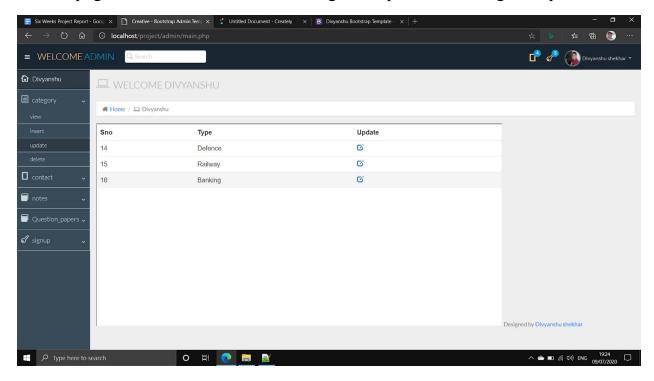
Insert:

It is the page where admin can insert the contents according to requirement.



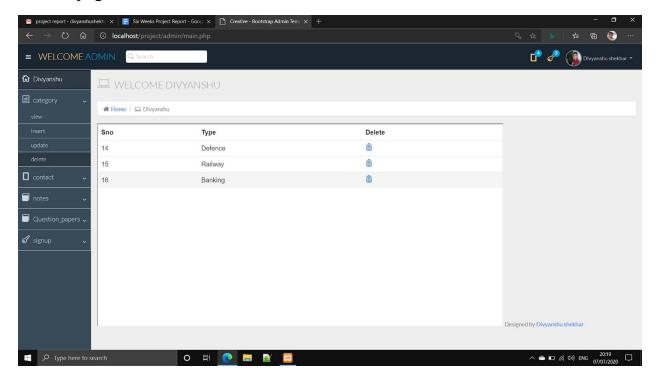
Update:-

It is the page where admin can make changes or update according to requirement.



Delete:-

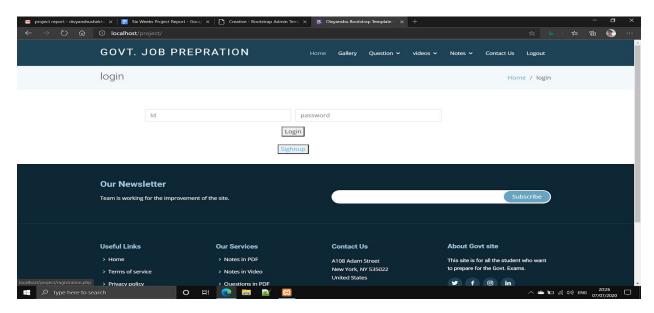
It is the page where admin can delete the content.



These options are similar for all the tables.

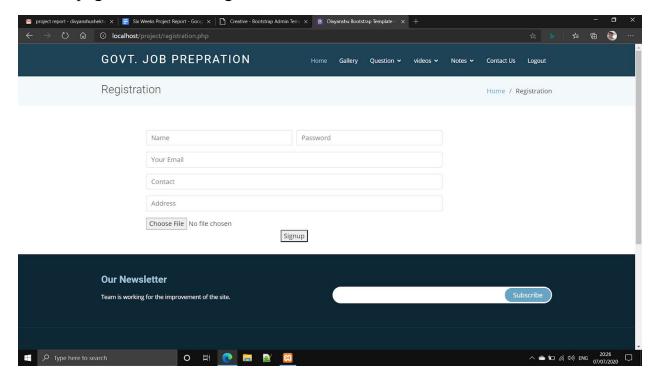
User panel

Login page:-It is the page for users where the user has to login for using our website.

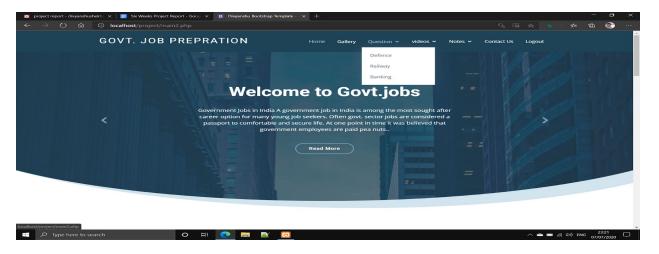


Registration:-

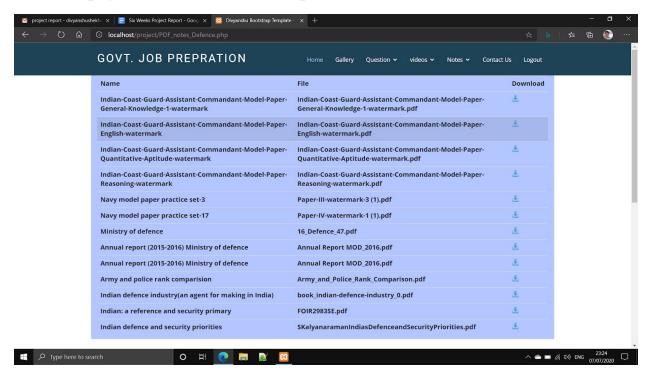
It is the page where users register or create accounts to enter into our website.



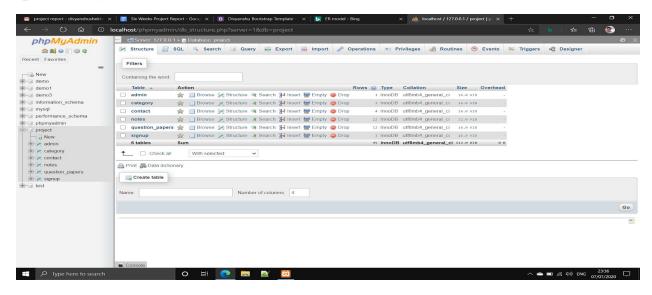
User page:- It is the page where the user can use our contents according to his need.



From this page user can download the pdf or notes.



Database:—It is a database view page here all the datas available which is uploaded by the admin.



Topic-10

TESTING

Once the coding phase completed, testing phase takes place. The testing process focuses on the conducting tests to uncover errors and to ensure that the given input will produce the desired output. The project has been tested on raw data.

11.1Test Strategy

- ☐ **Unit Testing**: In this individual modules are tested differently. We apply the different test cases for right output that are following define:
 - Test case 1: We test the login form with different inputs given to the form. In first case the right user name and password enter by the user/admin in form and submit. The web page is successfully opened.
 - **Test case 2**:In second case user/admin enter the wrong user name and password then submit. Now the error message print that not login.
 - Integration Testing: Integration testing is a systematic technique for testing
 the different modules together. The different types of inputs given to integration
 system and checked out whether right output will coming or not.
- □ System Testing: on my project all pages are working properly.
 □ Acceptance Testing: The client side ensure the user has accepted the system.
 □ Functional Testing: In this testing the validations are tested they work correctly. The login and sign up forms are tested for validations and all are working well the validation is that no user can access any page or the site without login.
- □ **Usability Testing:-** The usability testing apply on the content of the website which the developer make usable to the user. The content like videos is visible for the user and PDF is downloadable.

- ☐ **Compatibility Testing:** It is working on Window 10 in core i3 not hard system requirement.
- ☐ **Database Testing:-** In database testing we test the queries that are used to insert, delete, update the data in database. In the database all the contents are working properly.
- ☐ **Link Testing:** The link testing is used to test the links that used for navigate from one page to another page.all the links are working.

11.2 Test Cases Designed

The primary objective of test case design is to derive a set of tests that are used for uncovering errors in software. The test case specification is the major activity in the testing process. Careful selection of test cases that satisfy the requirements is essential for proper testing. Various characteristics of test cases that are required for portal are:

- A good test has a high probability of finding an error.
- A good test in not redundant.
- A good test should be neither too simple not too complex.

11.2.1 Test Results

- Actual Results: pass / failed.
- If pass –What actually happen when you run the test.
- If failed put in description of what you've observed.

Once code has been generated, project must be tested to uncover as many errors as possible before delivery to the customer. The testing process ensuring that all statements have been tested, and on the functional elements that is conducting test to uncover errors and ensures that defined input will produce actual results that agree with required results.

The table shows, that more than half the errors one can have in a system are introduced during requirements analysis. On the other hand, one only discovers a minority (5%) of the errors in a system during requirement analysis. Another point to be noted is that 55% of the faults are introduced in the first phase of the software development project.

Topic-11

IMPLEMENTATION

12.1 Tools Used For Implementation

WINDOW'S windows-10

Language PHP

Implementation involves placing the completed and tested system of hardware and software into the actual work environment of the users. As the system is tested it starts to move into the implementation phase. Ideally the system should be completed and fully tested before implementation gets under way.

As soon as the first phase of implementation- file set-up-starts, all system documentation should be available, user manuals, procedures manuals, computer operating instructions and security procedures. The system then passes from the development staff to the computer operations personnel and once the system is live, strict procedures should be enforced governing programmer's access to programs and files.

There are both technical & people oriented activities during this stage.



Figure:-12.1

13.2 Future Scope

-: Bibliography (Government Exams):-

I describe my "Government Exams" Project Bibliography by the help of these points-

1.Owner name-Divyanshu shekhar

Detail-This is divyanshu shekhar ,from mahishi ,saharsa(bihar),I have completed matric from ADPJ High school mahishi,now i am the student of CDL Govt. poly. collage with the branch of CS Engineering in 4th sam.

- 2.Project title-Government Exams
- 3.Date of project submission-11-july-2020
- 4. Company name-Infosys solitaire pvt. ltd.

- 5. Trainer name-Miss. Chahat arora (PHP trainer)
- 6.Used language-HTML+CSS+JS+PHP+BOOTSTRAP
- 7.Include contents in project-Notes, VIdeos and Question papers etc...