**ENGLISH LEARNING WEBSITE**

**A Project Report**

Submitted in partial fulfilment of the Requirements for the award of the Degree of

**BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)**

**By**

**DILIPKUMAR JADAM**

**------------------------------**

**Under the esteemed guidance of**

**Prof. Ms. Crimita Pereira**

**Prof. Mr. Ashish R. Shah**

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**DEPARTMENT OF INFORMATION TECHNOLOGY**

**JASHBHAI MANGANBHAI PATEL COLLEGE OF COMMERCE**

(Affiliated to University of Mumbai)

**MUMBAI, 400 104**

**MAHARASHTRA**

**2022-2023**

**JASHBHAI MANGANBHAI PATEL COLLEGE OF COMMERCE**

**(Affiliated to University of Mumbai)**

**MUMBAI –MAHARASHTRA**

DEPARTMENT OF INFORMATION TECHNOLOGY

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**CERTIFICATE**

This is to certify that the project entitled, "ENGLISH LEARNING WEBSITE", is Mr. Dilipkumar Jadam beanfield work of bearing Seat. No: 2153 submitted in partial fulfillment of the requirements for the award of degree of

BACHELOR OF SCIENCE in INFORMATION TECHNOLOGY from University of Mumbai.

**Internal Guide Coordinator**

**Date:**

**External Examiner**

**College Seal**

# ABSTRACT

This project describes about the teaching and learning English in global working area in active atmosphere. In this project user will interact with people from different cultural background from different countries, to learn and understand more about English, so that they can improve their communication skill, more efficiently.

In our website based English learning project, user can learn English through PDFs, notes, video and audio lectures that we will provide on our website.

On this website user can check there level of understanding English by passing some test on the website. User can also enjoy video calling and chating with random peoples and communicate with them in English.

# ACKNOWLEDGEMENT

I would like to place my sincere gratitude whom so ever has that they have contributed to the successful completion of this project directly or indirectly.

I wish to thank the principle of my college **Ms.Pranita Kamath,** our **Prof.MR.Ashish R Shah** as well as the management and the library staff for their great support throughout my graduation years.

I take this opportunity to expresss my profound gratitude and deep regard yo my guide **Prof.Ms.Crimita Pereira** as well as **Ms.Anuja Narvekar** and **Ms.Kajal Mehta** , without whose guidance and critical appreciation this project would haven’t be completed.

Right From its inception, this has been shaped by her expert opinions and she has helped me to improve the project in all manners and achieve the level that it has acquired.

Last but not the least I place a deep sense of gratitude to my family members and my friends who have been inspiration during the preparation of this project work.

# DECLARATION

I here by declare that the project, “English Learning” done completely by me, and it has not been in any case duplicated to submit to any other university for award of any degree, to the best of my knowledge other than me no one has submitted to any other university.The project is done in partial fulfillment of the requirement for the award of the degree of BACHELOR OF SCIENCE(INFORMATION TECHNOLOGY) to be submitted as final semester project as part of our curriculum.

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# INTRODUCTION

English is a constantly evolving language that has been impacted by a wide range of diverse cultures and languages, such as Latin, French, Dutch, and Afrikaans. Vocabulary is central to English Language because without sufficient vocabulary people cannot understand others and express their own ideas. The knowledge of English is highly valued, as it is associated with wealth and social status. English also helps to understand different cultures and different ways of life better, as well as enables people representations different nations to become aware of the worlds diversity. Therefore English has become one of the most popular language of the world. In this website people can learn English more efficiently without putting any extra effort on it. On this website user starts learning English with different types of study material that we will provide on our website like pdfs which contains notes, audio and video lectures are also available so that you can learn more interactively. On this website user can also enjoy features of video calling and chating with random people but in English so that you can develop your confidence to communicate in English, but to enable this feature you have to pass some test which will be in a MCQ format this test shows that atleast you know the basic English to move a ahead.

# BACKGROUND

Nowadays, Speaking English plays an very important role in the life of the every person because English is the one language that is used worldwide. In this English Learning project, will teach you English with basic to advanced level and try to improve your communication skill. we will also provide features to talk with peoples from different countries using video calling these features helps you to build confidence to talk in English.

## OVERVIEW

India , a country with natural beauty and historical places , is visited by many foreigners from different countries .The purpose of foreigners ‟visit to this country is diverse .The most dominant purpose is tourism . The country was listed as the" best value destination" . There are some other reasons to travel the country such as political, business , official , Religious Place and education purpose ,and soon. However, being foreigners in India, they face some challenges during residing in the country such as lack of getting language and transport information . For meeting up some of the requirements by the travelers , we have come up with an online solution by developing website .The chapter describes the objective of our project .Besides ,it describes the scope and limitation of our web page. India offers its tourists the highest mountains, the deepest ravines and valleys, wide deserts, white sand beaches, reefs, archipelagos, coasts, dense forests, dry plains, productive farmlands, flowing rivers, and many other natural wonders.

**OBJECTIVE**

This website is very usefull to all the people who love to travel in planning a time efficient trips where he or she can save time to visit new places rather than getting lost in an unaware place . Our main aim to “Help tourist to search places and increase tourism”.

## SCOPE AND LIMITATION

The scope of our project is mainly for the travelers of India. Moreover ,Indians people particularly the new comers to South India can also use the website.

For knowing the route and source to destination cost by transportation medium.

Currently our project is covering only South India , soonly travelers who visit South India, can use the website to know the transportation information of this region. The project has a wide scope, as it is not intended to a particular organization. This project is going to develop generic website (software) , which can be applied by any businesses Organization. More over it provides facility to its customer. Also the website is going to provide a huge amount of summary data.

## 

## ACHIEVEMENTS

From This Project I learned website development lifecycle works in which Mainly the languages I used in developing another

Web Application . I learned how to communicate and improve skills by interacting with client.

**SURVEY OF TECHNOLOGIES**

* 1. **List of Technologies**

Following are the list of the technologies / software which can be used to develop a system based on particular requirements: -

**java:** java is general purpose programming language which is class-based object-oriented programming language mostly used for the development of client-server web applications.java provides the best level of security and speed. It is a general-purpose programming language intended to let programmers write once, run anywhere. Java is a high-level, class-based, object- oriented programming language that is designed to have as few implementation dependencies as possible

**PHP:** A rather easy language to learn, PHP is object-oriented and uses a three Layered model to help create dynamic mobile apps and web application. It works great for apps that require database integration. PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a common Gateway interface executable. PHP is a general-purpose scripting language that is especially suited to server-side web development, in which case PHP generally runs on a web server

**Python:** Python is one of the most trending programming languages. It is used In machine learning. Deep learning and Artificial intelligence. It is also Used in IOT and other automation stuffs. Python is dynamically-typed And garbage-collected.it supports multiple programming paradigms, Including structured, object-oriented and functional programming. Python can serve as a scripting language for web applications, e.g., via mod\_wsgi for the Apache webserver

**MySQL:** MySQL is an open source Relational Database Management System (RDBMS). MySQL is a component of the LAMP stack. It is used for Many database-driven web applications. MySQL has stand-alone Clients that allow users to interact directly with a MySQL database Using SQL, but more often, MySQL is used with other programs to Implement applications that need relational database capability

**JavaScript:** JavaScript, is often abbreviated JS, is a programming language That is one of the core technologies of the world wide web, alongside HTML and CSS. As of 2022, 98% of websites use JavaScript on the Client side for webpage behavior, often incorporating third-party Libraries. All major web browsers have a dedicated JavaScript Engine to execute the code on user’s devices.

## comparative study

|  |  |  |  |
| --- | --- | --- | --- |
| **Technology** | **Features** | **Advantages** | **Disadvantages** |
| Java | * Object oriented. * Platform independen t * Mobile developmen t | * Speed * Provides highsecurity. * Powerful Debugging   . | * Takes more memory space. * Cost increases since processing and memory requirement is high |
| PHP | * Popular scripting language   .   * Simple syntaxes. * Provides inbuilt JSON encode and decode. | * Operating System independent   .   * Cheap hostingservices. * Stable. | * Bad error handling. * Speed is not that great. * Security is not very high. |
| Python | * Object oriented * Large Standard Library. * Used in AI, ML, DL, IOT. | * Cross Platform. * Easy to learn. * Implementatio nis simple. | * Comparatively slower than other languages. * No mobile development support. |
| C# | * Modern Programmin glanguage. * Compatible with other languages. | * Used in Game Development. * Used in desktop software development. | * Slow as compared to other languages. * Less flexible. |
| JSON | * Fast data transfer. * Human readabl eformat. | * Lightweight. * Language independent   . | * Complex inlarge projects. |
| MySQL | * Quick and Reliable. * Scalable. * Data Types. * Secure. | * Data security. * High performance   .   * Complet e workflow   control. | * MySQL is opensource. * Big names are jumping ship. |

* 1. **Selected technology**

1. **HTML:**

HTML (Hyper Text Markup Language) is the most basic building block of the web. It defines the meaning and structure of web content. Other technologies besides HTML are generally used to describe a web page’s appearance/presentation (CSS) or functionality/behavior (JavaScript).

“Hypertext” refers to links that connect web pages to one another, either within a single website aspect of the web. By uploading content to the internet and linking it to pages created by other people, you become an active participant in the World wide web.

1. **CSS:**

Cascading Style Sheet (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML (including XML dialects such as SVG, MathML or XHTML). CSS is a cornerstone technology of the world wide web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility; provide more flexibility and control in the specification of presentation characteristic; enable multiple web pages to share formatting by specifying the relevant CSS in a separate.

1. **JavaScript:**

JavaScript, is often abbreviated JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. As of 2022, 98% of websites use JavaScript on the client side for webpage behavior, often incorporating third- party libraries. All major web browsers have a dedicated JavaScript engine to execute the code on user’s devices.

JavaScript is high-level, often just-in-time compiled language that conforms to the ECMAScript standard. It has dynamic typing, prototype-based object-oriented, and first- class functional, and imperative programming style.

1. **PHP:**

PHP is general-purpose scripting language geared toward web development. It was originally created by Danish-canadian programmer Ramus Lerdorf in1994. The PHP reference implementation is now produced by the PHP group. PHP originally stood for personal home page, but it now stands for the recursive initialism PHP: hypertext

preprocessor.

PHP code is usually processed on a web server by PHP interpreter implemented as amodule, a daemon or as a common gateway interface(CGI) executable. On a web srver, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would from the whole or part of an HTTP response.

**4) MySQL:**

MySQL is an open source relational database management system (RDBMS). Its name is a combination of “my”, and “SQL”, the abbreviation for structured Query Language. A relationaldatabase organizes data into one or more data tables in which data may be related to each other; these relations help structure the data.

MySQL is free and open-source software under the terms of the GNU general public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the swedish company MySQL AB, which was bought by sun microsystems.

# REQUIREMENTS AND ANALYSIS

**Problem Definition**

Till now peoples thinking that, they have to go and learn English at some specific classes or tutorial so they have to give some

of their time at that particular class and this is a very big disadvantage of English learning.

As they are going to particular class to learn English, then obviously they have to pay fees and this is also a another disadvantage of learning English

* Time consuming in search for better tutor and source

* Vocabulary words with multiple meanings

* Variation of the language

* The Limited Environment to Practice

* Difficulties Retaining New Knowledge Learned in Class

# Feasibility Study

Feasibility study is the process of determination of whether or not a project is worth doing. Feasibility studies are undertaken within right time constraints and normally culminate in a written and oral feasibility report. The contents and recommendations of this feasibility study helped us as a sound basis for deciding how to precede the project. It helped in taking decisions such as which software to use, hardware combinations, etc.

In the diagram, the feasibility analysis starts with the user set of requirements. With this, the existing system is also observed. The next step is to check for the deficiencies in the existing system. By evaluating the above points a fresh idea is conceived to define and quantify the required goals. The user consent is very important for the new plan. Along with, for implementing the new system, the ability of the organization is also checked. Besides that, a set of alternatives and their feasibility is also considered in case of any failure in the proposed system. Thus, feasibility study is an important part in software development.

A Feasibility Study is a high-level capsule version of the entire System analysis and Design Process. The study begins by classifying the problem definition. Feasibility is to determine if it’s worth doing. Once an acceptance problem definition has been generated, the analyst develops a logical model of the system. A search for alternatives is analysed carefully.

# REQUIREMENT GATHERNG

1. Functional Requirements:

As a solution for the present learnig system, this project provides all the information needed by the admin, without the need of the paper work. This project also reduces the time and money in search of best tution or tutor and pay them fees to learn English.

Non-functional Requirements:

1. Security: The application is secure enough, so as not to compromise any data in the database. The user and administrator accounts are duly password protected in order to ensure security of each user also to maintain integrity of the information it holds.The privileges attached to each account of user are strictly adhered to and are not vulnerable to any kind of circum.
2. Speed & Performance: The website which includes study material for learning English in the notes and lectures panel is fairly quick in execution. The response time is not too slow. The query and processing time of the said interface are reasonably fast. Any number of user are able to place appointment and access their respective account at a time.
3. Integrity: Data Integrity and referential integrity are maintained in the database tables and interfaces. Input-Output fault trapping and bad fault trapping, both are handled immediately.
4. Usability: Look and feel of the screen elements on the interface ,their density, layout, flow, colours , keyboard shortcuts, are simple and easy to follow and use.

The feasibility study can be further decomposed into following:

 Technical Feasibility:

In Technical Feasibility study, one has to test whether the proposed system can be developed using existing technology or not.It is planned to implement the proposed system using Android technology. The license for Microsoft visual studio is available for the people, so it’s feasible to use this Android by the Laymen.

 Behavioural Feasibility:

System will require simple desktop computers. The system is very user-friendly so any laymen has knowledge about the computer can use it. This makes it behaviourally feasible.

 Economic Feasibility:

Hardware requirement for the system are desktop computer. It is available at economically cheap price and hence can easily be produced. Also the software requirement for the system are available at economically cheap prices.

 Operational Feasibility:

The operational feasibility of the system lies in the fact that it is user friendly, easy to use and has a simple user interface. The proposed system has worked successfully thereby achieving the intended functionalities and resulting in consistent performance and better out.

**GANTT CHART**

 A Gantt chart is a horizontal bar chart.

 Frequently used in project management, a Gantt chart provides a graphical illustration of aschedule that helps to plan, coordinate, and track specific tasks in a project.

 Gantt charts may be simple versions created on graph paper or more complex automatedversions created using project management applications such as Microsoft

Project or Excel.

 It is like Time table of our Project which show Scheduling and planning of our project

in dateand months.

 Sequence of your project completed.

# PLANNING AND SCHEDULE

Duration

(Months)

Jul Aug Sept

2022 2022 2022

Oct

2022

Nov

2022

Dec

2022

Jan

2023

Feb Mar

2023 2023

Activities

(Phase)

Requireme

-nt Gathering

Plan

ned

Actu

al

Analysis

Document-

ation

Design

Code And

Testing

# CONCEPTUAL MODELS

 A conceptual model is a representation of a system, made of the composition of concepts which are used to help people know, understand, or simulate a subject the model represents. It is also a set of concepts. Some models are physical objects; for example, a toy model which may be assembled, and may be made to work like the object it represents.

 The term conceptual model may be used to refer to models which are formed after a conceptualization or generalization process..

 Conceptual models are often abstractions of things in the real world whether physical or social. Semantic studies are relevant to various stages of concept formation.

 Semantics is basically about concepts, the meaning that thinking beings give to various elements of their experience

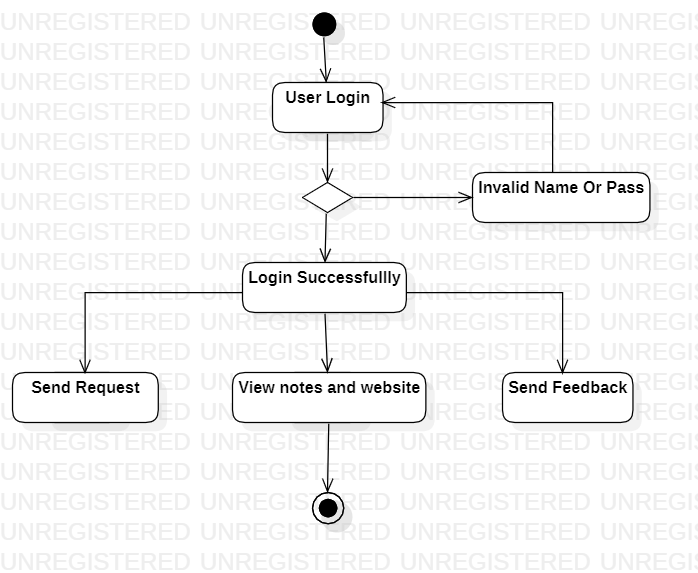
**Activity Diagram Of Admin**

Activity diagrams are mainly used as a flowchart that consists of activities performed by the system. Activity diagrams are not exactly flowcharts as they have some additional capabilities. These additional capabilities include branching, parallel flow, swimlane, etc



**Activity Diagram Of User**

Activity diagrams are mainly used as a flowchart that consists of activities performed by the system. Activity diagrams are not exactly flowcharts as they have some additional capabilities. These additional capabilities include branching, parallel flow, swimlane, etc.



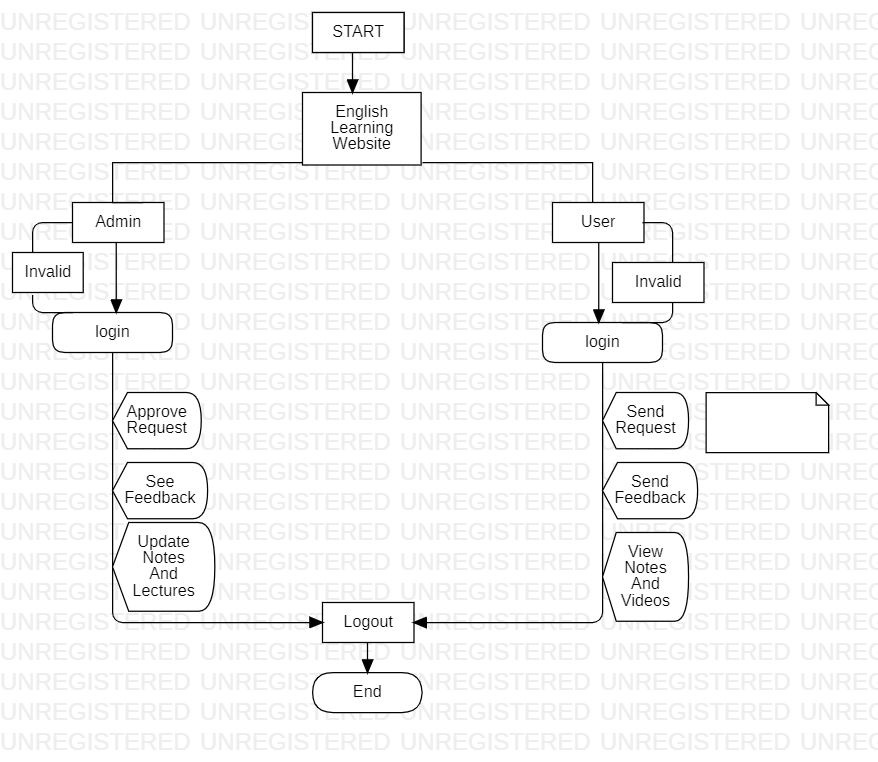
**Dfd Diagram**

DFD is the abbreviation for Data Flow Diagram. The flow of data of a system or a process is represented by DFD. It also gives insight into the inputs and outputs of each entity and the process itself. DFD does not have control flow and no loops or decision rules are present. Specific operations depending on the type of data can be explained by a flowchart. Data Flow Diagram can be represented in several ways. The DFD belongs to structured-analysis modeling tools.



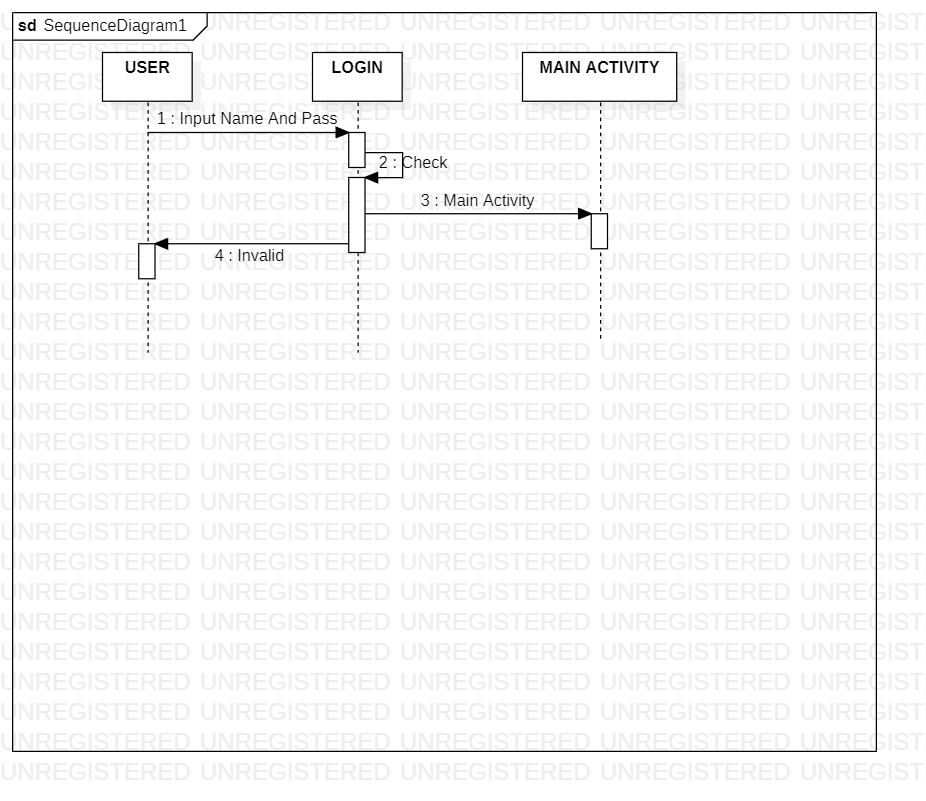
**System Flow Chart**

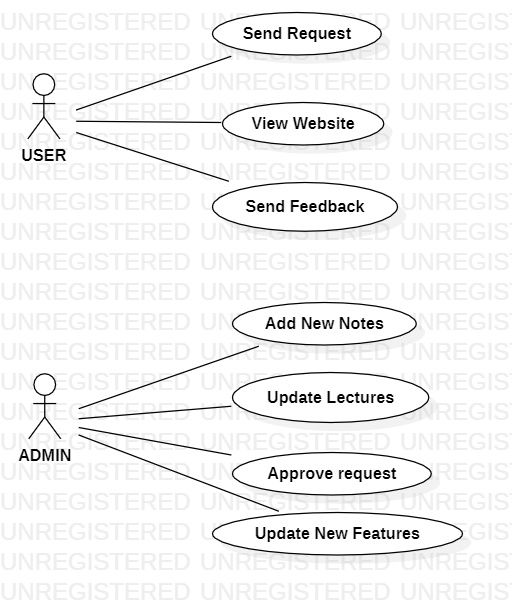
A flow chart is one of the many project management charts and tools you need as a project manager to control a project. With the right project management software, your management can be even more productive and efficient. But before we get to that, let’s look a little more closely at what a flow chart is outlining.



**Sequence Diagram**

Sequence Diagrams – A sequence diagram simply depicts interaction between objects in a sequential order i.e. the order in which these interactions take place. We can also use the terms event diagrams or event scenarios to refer to a sequence diagram.





**Use Case Diagram**

Use-case diagrams describe the high-level functions and scope of a system. These diagrams also identify the interactions between the system and its actors. The use cases and actors in use-case diagrams describe what the system does and how the actors use it, but not how the system operates internally.

**System Design**

**Basic Module**

**User Module**

**\*** The Main Motive of User To Visit This Website To Learn English .

\* When User Enters In Website ,He Will Get User Interface At Home Page Where He Will Get Whole Options On videos Lectures and notes.

\* Usually What Is The role Of The user in our project that user can send request to the admin to get into the website.After visiting the website ,the user can also send some their doubt about lectures and queries.

\* user also has login section through which he can login and save his data which will we useful in future use.

**Admin Module**

**\*** In Admin module admin can approve the request sent by user .Admin can add new study material and update new features also can view feedback sent by admin by user.

**SCHEMA DESIGN**

1. **Table For User Registration**

|  |  |  |
| --- | --- | --- |
| **FIELD** | **DATA TYPE** | **CONSTAINT** |
| User Name | CHAR(50) | PRIMARY KEY |
| Password | VARCHAR(20) | NOT NULL |
| Email | VARCHAR | NOT NULL |
| Address | VARCHAR(250) | NOT NULL |
| Mobile No. | INT (10) | NOT NULL |

1. **Table For Admin Login**

|  |  |  |
| --- | --- | --- |
| **FIELD** | **DATA TYPE** | **CONSTAINT** |
| NAME | CHAR(50) | PRIMARY KEY |
| PASSWORD | VARCHAR(20) | NOT NULL |

**TESTING METHODOLOGY**

**Introduction**

Software testing is an activity to check whether the actual results match the expected results and to ensure that the software system is defect free. It involves execution of a software component or system component to evaluate one or more properties of interest. Software testing also helps to identify errors, gaps or missing requirements in contrary to the actual requirements. It can be either done manually or using automated tools. Some prefer saying Software testing as a white box and black box testing.

**Strategic approach to software testing**

Software Testing is evaluation of the software against requirements gathered from users and system specifications. Testing is conducted at the phase level in software development life cycle or at module level in program code. Software testing comprises of Validation and Verification.

**Software Validation**

Validation is process of examining whether or not the software satisfies the user requirements. It is carried out at the end of the SDLC. If the software matches requirements for which it was made, it is validated. • Validation ensures the product under development is as per the user requirements.

• Validation answers the question – "Are we developing the product which attempts all that user needs from this software?”

• Validation emphasizes on user requirements.

**Software Verification**

Verification is the process of confirming if the software is meeting the business requirements, and is developed adhering to the proper specifications and methodologies.

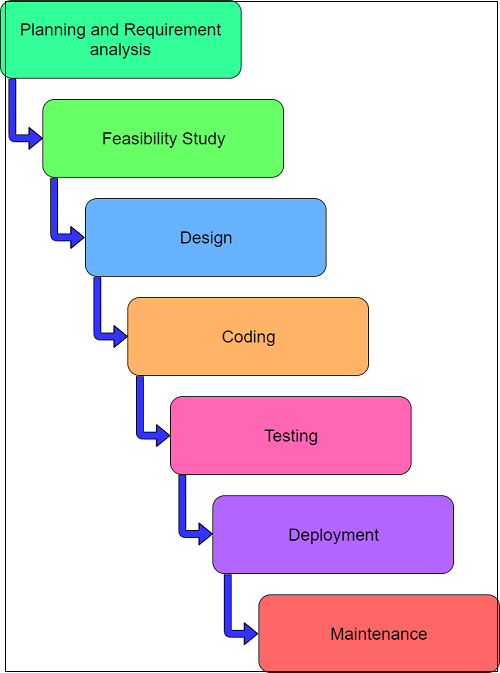
• Verification ensures the product being developed is according to design specifications. Sss Verification answers the question– Are we developing this product by firmly following all design specifications?

• Verifications concentrates on the design and system specifications.

• Levels of software testing. • Unit Testing: For testing paths within a unit. • Integration Testing: For testing paths between units.

• System Testing: For testing paths between subsystems.

As we are beginners so we don’t have the exact knowledge of developing any project. So Iterative Waterfall Model is the best suited methodology to be used for developing this project. Here we are not very much clear with the requirements of the project so there is more probability in changing the requirements and the strategies used accordingly. There will be need of going back to the previous whenever required. In iterative model we are building and improving the product step by step. Hence we can track the defects at early stages. This avoids the downward flow of the defects. In iterative model we can get the reliable user feedback. When presenting sketches and blueprints of the product to users for their feedback, we are effectively asking them to imagine how the product will work. In Iterative model the delivery of software is divided into increments or builds with each increment adding new functionality to the software product. In Iterative model each subsequent increment needs testing of new functionality, regression testing and integration testing of the new and existing functionality.



**Test Cases**

**White box Testing :** White Box testing was done after the completion of all the forms for the frontend. Each and every line has been personally scrutinized and checked for validating and correctness. Each line of code has been carefully read through and verified as per the intended working. This testing was carried out after integrating all the program files modules together. Black box Testing: The black box testing has been carried out quite a few times after the entire assembly was integrated and merged. It helped us identify the places which needed tweaks and corrections for optimum working; be it the frontend, backend. This testing was done towards the end of the project.

**Black box Testing**: The black box testing has been carried out quite a few times after the entire assembly was integrated and merged. It helped us identify the places which needed tweaks and corrections for optimum working; be it the frontend, backend. This testing was done towards the end of the project.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TEST CASE | TEST SCENARIO | INPUT | EXPECTED OUTPUT | OBTAINED OUTPUT |
| When Username & Password Is Filled And Submitted | Correct Username & Password  Correct Email id & Incorrect password  Incorrect Email id & Correct Password  Incorrct Email  Id & Invalid Password | Email Id: [fghsk@gmail.com](mailto:fghsk@gmail.com)  Password : DilipKumar123  Email id:  [Shivam@gmail.com](mailto:Shivam@gmail.com)  Password : Dilip908  Email:  [Shibam\*@mal.com](mailto:Shibam*@mail.com)  & Password: DlipKumar123  Email:  [Shibbham\*@mai.com](mailto:Shibbham*@mai.com)  & Password:  DilipKu637 | Successfully logged in  Invalid Login  Invalid Login  Invalid Login | Succesfully Loged in  Invalid Login  Invalid Login  Invalid Login |
|  |  |  |  |  |
| When Only Email ID is Filled And Submitted | Correct Email id and No Password | Email:  [Shivam\*@gmail.com](mailto:Shivan&@mocn.com) | Invalid Login | Invalid Login |
| When Only email id Is submitted  When Only Password Is Filled And Submitted | Incorrect email id and no Password  No Email ID And correct Password  No Email Id And Incorrect Password | Email :  [Fhifij&#@mail.com](mailto:Fhifij&#@mail.com)  Password : DilipKumar123  Password : FilipKumar123 | Invalid Login  Invalid Login  Invalid Login | Invalid Login  Invalid Login  Invalid Login |
| When Form Is Submitted | No Email And No Password |  | Invalid Login | Invalid Login |