

A Major Project Report

On

Web-Based Education and Accessibility of Quantum Learning

*Submitted in partial fulfilment of the
Requirement for the award of the degree of*

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In Department of Computer Science and Engineering



Under The Supervision of

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CANDIDATE’S DECLARATION

I/We hereby certify that the work which is being presented in the thesis/project, entitled “Web-Based Education and Accessibility of Quantum Learning ” in partial fulfilment of the requirements for the award of the Bachelor of Technology submitted in the School of Computing Science and Engineering of Galgotias University, Greater Noida, is an original work carried out during June-December 2021, under the supervision of Dr.V.Jayakumar, Assistant Professor, Department of Computer Science and Engineering/Computer Application and Information and Science, of School of Computing Science and Engineering , Galgotias University, Greater Noida

The matter presented in the thesis/project has not been submitted by me/us for the award of any other degree of this or any other places.

Samridhi Suri
Yash Kulshrestha

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Dr.V.Jayakumar
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CHAPTER-1

INTRODUCTION

The "E-learning Management System" has been developed to override the issues prevailing within the active manual system. This code is supported to eliminate and in some cases cut back the hardships visaged by this existing system. Furthermore this method is intended for the actual want of the corporate to hold out operations in a very sleek and effective manner.

The application is reduced the maximum amount as potential to avoid errors whereas coming into the info. It conjointly provides error message whereas coming into invalid knowledge. No formal data is required for the user to use this method. therefore by this all it proves it's easy. E- Learning Management System, as delineate higher than, will result in error free, secure, reliable and quick management system. It will assist the user to consider their different activities rather to consider the record keeping. therefore it'll facilitate organization in higher utilization of resources.

Every organization, whether or not huge or tiny, has challenges to beat and managing the data of Student, Assignment, QUIZ, CLASS, and QUESTION. each E-learning Management System has completely different Assignment wants, thus we tend to style exclusive worker management systems that area unit tailored to your social control necessities. this can be designed to help in strategic coming up with, and can assist you make sure that your organization is provided with the proper level of data and details for your future goals. Also, for those busy government World Health Organization area unit continuously on the go, our systems go with remote access options, which is able to enable you to manage your men anytime, in the slightest degree times. These systems can ultimately enable you to raised manage resources.

1.1 Abstract

The purpose of E-learning Management System is to automatise the present manual system by the assistance of processed equipment's and full-fledged laptop software system, fulfilling their needs, in order that their valuable data/information is keep for a extended amount with straightforward accessing and manipulation of identical. the desired software system and hardware area unit simply on the market and simple to figure with. E-learning Management System, as delineated higher than, will cause error free, secure, reliable and quick management system. It will assist the user to consider their different activities rather to consider the record keeping. therefore it'll facilitate organization in higher utilization of resources. The organization will maintain processed records while not redundant entries. meaning that one needn't be distracted by info that's not relevant, whereas having the ability to succeed in the data.

Functionalities provided by E-learning Management System:

- Provides the looking out facilities supported varied factors. like Assignment, TEACHER, QUIZ, QUESTION.
- E-learning Management System additionally manage the category details on-line for QUIZ details, QUESTION details, Assignment.
- It tracks all the data of Student, CLASS, and QUIZ etc
- Manage the data of Student.
- Shows the data and outline of the Assignment, TEACHER
- To extend potency of managing the Assignment, Student.
- It deals with observation the data and transactions of QUIZ.
- Manage the data of Assignment
- Writing, adding and change of Records is improved which ends in correct resource management of Assignment information.
- Manage the data of QUIZ
- Integration of all records of QUESTION.

1.2 Scope of the Project

It can help to gather complete management of data. In a very short time, the collection will be clear, simple and sensible. It will help the person to know the past year's management completely and clearly. It is also useful for all current activities related to the Web Based Learning. It will also reduce the cost of collection management and the collection process will continue smoothly.

Our project aims to do Business process automation, that is, we have tried to computerize various E-learning Management System processes.

- In a computer program one has to fill out various forms and a number of copies of forms that can be easily produced at a time.
- In a computer system, it is not necessary to create a manifest but we can print it directly, which saves our time.
- Helping employees to keep track of the effort expended in their workplaces.
- Effective use of resources by automatically increasing their productivity.
- The system generates a variety of information that can be used for a variety of purposes.
- Satisfy user requirements
- Easy to understand user and operator
- Easy to use Have a good user interface
- Extensive
- Delivery within schedule within budget.

1.3 Modules E-learning Management System

- Assignment Management Module: Used for managing the Assignment details.
- QUESTION Module: Used for managing the small print of QUESTION
- Category Module: Used for managing the small print of sophistication
- Student Management Module: Used for managing the data and details of the scholar.
- TEACHER Module: Used for managing the TEACHER details
- QUIZ Module: Used for managing the QUIZ information's
- Login Module: Used for managing the login details
- Users Module: Used for managing the users of the system

1.4 Objective

Over the past two decades, communication technology and web-enabled technologies have come together to create a new field of knowledge known as "Web-Based Teaching and Teaching Technology."

The main purpose of Web-Based Education: Experience Learning is the learning experience gained while implementing and using these technologies. This book discusses many of the styles and problems associated with Web-based Education, and explores the opportunities and challenges facing colleges and universities to effectively use and manage Web-based Education in their teaching environment.

One of the costs of using the web to access learning materials that web pages may contain links to other sections of web, thus allowing access to a large number of web based information.

CHAPTER-2

Requirement Engineering

2.1 Software Requirement Specification

Software Requirements Specification is generated at the end of the analysis process. The function and function assigned to the software as part of the system engineering is refined by establishing a detailed information description, a detailed description of performance and ethics, an index of operational requirements and design parameters, appropriate verification conditions, and other relevant data.

2.2 The proposed system has following requirements:

- System wants store data regarding new entry of Assignment.
- System must facilitate the interior workers to stay data of Student and realize them as per numerous queries.
- System ought to maintain amount record.
- System ought to keep the record of TEACHER.
- System ought to update and delete the record.
- System conjointly wants a quest space.
- It conjointly wants a security system to stop knowledge.

CHAPTER-3

Literature Review

In the study carried out by Liu (2017), it was stated that web-based learning began to appear more and more in distance education and related areas. The researcher examined an English teaching model in a multimedia classroom using web-based learning. The web-based learning activities were categorized as: web-supported, which is posting or distributing materials in a face-to-face course, web-enhanced, which is to improve a face-to-face course with internet resources, web-enabled, which supports face-to-face courses with online learning activities, and web-delivered, which is completely online.

Ekici and Delen (2016) aimed to examine the diaries shared by preservice teachers in the fields of science and mathematics in web-based environments within the context of "teaching practice" during their teaching practicum course. Two websites have been created to ensure that preservice teachers share their experiences. This ensures that the ideas of the participants are visible for the researchers to see the participants' understanding (National Research Council, 2000). The authors analyzed the 195 postings that the 65 preservice teachers shared about the three activities on the website. When the research findings were examined, it was determined that more detailed information about the subjects; evaluating the teaching methods used in the learning process and emphasizing the preparations before the lesson has been provided in the diaries of pre-service mathematics teachers. Likewise, based on the results of the study of Tuzel and Tok (2013), learners have many advantages in web-based environments such as: comfort, time-saving, economic efficiency, easy sharing opportunities, visual use, legible writing, reduction of writing and punctuation problems, and page layout.

Below are findings and comments excerpted from several pieces of research that have analyzed the performance of students who have been a part of Quantum Learning programs:

“The Quantum Learning model demonstrated a consistent pattern of positive impact on student achievement in 18 schools in four states. This impact included statistically and educationally significant gains in reading, mathematics, writing and more comprehensive measures of core academic achievement. Students, who have participated in schools implementing QL, have also shown a pattern of greater gains in achievement than comparison sample students not participating in the QL model.”

*External Evaluator for Program Improvement Schools
William Benn and Associates, 2003*

“With Quantum Learning, 17% of LD ISAT intensive math students met or exceeded the standards, compared to 0% in traditional classrooms.”

*Masters Study
Aurora University, IL*

“The students identified as performing below grade level, without Quantum Learning, would have been placed in remedial Math. After attending a 22-day Quantum Learning Program, 67% passed Algebra, while only 62% of regular students passed.”

*Masters Study
Thornton Township School District, IL*

“After Quantum Learning, two out of three students increased their grades.”

*Masters Study
Brock University, Canada*

“97% of students felt that they learned better in classes taught with Quantum Learning methods.”

*Paper presented at Eastern Educational Research Assoc. Conference
Tampa, FL*

“After attending Quantum Learning Programs, there was an average 85.8 point gain on SAT scores. 98% of students with a 1.9 and lower GPA, improved their GPAs by an average of one letter grade. Overall students across the A-F range, increased their GPA by half a point.”

*Doctoral Study
Northern Arizona University, AZ*

“After Quantum Learning training, learning-challenged 8th graders earned their best GPAs average ever (only one D and no Fs).”

*Case Studies
Northwood Middle School, IL*

“After Quantum Learning, 98% of at-risk children have been successful in achieving average or above-average success in literacy acquisition skills and are no longer in need of special education.”

Action

Research

Waterloo Region School District, Canada

“After attending Quantum Learning, 63% of low-performing students earned a GPA of 2.0 or higher.”

Case

Studies,

1993

Grossmont Union School District, CA

“Students develop both emotional and physical trust. Students begin to understand themselves, becoming aware of personal attributes, feelings and thoughts.”

Doctoral Study California School of Professional Psychology, Fresno

“After Quantum Learning, students’ test-taking skills increased 35%. Teachers’ perceptions of student self-confidence were six times higher than before the program. Students reported an average of a 33% increase in their own self-confidence.”

Teacher and Student Surveys Encinitas Union School District, CA

CHAPTER-4

Analysis & Design

4.1 System Design of E-learning Management System

In this section, a logic is constructed that fulfils the given necessities. style section of software package development deals with remodeling the client's necessities into a logically operating system. Normally, style is performed within the following within the following 2 steps:

1. Primary style Phase: during this section, the system is meant at block level. The blocks ar created on the premise of study tired the matter identification section. completely different blocks ar created for various functions stress is placed on minimizing the knowledge flow between blocks. Thus, all activities that need a lot of interaction ar unbroken in one block.

2. Secondary style Phase: within the secondary section the careful style of each block is performed.

4.2 General task involved in the design process are following:

A. style numerous blocks for overall system processes. B. style smaller, compact and feasible modules in every block. C. style numerous information structures. D. Specify details of programs to attain desired practicality. E. style the shape of inputs, and outputs of the system. F. Perform documentation of the planning. G. System reviews.

4.3 Project Category

- **Relational Database Management System (RDBMS):** This is AN RDBMS based mostly project that is presently exploitation MySQL for all the group action statements. MySQL is AN open supply RDBMS System.
- **Brief introduction about RDBMS:** A on-line database management system (RDBMS) may be a direction system (DBMS) that's supported the relative model as unreal by E. F. Codd, of IBM's San Jose workplace. several

widespread databases presently in use area unit supported the on-line database model. RDBMSs became a predominant alternative for the storage of data in new databases used for monetary records, producing and provision info, personnel information, and far a lot of since the Nineteen Eighties. relative databases have typically replaced heritage hierarchical databases and network databases as a result of they're easier to grasp and use. However, relative databases are challenged by object databases, that were introduced in a shot to handle the object-relational electrical phenomenon twin in on-line database, and XML databases.

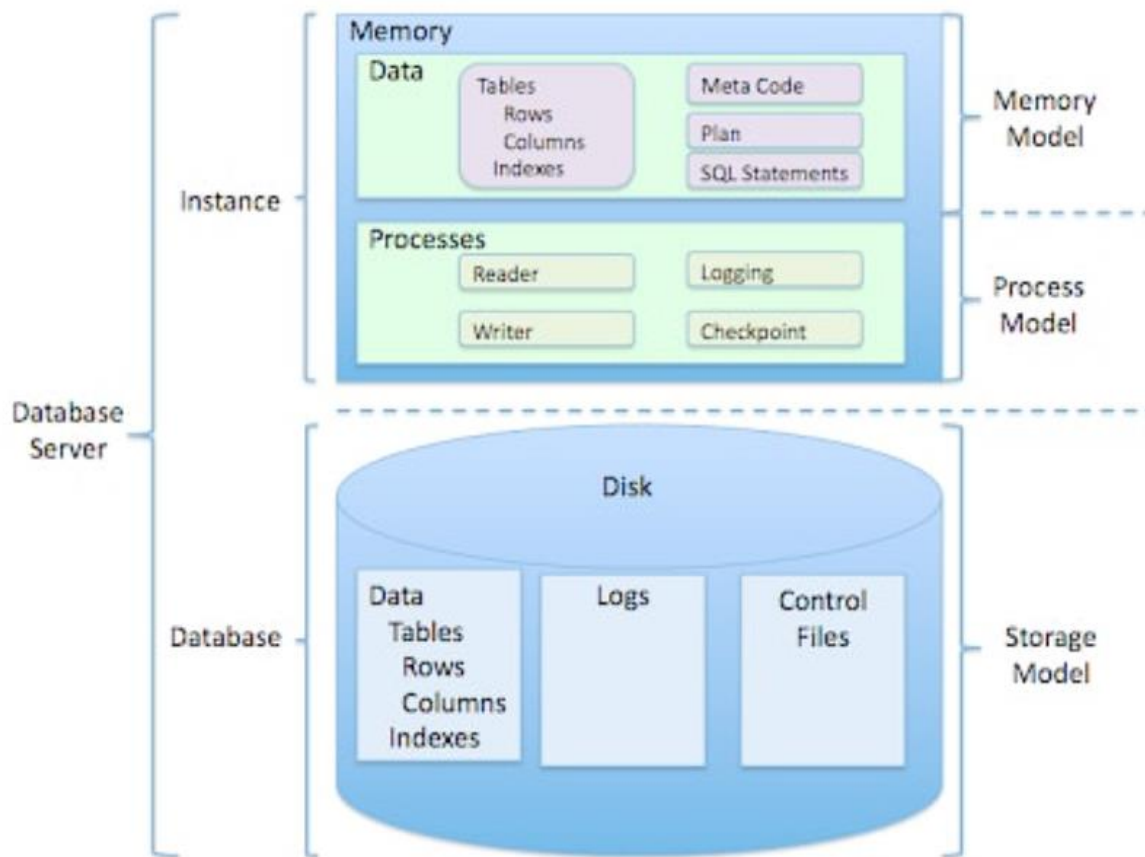


Figure 1 Database Server Architecture

4.4 Project Planning:

Software project set up may be viewed because the following:

- 1) **Among the organization:** however the project is to be implemented? What square measure varied constraints (time, cost, and staff)? what's market strategy?
- 2) **With relevance the client:** weekly or timely conferences with the customer with presentation on standing reports. Customer's feedback is additionally taken and more modification and developments square measure done. Project milestones and deliverables also are conferred to the client.

4.5 For a successful software project the following steps can be followed:

- ❖ Choose a project
 - Distinctive project's aims and objectives.
 - Understanding necessities and specification
 - ways of study, style and implementation
 - Testing techniques
 - Documentation management
- ❖ Project milestones and deliverables length
- ❖ Budget allocation
 - Extraordinary limits among management
- ❖ Project Estimates
 - Price
 - Time
 - Size of code
 - Length
- ❖ Resource Allocation
 - Hardware
 - Computer code
 - Previous relevant project info
 - Digital Library
- ❖ Risk Management
 - Risk turning away
 - Risk detection

4.6 Project Profile

There has been continuous effort to develop tools, which might ease the method of computer code development. But, with the evolving trend of various programming paradigms today's computer code developers are extremely challenged to alter the dynamic technology. Among different problems, computer code re-engineering is being thought to be a vital method within the computer code development business. One in all the main tasks here is to know computer code systems that are already developed and to remodel them to a unique computer code atmosphere. Generally, this needs loads of manual effort in researching a program that may be developed by another software engineer.

This project makes a unique arrangement to address the problem of program analysis and generation of diagrams, which might depict the structure of a program in an exceedingly higher method. Today, UML is being thought of as an industrial normal for computer code engineering style method. It essentially provides many representation tools that may specify totally different aspects/ characteristics of a program like

- **Use cases:** Elicit demand from users in purposeful chunks. Construction coming up with is constructed around delivering some use cases on every interaction basis for system testing.
- **Class diagrams:** shows static structure of ideas, sorts and sophistication. Ideas however users trust the world; kind shows interfaces of computer code elements; categories shows implementation of computer code components.
- **State diagram:** show however single object behaves across several use cases.
- **Activity Diagram:** shows behavior with management structure. will show several objects over several uses, several object in single use case, or implementation strategies encourage parallel behavior etc. The end-product of this project could be a comprehensive tool that may analyze any vb.net program and extract most of the thing bound options inherent within the program like polymorphism, inheritance, encapsulation and abstraction.
- **What's UML?**

UML stands for Unified Modeling Language is that the successor to the wave of Object bound Analysis and style (OOA&D) strategies that appeared within the late

80's. It most directly unifies the strategies of Booch, Rumbaugh (OMT) and Jacobson. The UML is named a modeling language, not a way. Most strategies consist a minimum of in essence, of each a modeling language and a method. The Modeling language is that notation that strategies went to specific style.

- **Class-Diagram:**

The category diagram technique has become really central at intervals object- bound strategies. Nearly each methodology has enclosed some variation on this system. Category diagram is additionally subject to the best vary of modeling thought. Though the essential parts ar required by everybody, advanced ideas ar used less usually.

A class diagram describes the categories of objects within the system and also the varied types of static relationship that exist among them. There area unit 2 principal types of static relationship:

- Association
- Subtype category diagram additionally show the attributes and operations of a category and also the constraints that apply to the approach objects area unit connected.

4.7 Use Case Model of the Project:

- The use case model for any system consists of "use cases". Use cases represent alternative ways during which the system is employed by the user. an easy thanks to realize all the utilization case of a system is to raise the queries "What the user will do mistreatment the system?" the utilization cases partition the system behavior into group actions specified every transaction performs some helpful action from the users' purpose of read.
- The aim of the utilization case to outline a chunk of coherent behavior while not revealing the inner structure of the system. AN use case usually represents a sequence of interaction between the user and also the system. These interactions consists of 1 path sequence is represent the conventional interaction between the user and also the system. the utilization case model is a vital analysis and style whole thing (task).Use cases is described by drawing a use case diagram ANd writing an accompany text elaborating the drawing.

- Within the use case diagram every use case is described by an oval with the name of use case written within the oval. All the ellipses of the system area unit encircled with in an exceedingly parallelogram that represents the system boundary. The name of the system being module seems within the parallelogram. the various users of the system area unit described by mistreatment stick person icon. The stick person icon is often remarked as AN Actor. the road connecting the actor and also the use cases is termed the communication relationship. once a stick person icon represents AN external system it's annotated by the reproducer

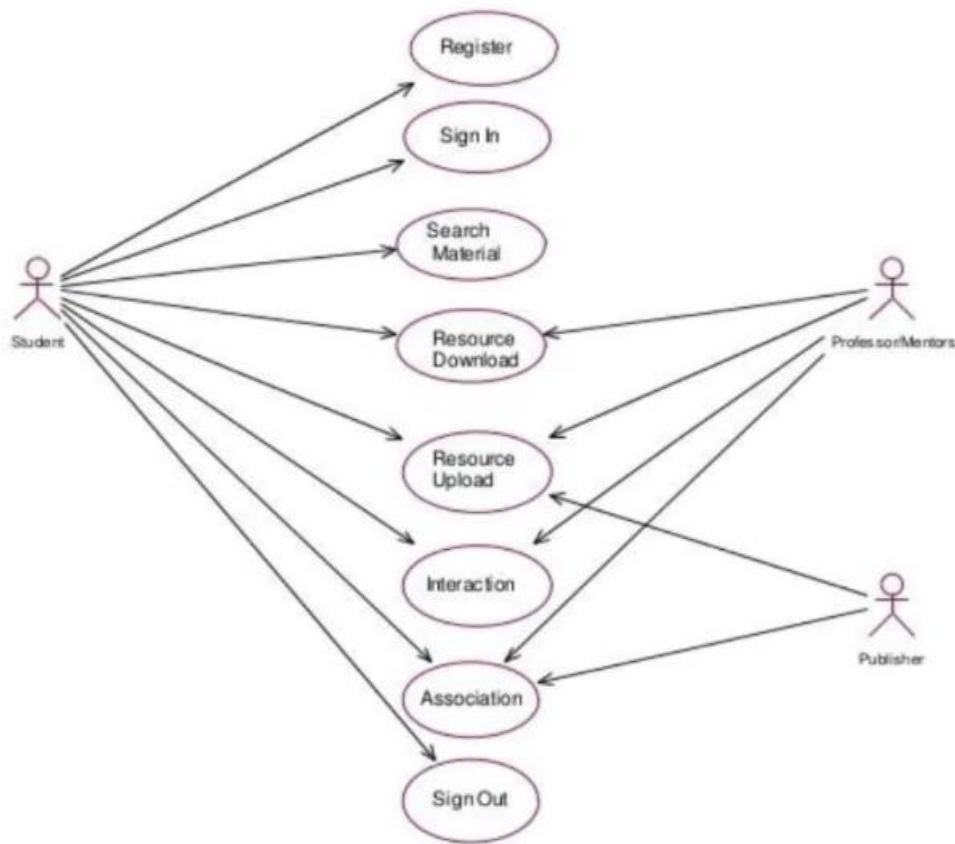


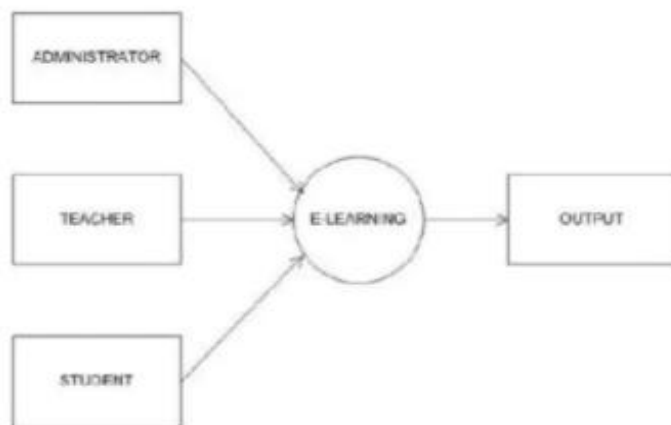
Figure 1 Use Case Diagram

4.8 Dataflow Diagram:

Data flowchart is that the start line of the planning section that functionally decomposes the wants specification. A DFD consists of a series of bubbles joined by lines. The bubbles represent knowledge transformation and therefore the lines represent knowledge flows within the system. A DFD describes what knowledge flow

instead of however they're processed, thus it doesn't hardware, software package and organization.

A **data-flow diagram (DFD)** could be a graphical illustration of the "flow" of information through associate DFDs may also be used for the of process (structured design). info} flowchart (DFD) could be a important modeling technique for analyzing and construct metric weight unit information processes. DFD virtually suggests that associate illustration that explains the course or movement of data in a very method. DFD illustrates this flow of data in a very method supported the inputs and outputs. A DFD is spoken as a method Model. {the knowledge|the info|the information} flowchart could be a graphical description of a system's data and the way to method rework the info is thought as knowledge flowchart (DFD). not like details flow chart, DFDs do not provide detail descriptions of modules that diagrammatically describe a system's knowledge and the way the info act with the system. knowledge flowchart variety of symbols and therefore the following symbols square measure of by DeMarco.



This shows the context level diagram of the system. The users of the system are administrator, teachers and students.

Figure 2 Data Flow Diagram

This basic DFD may be then disintegrated to a lower level diagram demonstrating smaller steps exhibiting details of the system that's being shapely. On a DFD, knowledge things ensue associate degree external knowledge supply or an indoor knowledge store to an indoor knowledge store or associate degree external knowledge sink, via an indoor method. it's common observe to draw a mntext-level knowledge flow chart initial, that shows the interaction between the system and external agents, that act as knowledge sources and knowledge sinks. On the context diagram (also

called the amount O DFD'), the system's Interactions With the skin world area unit shapely strictly in terms of knowledge flows across the system boundary. The context diagram shows the complete system as one method, and provides no clues on its internal organization.

This context-level DFD is next "exploded", to supply A level one DFD that shows a number of the detail of the system being sculptural. the amount one DFD shows however the system is split into sub-systems (processes), every of that deals with one or additional of the info flows to or from AN external agent, and that along give all of the practicality of the system as an entire. the amount one DFD is more speeded and split into additional descriptive and elaborated description regarding the project as level a pair of DFD. the amount a pair of DFD are often variety of knowledge flows which is able to finally show the complete description of the code project.

4.9 About ER Diagram

Entity Relationship Diagram: E-R Model could be a common high level abstract knowledge model. This model and its variations square measure oftentimes used for the abstract style of info application and plenty of info style tools use its thought.

A info that to AN E-R diagram are often delineate by a collecton of tables within the relative system. The mapping of E-R diagram to the entities are:

- Attributes
- Relations
 - Many-to-many
 - Many-to-one
 - One-to-many
 - One-to-One
- Weak entities
- Sub-type and super-type

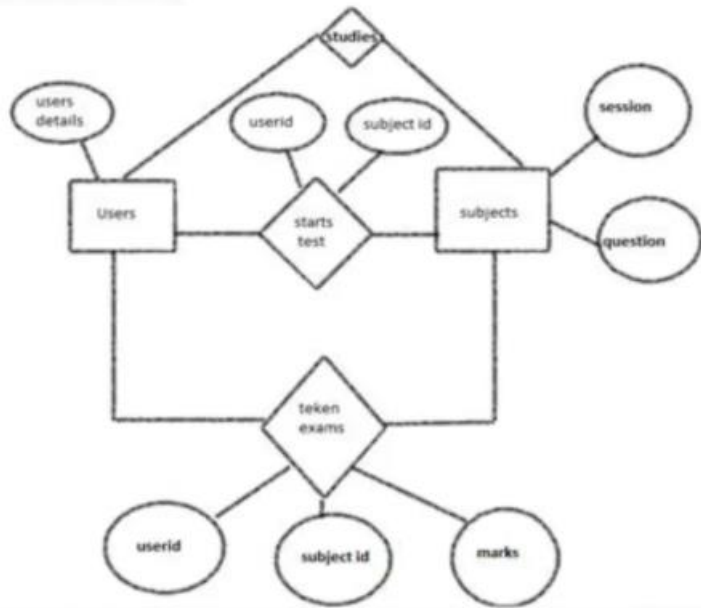


Figure 3 E-R Diagram

CHAPTER-5

Construction

5.1 Implementation and Software Specification Testing

Detailed Design of Implementation: This section of the systems development life cycle refines hardware and computer code specifications, establishes programming plans, trains users and implements intensive testing procedures, to gauge style and in operation specifications and/or offer the idea for additional modification.

- **Technical Design:** This activity builds upon specifications made throughout new system style, adding elaborated technical specifications and documentation.
- **Check Specifications and Planning:** This activity prepares elaborated check specifications for individual modules and programs, job streams, subsystems, and for the system as an entire.

5.2 Programming And Testing

This activity encompasses actual development, writing, and testing of program units or modules.

❖ **User Testing**

This activity encompasses writing user procedure manuals, materials, conducting coaching programs, and testing procedures.

❖ **Acceptance check**

A final procedural review to demonstrate a system and secure user approval before a system becomes operational.

❖ **Installation Phase**

This section the new processed system is put in, the conversion to new procedures is totally enforced, and also the potential of the new system is explored.

❖ **System Installation**

The method of beginning the particular use of a system and coaching user personnel in its operation.

❖ **Review section**

This section evaluates the successes and failures throughout a systems development project, and to live the results of a brand new processed Transystem in terms of advantages and savings projected at the beginning of the project.

❖ **Development Recap**

A review of a project forthwith when completion to seek out successes and potential issues in future work.

❖ **Post-Implementation Review**

A review, conducted when a brand new system has been operational for a few time, to guage actual system performance against original expectations and projections for cost-benefit enhancements. additionally identifies maintenance comes to reinforce or improve the system.

5.3 THE STEPS within the computer code TESTING

The steps concerned throughout Unit checking ar as follows:

- a) Preparation of the test cases.
 - b) Preparation of the potential check knowledge with all the validation checks.
 - c) Complete code review of the module.
 - d) Actual testing done manually.
 - e) Modifications in dire straits the errors found throughout testing.
 - f) Ready the check result scripts.
- **The unit testing done included the testing of the following items:**
 1. Practicality of the complete module/forms.
 2. Validations for user input.
 3. Checking of the secret writing standards to be maintained throughout secret writing.
 4. Testing the module with all the potential check knowledge.

5. Testing of the practicality involving all form of calculations etc.
6. Commenting normal within the supply files.

After finishing the Unit testing of all the modules, the entire system is integrated with all its dependencies in this module. whereas System Integration, we tend to integrated the modules one by one and tested the system at every step. This helped in reduction of errors at the time of the system testing.

- **The steps involved during System testing are as follows:**
 - Integration of all the modules/forms within the system.
 - Preparation of the check cases.
 - Preparation of the doable check information with all the validation checks.
 - Actual testing done manually.
 - Recording of all the reproduced errors.
 - Modifications in deep trouble the errors found throughout testing.
 - Ready the check result scripts when rectification of the errors.

5.4 The System Testing done included the testing of the following items:

1. Practicality of the complete system as an entire.
2. Program of the system.
3. Testing the dependent modules along with all the doable check information scripts.
4. Verification and Validation testing.
5. Testing the reports with all its practicality.

5.5 Existing System of E-learning Management System:

Within the existing system the exams ar done solely manually however in projected system we've to computerize the exams mistreatment this application.

- Lack of security of information.
- A lot of man power.
- Time intense.
- Consumes giant volume of pare work.
- Desires manual calculations.

- No direct role for the upper officers

5.6 Proposed System of E-learning Management System:

The aim of projected system is to develop a system of improved facilities. The projected system will overcome all the constraints of the prevailing system. The system provides correct security and reduces the manual work.

- Security of information.
- Guarantee information accuracy's.
- Correct management of the upper officers.
- Minimize manual information entry.
- Minimum time required for the assorted process.
- Bigger potency.
- Higher service.
- User friendliness and interactive.
- Minimum time needed.

5.7 Description of Technology Used:-

1) Java Server Pages (JSP) :- java server pages as compared to the servlet are softer and fewer advanced once we subsume the HTML logics. Java server pages in java also are dynamic pages.

Java server pages are pure HTML by default however it supports java code too. Java Server Pages are engineered on high of the Java Servlets API, thus like Servlets, JSP (Java Server Pages) additionally has access to any or all the powerful Enterprise java genus APIs, together with the JDBC, JNDI, EJB or etc. JSP pages may be utilized in combination with servlets that handle the business logic, the model supported by Java servlet engine.

2) Eclipse

Eclipse is an associate degree integrated development surroundings (IDE) utilized in computer programming and it's the foremost wide used Java IDE. It contains a base space associate degree an protrusible plug-in system for customizing surroundings. Eclipse is written largely in Java and its primary use is for developing Java applications.

3) Tomcat-Server

Tomcat is reference implementation of the JSP and Servlet specifications Its open supply development model helps fix bugs by the developers themselves Apache Tomcat, typically mentioned as Tomcat Server, is associate degree ASCII text file Java servlet instrumentality developed by the Apache code Foundation(ASF). house cat implements many Java applied science specifications together with Java servlet, Java Server Pages (JSP), Java EL, and internet Socket, and provides a "pure Java" protocol internet server surroundings during which Java code will run.

4) HTML

HTML is that the customary nomenclature for making websites. HTML stands for Hyper Text nomenclature. HTML describes the structure of websites mistreatment markup. HTML parts ar the building blocks of HTML pages. HTML parts ar painted by tags.

5) CSS

Cascading vogue Sheets (CSS) may be a sheet language used for describing the presentation of a document written during a nomenclature.

6) JAVA-SCRIPT

JavaScript may be a light-weight, taken programing language. it's designed for making network-centric applications. it's complimentary to and integrated with Java. JavaScript is incredibly straightforward to implement as a result of it's integrated with HTML. it's open and cross-platform.

7) Connector and Driver

There's got to load the driving force category of the management system(dbms) within the java. each management system has its own separate driver category that was developed that the software system may be ready to connect with the java. If the driving force category can't be loaded because of some reason then the program won't be ready to communicate with information. when load the driving force with success we tend to use the MySQL connexion to attach with the information.

CHAPTER-6

Conclusion & Future Works

6.1 Conclusion of the Project E-learning Management System:

Our project is simply a humble venture to satisfy the requirements to manage their project work. many user friendly cryptography have additionally adopted. This package shall sway be a robust package in satisfying all the necessities of the college. the target of package coming up with is to supply a frame work that permits the container to create affordable estimates created among a restricted timeframe at the start of the package project and will be updated frequently because the project progresses.

At the top it's over that we've got created effort on following points...

- An outline of the background and context of the project and its relevancy work already wiped out the realm.
- Created statement of the aims and objectives of the project.
- The outline of Purpose, Scope, and pertinence.
- We have a tendency to &fine the matter on that we have a tendency to square measure operating within the project.
- We have a tendency to describe the necessity Specifications of the system and therefore the actions which will be done on this stuff.
- We have a tendency to perceive the matter domain and turn out a model of the system, that describes operations which will be performed on the system.
- We have a tendency to enclosed options and operations thoroughly, as well as screen layouts.
- We have a tendency to designed program and security problems associated with system.
- Finally the system is enforced and checked in keeping with test cases.

6.2 Future Scope of the Project:

During a shell, it will be summarized that the longer term scope of the project circles around maintaining info regarding:

- We will add printer in future.

- We can provide a lot of advance package for E-learning Management System as well as a lot of facilities.
- We'll host the platform on on-line servers to create it accessible worldwide
- Integrate multiple load balancers to distribute the masses of the system.
- Produce the master and slave info structure to cut back the overload of the info queries
- Implement the backup mechanism for taking backup of codebase and info on regular basis on totally different servers.

The higher than mentioned points are the enhancements which may be done to extend the pertinence and usage of this project. Here we will maintain the records of Assignment and Student. Also, because it will be seen that now-a-days the players square measure versatile, i.e. therefore there's a scope for introducing a way to take care of the E-learning Management System. Enhancements will be done to take care of all the Assignment, Student, TEACHER, QUIZ, QUESTION.

We've got left all the choices open so if there's the other future demand within the system by the user for the sweetening of the system then it's attainable to implement them. In the last we might prefer to thanks all the persons concerned within the development of the system directly or indirectly. we have a tendency to hope that the project can serve its purpose that it's develop there by underlining success of method.

CHAPTER-7

Codes & Snapshots

7.1 ReactJs Code

App.js-

```
import React from 'react';

import Home from './Components/Home/Home';

import Features from "././Components/Home/Features";

import {BrowserRouter as Router, Switch, Route} from "react-router-dom";

import Nav from "././Components/Nav";

import Footer from "././Components/Footer";

import GetStarted from '././Components/Pages/GetStarted';

import Entries from "././Components/Pages/Entries";

import Gallery from "././Components/Pages/Gallery";

import About from "././Components/Pages/About";

function App() {

  return (

    <div>

      <Nav />
```

```
<Router>
  <Switch>
    <Route path="/" exact component={Home}/>
    <Route path="/GetStarted" component={GetStarted}/>
    <Route path="/Entries" component={Entries}/>
    <Route path="/Gallery" component={Gallery}/>
    <Route path="/About" component={About}/>
  </Switch>

</Router>

<Footer/>
```

```
</div>
);
}

export default App;
```

Nav.js

```
import React from 'react';
import styles from './Nav.module.scss'

function Nav(){
  return(
    <nav className={styles.navbar}>
```



```
<a href="/" className={styles.Logo}>Quantum</a>
```

```
<div>
```

```
  <a href="GetStarted">Get Started</a>
```

```
  <a href="Entries">Entries</a>
```

```
  <a href="Gallery">Gallery</a>
```

```
  <a href="About">About</a>
```

```
</div>
```

```
</nav>
```

```
);
```

```
}
```

```
export default Nav;
```

Home.js

```
import React from "react";
```

```
import styles from './Home.module.scss';
```

```
import Nav from "../Nav";
```

```
import Features from "./Features";
```

```
import Info from "./Info";
```

```
function Home(){
```

```
  return(
```

```
    <div>
```

```
      <div className={styles.header}>
```

```
<h1 data-item="Quantum">Quantum </h1>
```

```
<p>Quantum physics governs everything that's very small or very cold,<br /> and it has a reputation for being
```

```
<div className={styles.animated_text}>
```

```
<div className={styles.line}> spooky.</div>
```

```
<div className={styles.line}> mystifying.</div>
```

```
<div className={styles.line}> unintelligible.
```

```
</div>
```

```
<div className={styles.line}>obscure.</div>
```

```
</div>
```

```
</p>
```

```
<p>
```

```
  We want to change that.
```

```
</p>
```

```
</div>
```

```
<Info />
```

```
<Features/>
```

```
</div>
```

```
);
```

```
}
```

```
export default Home;
```

Feature.js

```
import React, {useEffect} from 'react';
```

```
import styles from './Features.module.scss';
```

```
import AOS from "aos";
```

```
import "aos/dist/aos.css";
```

```
function Features(){
```

```
  useEffect(() => {
```

```
    AOS.init();
```

```
    AOS.refresh();
```

```
  }, []);
```

```
  return(
```

```
    <section className={styles.features}>
```

```
      <div className={styles.container}>
```

```
        <div className={styles.row} data-aos="fade-up">
```

```
          <div className={styles["column-left"]} >
```

```
            
```

```
          </div>
```

```
          <div className={styles["column-right"]} >
```

```
            <h2>Interactives</h2>
```

```

    <div className={styles["fst-italic","test"]} >
      <p>We think quantum concepts are easier to<br/> understand
      if you can play around with them.</p>
      
    </div>

  </div>

</div>

</div>

<div className={styles.row} data-aos="fade-up">
  <div className={styles["column-right"]} >
    <h2>Animationst</h2>
    <div className={styles["fst-italic","test"]} >
      
      <p className={styles["fst-italic"]} >
        Graphics can help kindle your imagination and bring the
        quantum world to life.
      </p>

    </div>
  </div>

  <div className={styles["column-left"]} >
    

```

```
</div>
```

```
</div>
```

```
<div className={styles.row} data-aos="fade-up">
```

```
<div className={styles["column-left"]}>
```

```

```

```
</div>
```

```
<div className={styles["column-right"]}>
```

```
<h2>Illustrations</h2>
```

```
<div className={styles["fst-italic","test"]}>
```

```
<p>Lighthearted cartoons are sprinkled throughout to make the science more approachable.</p>
```

```

```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</section>
```

```
)
```

```
}
```

```
export default Features;
```

Info.js

```
import React from 'react';
```

```
import styles from './Info.module.css'
```

```
function Info(){
```

```
  return(
```

```
    <div className={styles.info_section}>
```

```
      <div className={styles.items}>
```

```
        <h2><a href="GetStarted">Get started</a></h2>
```

```
        
```

```
        <p>New to quantum? Begin your journey here!</p>
```

```
      </div>
```

```
      <div className={styles.items}>
```

```
        <h2>Poke Around</h2>
```

```
        
```

```
        <p>Want to explore? Click here to see all our entries.</p>
```

```
      </div>
```

```
      <div className={styles.items}>
```

```
        <h2>Comments</h2>
```

```
        
```

```
        <p>Have feedback for us? Please <br/>share your thoughts in a  
survey.</p>
```

```
      </div>
```

```
    </div>
```

```
)  
}  
export default Info;
```

GetStarted.js

```
import React from "react";  
import styles from "../Pages/GetStarted.module.scss";
```

```
function GetStarted() {  
  return(  
    <div className={styles.container}>  
      <h2>GetStarted</h2>  
      <p>
```

The Quantum Atlas is organized like a glossary, but it offers more than just definitions. It features cartoons, animations, interactive elements and short podcasts---a multimedia approach that we hope will enrich your exploration of the quantum world.

If you're new to quantum physics, the best place to start is the Quantum vs. Classical entry, since it lays out some of the basic differences between quantum behavior and our everyday experience.

```
</p>  
    <div className={styles.cardContainer}>  
      <card className={styles.card}>  
          
        <h3>Quantum VS Classic</h3>
```

```
<p>The quantum world is not spooky or incomprehensible. It's just
way different</p>
```

```
</card>
```

```
</div>
```

```
<p>Following that, you should check out both the Superposition and
Measurement entries. They grapple with several of the most counterintuitive
aspects of the quantum world, including the wavy nature of quantum objects
and why quantum measurement is fundamentally different than, say, using a
thermometer.
```

```
</p>
```

```
<div className={styles.cardContainer}>
```

```
<card className={styles.card}>
```

```

```

```
<h3>Superposition</h3>
```

```
<p>A fundamental—and not totally unfamiliar—feature of
quantum physics.</p>
```

```
</card>
```

```
<card className={styles.card}>
```

```

```

```
<h3>Quantum Measurement</h3>
```

```
<p>Brick Quantum Measurement Ordinary measurements reveal the
unknown. Quantum measurements create it."
```

```
</p>
```

```
</card>
```

```
</div>
```

```
<p>Sprinkled throughout the Atlas, you'll see text decorated like this. If
you hover over these extra tidbits, you'll see quick reminders, additional
context or clarifications that keep the main text streamlined.
```


We value feedback, so if you find something confusing or have a suggestion, please share your thoughts using our contact form.</p>

```
</div>
)
}
export default GetStarted;
```

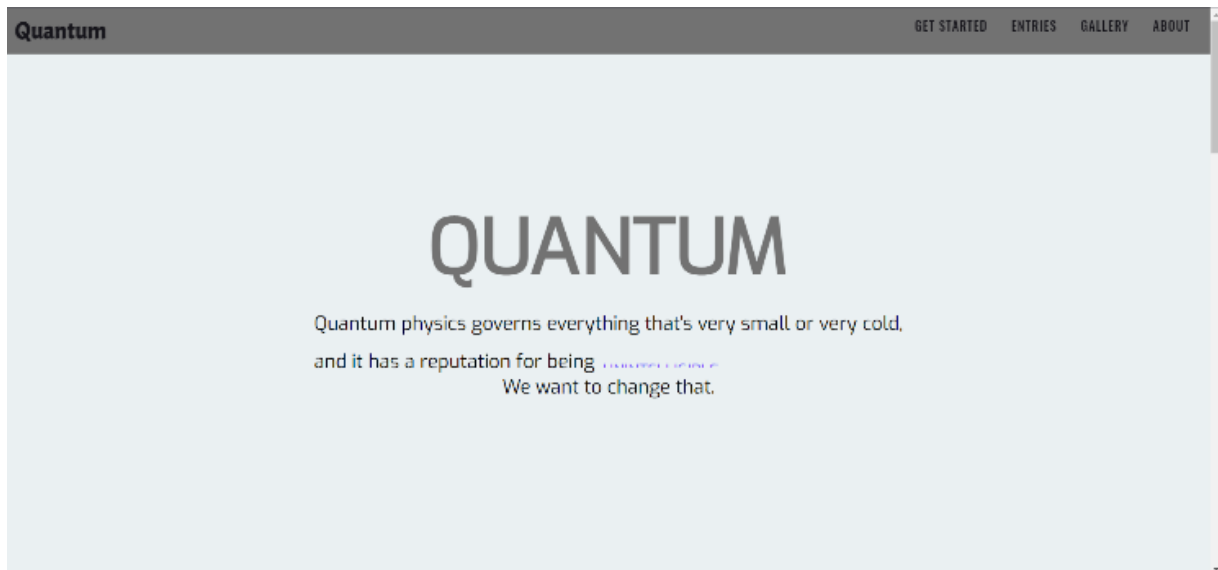
Package.json

```
{
  "name": "untitled",
  "version": "0.1.0",
  "private": true,
  "dependencies": {
    "@fortawesome/fontawesome-svg-core": "^1.2.36",
    "@fortawesome/free-solid-svg-icons": "^5.15.4",
    "@fortawesome/react-fontawesome": "^0.1.16",
    "@testing-library/jest-dom": "^5.14.1",
    "@testing-library/react": "^11.2.7",
    "@testing-library/user-event": "^12.8.3",
    "aos": "^2.3.4",
    "bootstrap": "^5.1.3",
    "cdbreact": "^1.2.1",
    "jquery": "^3.6.0",
    "node-sass": "^6.0.1",
    "react": "^17.0.2",
    "react-bootstrap": "^2.0.3",
```

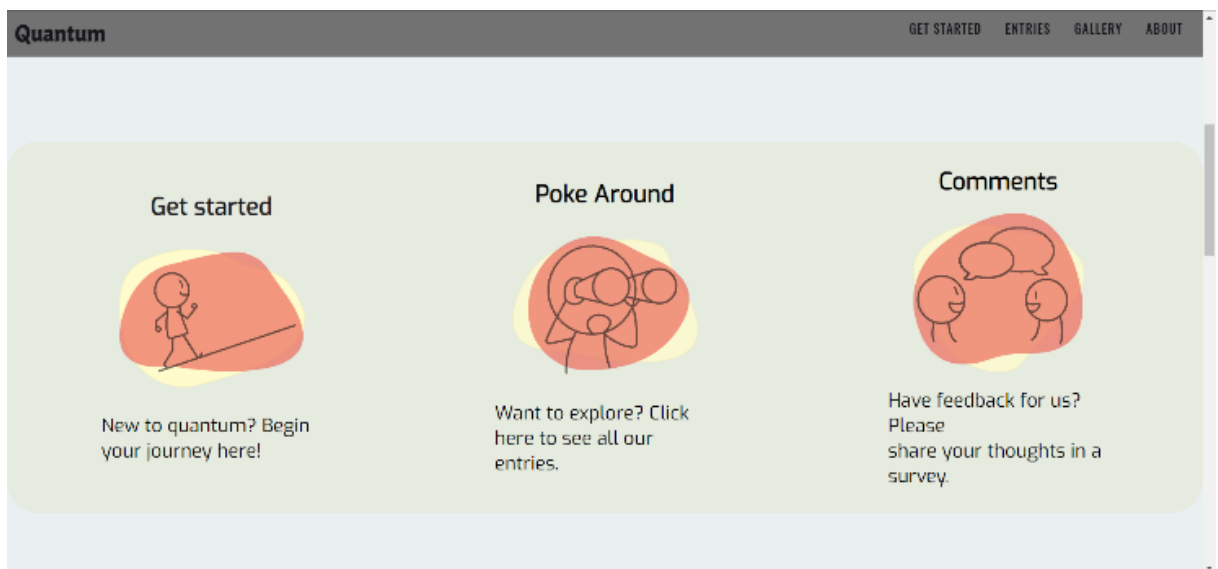
```
"react-dom": "^17.0.2",
"react-responsive-animate-navbar": "^1.1.8",
"react-scripts": "4.0.3",
"web-vitals": "^1.1.2"
},
"scripts": {
  "start": "react-scripts start",
  "build": "react-scripts build",
  "test": "react-scripts test",
  "eject": "react-scripts eject"
},
"eslintConfig": {
  "extends": [
    "react-app",
    "react-app/jest"
  ]
},
"browserslist": {
  "production": [
    ">0.2%",
    "not dead",
    "not op_mini all"
  ],
  "development": [
    "last 1 chrome version",
    "last 1 firefox version",
```

```
    "last 1 safari version"  
  ]  
},  
"devDependencies": {  
  "react-redux": "^7.2.6",  
  "react-router-dom": "^5.3.0"  
}  
}
```

7.2 Snapshot Of Project



Home Page

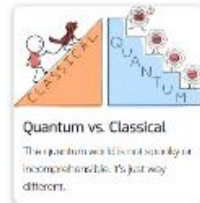


Info Page

Get Started

The Quantum Atlas is organized like a glossary, but it offers more than just definitions. It features cartoons, animations, interactive elements and short, podcast-style multimedia approach that we hope will enrich your exploration of the quantum world.

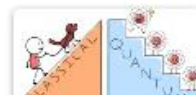
If you're new to quantum physics, the best place to start is the [Quantum vs. Classical](#) entry, since it lays out some of the basic differences between quantum behavior and our everyday expectations.



Following that, you should check out both the [Superposition](#) and [Measurement](#) entries. They grapple with several of the most counterintuitive aspects of the quantum world, including the weird nature of quantum objects and why quantum measurement is fundamentally different than, say, using a thermometer.



Get Started Page



Topic Page

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