WEB QUIZ & ASSIGNMENT PORTAL

A PROJECT REPORT

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DECLARATION

We hereby declare that the project entitled "**WEB QUIZ & ASSIGNMENT PORTAL**" submitted for the B. Tech. (CSE) degree is our original work and the project has not formed the basis for the award of any other degree, diploma, fellowship or any other similar titles.

(NAMEH DHIMAN), (PANKAJ KR. BANSAL), (SUMIT YADAV)

Signature of the Students

Place: JUET GUNA

Date: 26TH NOVEMBER 2018

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CERTIFICATE

This is to certify that the work entitled **"Web Quiz & Assignment Portal"**, submitted by **NAMEH DHIMAN (161B126), PANKAJ KR. BANSAL (161B136), SUMIT YADAV (161B240)** to the Department of Computer Science and Engineering, Jaypee University of Engineering and Technology, Guna, for the award of the degree of Bachelor of Technology, is a bonafide record of the research work carried out by him under our supervision and guidance. As per best of my knowledge and belief there is no infringement of copyright and intellectual property right. Also, this work has not been submitted partially or wholly to any other Institute or University for the award of any other degree or diploma. In case of any violation concern student will solely be responsible.

(Dr. Harikesh Singh)
Asst. Professor, Dept. of CSE

Date: 26th November, 2018

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EXECUTIVE SUMMARY

The Project **"Web Quiz and Assignment Portal"** is an online platform for conducting Quizzes and submitting Assignments. It is an efficient manner and no time waste for checking the quiz and assignment, saves a lot of time, paper and effort. The Quiz and Assignment has an interface for the Students and Admin. Admin can login with their given ID and password and student had register himself before logging. Student login required enrolment no. and password.

In the Quiz portal Student can view marks after submitting the quiz. Student can't login again to the quiz portal after giving quiz. The Admin has privilege to create the quiz using text file, delete the file, modify the quiz, this saves a lot of time and effort in online as compared to paper quiz. The portal also provides Admin with the privilege of adding dynamic negative marking and time duration. He can view marks of all the students.

In the Assignment Portal the Student can view the assignment file uploaded by the admin and can submit the assignment solution in ".txt" or ".doc" format file. The Admin has privilege of adding assignment in different formats like .txt, .doc and .pdf. The admin can also view the submitted assignment solution and can check plagiarism in the submitted file by the students.

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CHAPTER 1

INTRODUCTION

1.1 ABOUT THE PROJECT

The Web Quiz and Assignment Submission Portal provides with the facility to conduct online quizzes for a number of students along with the facility submit their assignments through the Assignment Submission portal. The main objective of Web Quiz & Assignment Submission Portal is to effectively evaluate the students thoroughly through a fully automated system that would not only save a lot of time and paper work but also would give fast results while keeping the record for each student registered onto this system. This system can be used in educational institutions and Universities as well as in the corporate world. Can be used irrespective of the location and time.

1.2 OBJECTIVES

Need of a new system to conduct quizzes for a number of students at the same time with upgraded features such as uploading Q/A for the quiz through ways more easier and less tedious than through spreadsheet or manually entering the question and answers into the system which could save time by reducing manuals tasks to conduct a quiz.

To create a system that could eliminate plagiarism in the assignment submissions made by the students that would possibly lessen up habit of copy and paste among students.

An effective and interactive system that could reduce pen and paper work for both the quiz and assignments to facilitate effective evaluation with faster results.

1.3 SCOPE

- This System is cost-effective and is among popular means of mass-evaluation.

- It would provide with time-flexibility and also time-saving at the same time for proper quiz conduction and submissions of assignments.
- It can be used in educational institutions as well as corporate world.
- It would release workload of admin/faculty promoting interactions among students and between the faculty & students.

1.4 TAXONOMY

Users of this system are classified into three categories:

- Administrators
- Faculty
- Students

1.4.1 Administrators

Administrator is responsible for the management of the system, user details, quiz creation, deletion & conduction.

1.4.2 Faculty

Faculty is responsible for preparing questionnaires to be answered by the students during quiz and also uploading assignments for the students along with a deadline.

1.4.3 Students

Students are the candidates appearing for the quiz and submitting solutions for the assignments that were uploaded by the faculty within the given timeline.

CHAPTER 2

RELATED RESEARCH & EXISTING SYSTEMS

2.1 EXISTING SYSTEM IN USE

In our university, system currently in use is a quiz portal that allows a large number of students to attend a quiz at the same time. Faculty provides a questionnaire with correct answers in a text, doc file etc. to the administrator who looks after the management of the existing quiz portal. The administrator then manually copies and pastes it to an excel sheet with different rows and columns for questions, options and correct answers to be fetched by the system.

In this system the input is provided in the form of Q/A through an excel sheet & no other format is supported. System fails to accept alpha-numeric sequence as login id which often leads to identity collision. Form of error is not detected during the operation of the system in case of any error.

2.2 ONLINE RESOURCES & EXISTING SYSTEMS

The following were the resources & existing systems that we found online:

2.2.1 TestYou.in

TestYou.in allows educators to create and administer tests in a fast and reliable way. This platform allows to create tests using an interface that is hosted online without having to install anything on our computers [1].

This platform provides the following features:

- This system provides with options to upload Q/A through spreadsheets and manual entry directly into the system.
- Uploaded Q/A can be converted to question bank for further use.
- Option to enable negative marking.
- E-mail notifications for real-time update of test results.

2.2.2 HippoQuiz.com

Hippo Quiz is an Innovative online quizzing and assessment software for Employees, Students and Candidates [2].

This platform provides the following features:

- Drag & Drop option to add questions.
- Profile information for tracking & reports.
- Scoring report and auto grade on completion.
- Revealing answers after quiz completion with explanation.

2.2.3 Turnitin.com

The Turnitin is a commercial, internet based plagiarism detection service launched in 1997. Universities and High schools typically buy licenses to use software as a service website, which checks submitted documents against its database and content of other websites with aim of identifying plagiarism. Results can also be used in formative assessment to help students avoid the plagiarism and improve their writing skills [3].

2.2.4 Duplichecker.com

Duplichecker is free online plagiarism detection software that can be used to compare your source content against other content across the web. It can be used to check uploaded content against existing content. It will check the content provided against every published page on the web [4].

It is simple to use online and downloadable over computers or mobile devices.

On the website, there are options of checking your text one of two ways. Uploading a file in .doc or .txt format or paste up to 1000 words into the search box. It will check the source content against all other online and return a result. The report tells if the work has been copied or duplicated online. It will also provide with the website the material came from. With the free membership, can scan up to 50 documents a day.

2.3 FEASIBILITY STUDY

WHAT ARE THE DEMONSTRABLE NEEDS?

An effective and interactive system that could facilitate mass-evaluation with faster results and report generation. System that will provide with ease of work by reducing manual tasks and pen-paper work. System that would release workload of admin/faculty promoting interactions among students and between the faculty & students.

HOW CAN THE PROBLEM BE REDEFINED?

In accordance with the problems of existing systems we tried to redefine the problems through solutions that would facilitate time-saving such as uploading questions and answers through a text file, plagiarism check feature to eliminate duplicated data in the assignment solutions submitted by the students. Submission of assignments directly through the systems of the students that would make the process easier and flexible.

HOW FEASIBLE IS THE SYSTEM PROPOSED?

This was analysed by comparing the following factors with both the existing system and proposed system:

COST: The cost required in conducting quiz and assignments while also checking for plagiarism is comparatively less in comparison with the resources available online and there is no system that came into our notice that incorporates both the means of mass-evaluation i.e. quiz and assignment submission portal. This system would also reduce cost by minimizing printing and paper work.

EFFORT: Compared to the existing systems the proposed system will provide a better working environment in which there will be ease of work and the effort required will be comparatively less. It would reduce workload of faculty and the admin to conduct a quiz and also reduce pen paper work for the students and the faculty.

TIME: Time required generating a report or for doing any other work related to quiz conduction or assignment submission will be comparatively less than in the existing system. Record finding and updating will take less time.

CHAPTER 3

PROPOSED SYSTEM

3.1 PROPOSED MODEL

Web Quiz & Assignment Submission Portal is an approach for conducting quiz as well as submit the assignments online which makes it a useful application in the world of technology. The Web Quiz & Assignment Submission Portal helps the faculty as well as the student to save time in manually writing on paper sheets which ultimately leads to the wastage of resource like paper in an era in which it is possible to write on computer, which when combined with the other application can do lot more than just writing.

3.2 FEATURES OF PROPOSED MODEL

FUNCTIONAL CAPABILITIES: The ultimate aim of this project is to help the quiz analysis and facilitate the faculties the faculties for easy evaluation of the students and generation of the automatic score cards. The system shall display the set of questions with certain rules. The mark is given and report is generated based on the correct answers. Web Quiz & Assignment Submission Portal has the capability of surpassing the existing model being used as it overcomes the drawbacks of the existing system. The Web Quiz Portal allows the admin to register & login into the system for managing the quiz, setting parameters for the quiz. The portal allows the admin to upload the whole quiz i.e. the collection of questions & answers in a form of a text file (.txt extension) which proves to be very human friendly approach, time saving & reduces the headache of separating the questions from the file & then filling the required table in the spreadsheet & similarly filling the table for all the options into the spreadsheet & then the system would be able to conduct the quiz which was the approach which was used until now. Our system works on directly uploading text (.txt) files of the whole quiz & correct answers files into the system & with just one click we are able to generate the database which will be used for conducting the quiz efficiently.

Similarly the student can also register & login into the quiz portal & attend the quiz.

The next part which is Assignment Submission Portal is basically created to help students to upload their assignments directly through their system & let go the pen paper approach. The Faculties can register on the portal & then upload their assignments on the portal. The students can also create their own id on the portal by registering themselves & can view the uploaded assignments & can submit their respective solutions. When all the submissions are done the faculty can check plagiarism in amongst the files & can award marks accordingly.

PERFORMANCE LEVEL: The quiz portal as discussed above provides a easiness in creation of the quiz & at the same time of conducting it & evaluating it. The portal gives students immense opportunity to the students for their self-evaluation in the quiz. The Assignment Submission Portal at the same time provides faculty & students a suitable interface for uploading & submitting assignments thus removing pen paper method, saving space & can later any particular assignment could be retrieved from the system.

DATA STRUCTURES: The data created submitted is stored in tabular form using MYSQL in the database. It provides easy access to the users to access the information they need.

SAFETY: No data loss occurs in the quiz or assignment submission portal. It is very much protected in such a way that it gives access to students when they enter correct username & password otherwise access is not granted. The result in quiz is generated through the system & plagiarism in the assignment is also checked through the system so that no body is prone to mistake.

RELIABILITY: We assure that the project is completely authenticated in order to enhance the security & corruptions of the database as well as the software. The person is given access only if he/she enters correct username & password.

3.3 USE CASE DIAGRAM

The user of our system is students & faculty members. This diagram will explain their interaction with the system. The use case diagram as in Fig1. is given in the high level by representing the goal of the actors. The admin can enter the quiz generation module by clearing all authentication phases & can create the quiz. The new user can perform the act of registering if he/she is entering the portal for the first time.

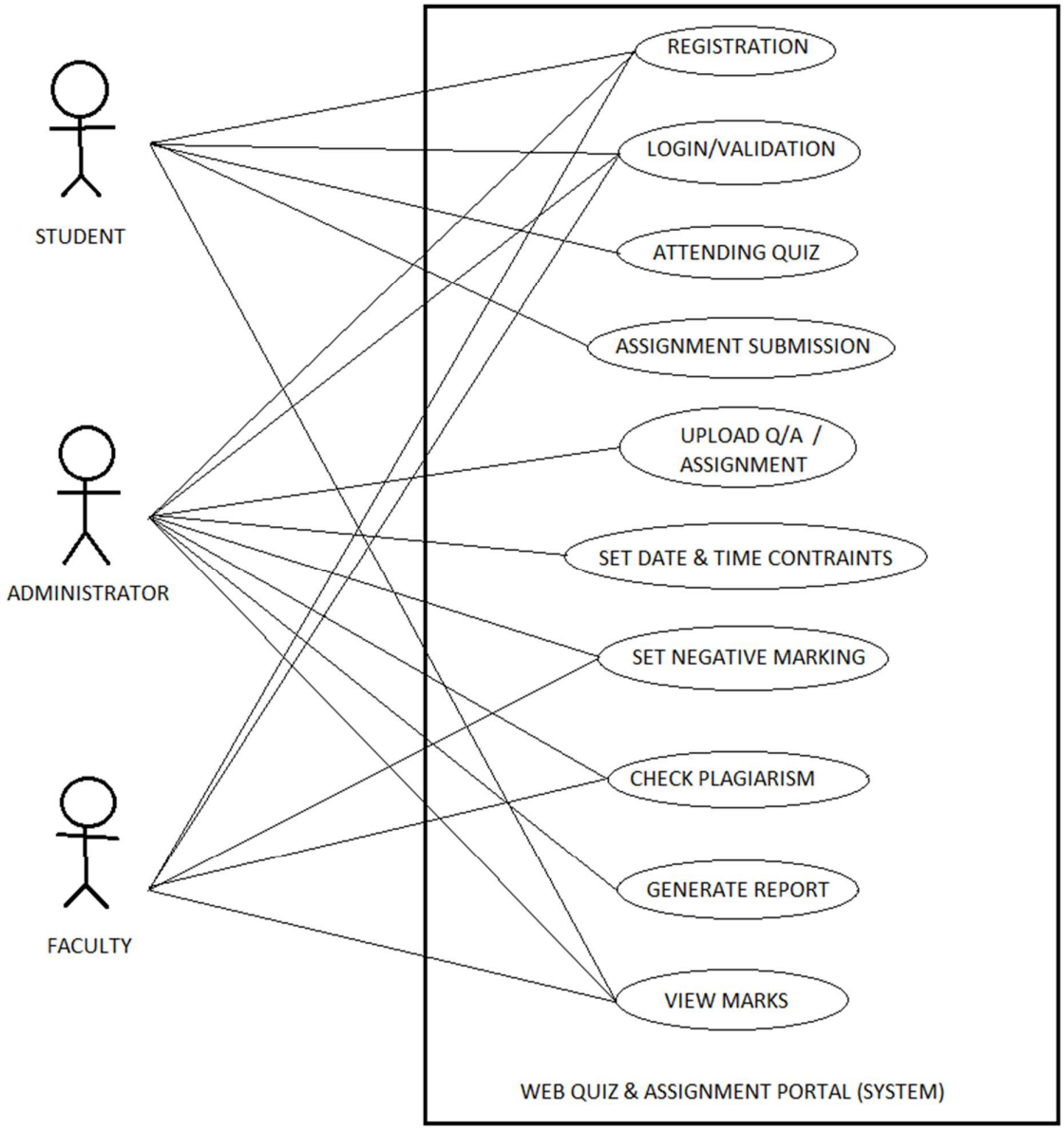

Fig 1. Use Case Diagram

3.3.1 IDENTIFICATION SUMMARY

TITLE: Registration

SUMMARY: This use case allows all the new users to register themselves in the system with the required details asked which then can be used for the future login.

ACTORS: Student, Admin, Faculty.

FLOW OF EVENTS:

Main success scenario –

1. The student who wishes to register with the system enters his/her enrolment number, full name, contact details and password.
2. When the above mentioned details are filled properly the system will successfully register the user.

Error Sequences:-

E1: Invalid enrolment number.

E2: Invalid contact details (like mobile number greater than 10 digits).

TITLE: Login Validation

SUMMARY: This use case checks whether the user is pre-registered with the system.

ACTORS: Student, Faculty, Admin, Database (Secondary).

FLOW OF EVENTS:

Main Success Scenario:-

1. The user enters his enrolment number, password, the system checks the information entered with database & if found correct the user can enter the portal.
2. The admin/faculty enters his/her ID, password & system check the information with database & if found correct the admin/faculty can enter the portal.

Error Sequence:-

E1: Invalid username or password entered will not let the user to login successfully with the system.

TITLE: Attending Quiz.

SUMMARY: This use case will allow the user to attend the quiz after the successful login of the user.

ACTORS: Student, Faculty, Database.

FLOW OF EVENTS:

Main Success Scenario:-

1. If the user is new he/she will register with the system & can then login in system for attending the quiz.
2. After successful login of the student the student will see the question & answers. The answers will be in multiple choice format. The student can select one option per question.
3. After attempting the desired questions the student can submit the quiz & will logout from the system.

Error Sequence:-

E1: Invalid credentials of the user will not let the user to attend the quiz.

TITLE: Upload Q/A & Assignments

SUMMARY: This use case will allow the admin/faculty to create database for the quiz by uploading the respective files using the upload module & then clicking on the button to generate database for the quiz. This use case will allow faculty/admin to upload the assignment in the prescribed format.

ACTORS: Student, Faculty, Database.

FLOW OF EVENTS:

Main Success Scenario:-

1. The admin/faculty after successful login will land on this module & will set date & time for the quiz.
2. The admin/faculty will now choose the question text file for uploading into the database for the quiz conduction & respective answer text file for uploading into the database which contain all the correct answers. Both of these files are necessary for quiz conduction.
3. After successfully selecting both the files one by one the admin/faculty can upload the text files one by one.

4. On successful uploading of the files “Files uploaded successfully” message will be seen on the screen.
5. The admin/faculty can now press the button Generate Quiz for generating the database.
6. After all steps followed above successfully the database will be generated.
7. The faculty/admin will face the same kind of registration & login phase as of the quiz portal.
8. After logging in the system the faculty/admin can upload the assignment for the students in the prescribed format.
9. Faculty can also set the last date of submission, floating date of the assignment.

Error Sequences:-

E1: The admin/faculty might try to upload a file which has extension other than .txt which would create an error.

E2: The admin/faculty might try to create the database for the quiz with this wrong format & will lead to error.

E3: The admin/faculty might try to upload file with different kind of names other than the prescribed one which will again lead to error at the time of database generation.

E4: Invalid credential by the faculty/admin will lead to the failure in login.

E5: Faculty/admin need to enter date in prescribed format failing in which the system may not work as expected.

TITLE: Check Plagiarism

SUMMARY: This use case will allow the faculty/admin to check the similarity between any two assignment files.

ACTORS: Student, Faculty, Database.

Main Success Scenario:-

1. After successful login the admin/faculty can view all the assignment submitted in the portal.
2. If the faculty/admin wishes to see the content of the file they can do so by clicking on the files name.
3. If they wish to check the plagiarism they can do so by clicking on the button & on a different tab the plagiarised percentage will be shown.

Error Sequence:-

E1: Invalid credential by the faculty/admin will lead to the failure in login.

TITLE: Set Date & Time Constraints.

SUMMARY: The faculty/admin can set time constraints for the quiz so that every student gets equal time for completing the quiz & also set the final date for submission of assignment.

ACTORS: Student, Faculty, Admin.

Main Success Scenario:-

1. The faculty/admin will face the login validation phase.
2. After proper validation the admin while making the setting for the quiz can set the time constraints for the quiz.
3. Similarly in Assignment Submission Portal the admin/faculty can set the last date for submission.

Error Sequence:-

E1: The faculty/admin might not get through the login validation phase because of invalid credentials.

E2: The faculty/admin might not set the time in prescribed format for example the prescribed format is in seconds & the entry made is in words which will result in the error for the quiz.

E3: The faculty/admin might not set the date in the prescribed format for example the prescribed format is dd/mm/yyyy & the data entry is in words which will result in the error in the system.

TITLE: Set Negative Marking.

SUMMARY: The faculty/admin has the privilege of setting the negative marks in the quiz which would result in deduction of a predefined amount of marks on each wrong answer.

ACTORS: Student, Faculty, Admin.

Main Success Scenario:-

1. The faculty/admin completes proper validation.
2. While setting the quiz the admin/faculty may select the option for negative marking by selecting the radio button available.

Error Sequence:

E1: The faculty/admin might not get through the login validation phase because of invalid credentials.

E2: The faculty/admin might forget to select the option for negative marking.

TITLE: Generate Report.

SUMMARY: After the completion of the quiz by every student the marks will be stored in the database & can fetched by the faculty.

ACTORS: Faculty, Admin, Database.

Main Success Scenario:

1. After the quiz has been completed successfully the marks will be scored into the database.
2. The faculty then can fetch the marks of the students who attended the quiz.

TITLE: View Marks.

SUMMARY: After the quiz has been submitted successfully by the student the marks will be visible to him. The visibility of the marks to the student shows the transparency of the system & its evaluation scheme.

ACTORS: Student.

Main Success Scenario:-

1. The student will register/login into the system for participating the quiz.
2. After proper login into the system the student will attend quiz.
3. After the quiz has been submitted by the student the marks will be displayed on the screen.

Error Sequence:-

E1: The student while attending the quiz logout/closes the tab without submitting the quiz.

3.4 ACTIVITY DIAGRAM

Activity diagram is another important diagram to describe the dynamic aspects of this system. It is basically a flowchart to represent the flow from one activity to another. This flow is sequential, branched and concurrent at times to represent the flow control by using fork, join etc.

Activity Diagram in Fig.2. Can be explained as follows:

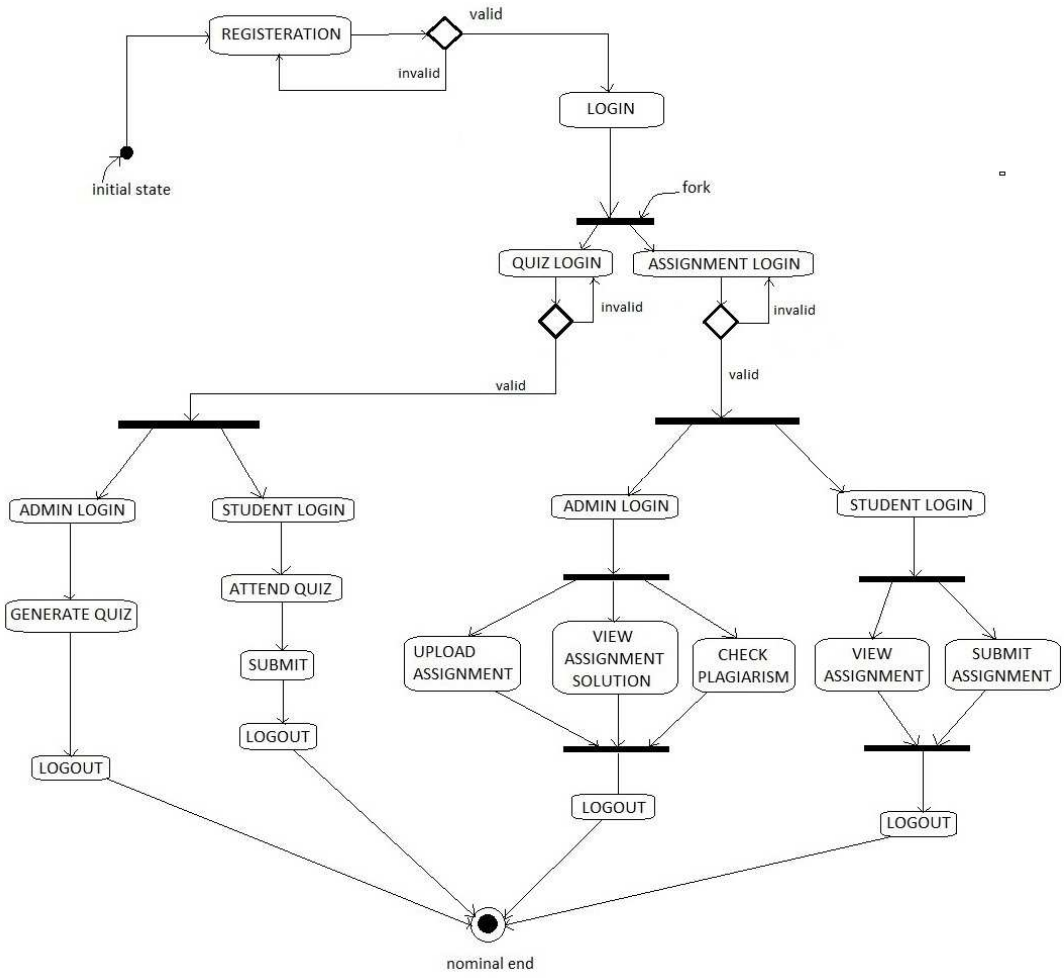

Fig 2. Activity Diagram

Initially, the end user has to register through the registration form if the username already exists or any of the mandatory fields are left empty the user is taken back to the registration phase. If the user is valid, the flow gets transferred to the Login phase to authenticate and to allow the entry of the user into the system for either Quiz Portal or

the Assignment portal as per the user's wish. User is made to select between the Admin & Student Login for the Assignment and the Quiz portals.

In the Quiz portal, if the user is the admin will be able to generate quiz by setting time & date for the quiz and will eventually logout for the flow to have a nominal end. If the user is a student, on starting the quiz will attend the quiz going through the question phase and lastly submit to see the results.

In the Assignment portal, Admin/Faculty will be able to upload assignment for the students, will be able to view individual files of the students to check the content of the assignment solutions, and will be able to check plagiarism among the files submitted by the students. If the user is a student, he/she will be able to view uploaded assignments by the faculty and also submit solutions by uploading a file in the prescribed format.

3.5 SOFTWARE DEVELOPMENT APPROACH

Software Development Approach means the approach used in developing the project. To develop the software, a software process model should be proposed and monitored at the beginning. A software process model for software engineering is chosen based on nature of the project, size requirements, methods and tools to be used. Among the many types of software process models, we choose the *Iterative model [8]* to develop the Web Quiz and Assignment Submission System. Iterative model is also called *Incremental model.* It is used when the initial requirements are well defined but overall scope is not clear. During each iteration, the development module goes through five phases-

Communication, Planning, Modelling, Construction and Deployment. The Communication phase contain-project initiation, requirements gathering; the Planning phase contains- estimation, scheduling and tracking; the Modelling phase contain- analysis and design; the Construction phase contain- Coding and Testing and the Deployment phase contain- delivery, support and feedback. Iterative model Advantages are-

- Risks are identified and resolved during iteration.
- We can go to one phase to another phase
- With every increment, operational product is delivered.

- Supports changing requirements.
- Testing and Debugging during smaller iteration is easy.

Disadvantages are-

- More resources may be required.
- More management attention is required.
- End of project may not be known which is a risk.

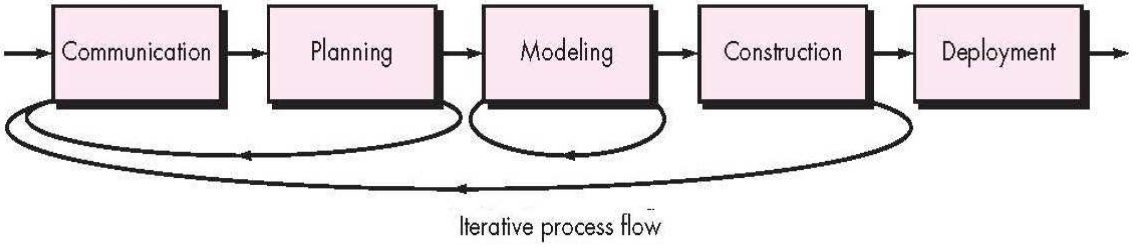

Fig 3. Iterative model

The phases in Incremental model:

- COMMUNICATION: This phase contains the Project Initiation and Requirements gathering. In this model initial requirements are well defined but overall scope is not clear. Requirements for a software to be developed are gathered. These requirements will be in a language that is understood by the customer/user. We gathered the requirements through analysis the existing and need for the new system.

- PLANNING: This phase contains the Estimation, Scheduling and Tracking. To do planning of overall project estimating the time to complete the project and scheduling the work for the different phases, dividing the work between the team mates. By tracking checking the progress of the project. Scheduling and distributing different tasks along with the estimation of completion for different modules. Divided the Front end and Backend part of the system among team members.

- MODELLING: This phase contains the Analysis and Design. Analysis focus on problem (What) domain of the project and Design focuses on solution (How) domain of the project. The gathered requirements are analysed from implementation point of view and the software specifications are written. Comparative Analysis on the basis of existing system and online resources & design the proposed model. Design phase involves arriving at the software architecture and implementation specifies based on technology chosen for development. The design process translates requirements into a representation of the software that can be assessed for quality before coding begins.

- CONSTRUCTON: Construction phase contains Coding and testing part. Coding work is done in the phase and code is developed. The design must be translated into a machine-readable form. Software design is translated into source code. We used different languages and frameworks for coding like HTML, CSS, Bootstrap, JavaScript for Front-end part and PHP, MySQL for Back-end part and represent the User Interface (UI) and page layouts with the help of web browser and web server. Once code has been generated, program testing begins. Each module is tested by doing different types of testing- unit testing, integration testing and system testing. The testing phase is only stage where the product defects are reported, tracked and fixed and retested, until the product reaches the quality standards defined in the SRS.

- DEPLOYMENT: This phase contains delivery feedback and support. Software development is all of the activities that make a software system available for use. Delivering the product to the client and getting feedback. Giving them the right support of the system. It is yet to be done in our project.

3.6 COMPARATIVE ANALYSIS

Table 1: Comparative Analysis of Existing Quiz Portals and WQA Portal

TESTYOU.IN [1]	EXISTING SYSTEM	WQA Portal
The system is able to take the alpha-numeric entries at time of login.	The system is not able to take alpha-numeric entries at time of login.	The system is able to take the alpha-numeric entries at time of login.
The system is able to provide feature of dynamic negative marking.	The system is not able to provide feature of dynamic negative marking.	The system is able to provide feature of dynamic negative marking.
The system is able to store marks of the students after completing quiz.	The system is not able to store marks of the students after completing quiz.	The system is able to store marks of the students after completing quiz.
The system allows to enter Q/A through excel sheet or add manually.	The system allows to enter Q/A for quiz through spreadsheet only.	The system allows to enter Q/A for the quiz through text file.

Table 1.2: Comparative Analysis of Existing Assignments and WQA Portal

DUPLICHECKER [4]	PLAGIARISM CHECKER [5]	WQA SYSTEM
The system allows to enter a particular file.	The system allows to enter only a part of text.	The system allows you to enter two files at a time which are stored in database.
The result displayed shows the URL's from where the text is possibly copied.	The result displayed shows the URL's from where the text is possibly copied.	The result displayed shows the difference between two files text & similarity among the text.
The system does not allow to create database to refer files in future.	The system does not allow to create database to refer files in future.	The system allows to create database to refer files in future.
The scope of system is limited to checking plagiarism.	The scope of system is limited to checking plagiarism.	The system allows files to get stored for future reference & also can check plagiarism.

CHAPTER 4

MODULAR DESCRIPTION

4.1 QUIZ PORTAL

The QUIZ PORTAL involves following phases

- ADMINISTRATOR

  4.1.1 Registration & Authentication Phase

  4.1.2 Question Generation Phase

  4.1.3 Report Generation Phase

- STUDENT

  4.1.4 Authentication Phase

  4.1.5 Question Phase

  4.1.6 Result Generation Phase

ADMINISTRATOR

4.1.1 REGISTRATION & AUTHENTICATION PHASE:

This proposed system is completely authenticated in order to enhance security and corruptions of database as well as the software. A person is given access permission to this system when he/she has got a valid username and password i.e. the administrator. Hence this authentication module includes two fields where administrator is asked to enter the username and password.

This phase is fulfilled through the Admin Login page which would provide authentication and most importantly security to the system as the whole system is managed by the administrator.

The details include:

1. Username
2. Password

4.1.2 QUESTION GENERATION PHASE:

This phase includes the various categorized question generation. In this phase the administrator can perform add, modify, and delete, clear all operation. This phase may be the most important phase in proposed system, because it is the one where the entire system gets the categorized questions along with their correct answers for the quiz as soon as input by the administrator through a txt file.

4.1.3 REPORT GENERATION PHASE:

This phase contains storing the marks obtained by the students and generation of a report as a result for all the students which maybe further used by faculty for allotting marks.

STUDENT

4.1.4 AUTHENTICATION PHASE:

After the registration, a person is given access permission to this system when he/she has got a valid username and password. Hence this authentication module includes two fields where participant/student is asked to enter their username and password. The details include:

1. Enrollment ID
2. Password

4.1.5 QUESTION & ANSWER PHASE:

This phase provides the students a set of multiple-choice questions and a set of answers below the specific question.

This module is provided with three fields:

1. Question number
2. Question field
3. Option1, 2, 3, 4...

4.1.6 RESULT GENERATION PHASE:

The result of the corresponding student is generated based on his, her performance in the test. The result is generated at the end of the quiz. The result is generated with the help of following field:

1. Username/Enrolment ID
2. No. of Questions Attempted
3. Marks Obtained

4.2 ASSIGNMENT PORTAL

The Assignment Portal involves following phases

- **FACULTY/ADMININISTRATOR**

  3.2.1 Registration & Authentication Phase

  3.2.2 Uploading Assignment Phase

  3.2.3 Plagiarism Check Phase

  3.2.4 Marks Allotment Phase

- **STUDENT**

  3.2.5 Authentication Phase

  3.2.6 Viewing Assignments Phase

  3.2.7 Solution Upload Phase

ADMINISTRATOR

4.2.1 AUTHENTICATION PHASE

In order to enhance security and corruptions of database as well as the software. A person is given access permission to this system when he/she has got a valid username and password i.e. the administrator. Hence this authentication module includes two fields where administrator is asked to enter the username and password. The details include:

1. Username
2. Password

4.2.2 UPLOADING ASSIGNMENT PHASE

The Faculty will upload assignment to be floated amongst the students with a deadline within which all the students must submit their assignment in order to get evaluated.

4.2.3 PLAIGIARISM CHECK PHASE

Faculty & Administrator would be able to check plagiarism in random uploaded submission files of the students and faculty will be able to view individual uploaded assignments for proper evaluation. This phase is a major game changer in the system which would eliminate copy-paste amongst students and would emphasize self-work.

4.2.4 MARKS ALLOTMENT PHASE

Faculty would be allotting marks to the students accordingly after checking for the plagiarism in uploaded assignments, also he/she would be able to view individual uploaded assignment submissions for viewing the quality of content delivered by the students.

STUDENT

4.2.5 AUTHENTICATION PHASE

In order to enhance security and corruptions of database as well as the software. A person is given access permission to this system when he/she has got a valid username and password i.e. the administrator. Hence this authentication module includes two fields where the student/participant is asked to enter the username and password with which he/she had already registered.

The details include:

1. Username
2. Password

4.2.6 VIEWING FLOATED ASSIGNMENT

Students will be able to check for the uploaded assignments from the faculty. In order to check for the recent assignments uploaded of the different courses along with their deadline which would keep them updated.

4.2.7 UPLOAD ASSIGNMENT SOLUTION

Students will upload assignment solutions in txt format which is later evaluated by the faculty in the plagiarism and marks allotment phase.

CHAPTER 5

IMPLEMENTATION

5.1 FRONT-END

The Front-end means everything that involved what the user sees. It is converting data to graphical interface for user view and interact with data through digital interaction using HTML, CSS and JavaScript.
For developing the Front-end of the project, the languages and frameworks that we used are HTML, CSS, Bootstrap and JavaScript.

HTML: - Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. It describes the structure of a web page semantically and originally cues for the appearance of the document.

CSS: - Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is designed to enable the separation of presentation and content, including layouts, colors and fonts.

BOOTSTRAP: - Bootstrap is a free open-source front-end framework for designing websites and web applications. It contains HTML and CSS based design templates for typography, forms, buttons, navigation and other interface components as well as optional JavaScript extensions.

JAVASCRIPT: - JavaScript often abbreviated as JS, is a high-level interpreted programming language. It is a language which is also characterized as dynamic, weakly, typed, prototyped-based and multi-paradigm.

5.2 BACK-END

The Back-end refers to the server side of a website or an application and everything that communicates between database and the browser. It primarily focused on how the

site works. Making updates and changes in addition to monitoring functionality of the site.

For developing the Back-end of the project, the languages that we used are PHP and MySQL.

PHP: - Hypertext Pre-processor (PHP) is a server-side scripting language designed for web development. It is widely-used open source general-purpose scripting language and can be embedded into HTML.

MySQL: - My Structured Query Language (MySQL) is a open source relational database management system (RDBMS). MySQL is the most popular database system used with PHP. It is a database system that runs on a server.

5.3 DATABASE DESIGN

5.3.1 ADMINISTRATOR

Table 2.1: admin

Name	**Type**
admin_id	varchar (10)-**Primary**
admin_pass	varchar (30)

5.3.2 REGISTERED STUDENTS

Table 2.2: register

Name	**Type**
Name	varchar (50)
enroll_no	varchar (30)-**Primary**
email_id	varchar (50)
phone_no	int (10)
Password	varchar (30)

5.3.3 STUDENTS QUIZ MARKS

Table 2.3: quiz_marks

Name	**Type**
enroll_no	varchar (10)-**Primary**
Marks	int (100)

5.3.4 ANSWERS

Table 2.4: answers

Name	**Type**
Aid	int (250)-**Primary**
Answer	varchar (500)
ans_id	int (250)

5.3.5 QUESTIONS

Table 2.5: questions

Name	**Type**
q_id	int (250)-**Primary**
Question	varchar (500)
ans_id	varchar (250)

5.3.6 ASSIGNMENT DETAILS

Table 2.6: assignment_details

Name	**Type**
assignment_name	varchar (50)
float_date	date
dead_date	date
File	text

5.3.7 STUDENTS ASSIGNMENT SOLUTIONS

Table 2.7: solution

Name	**Type**
Enroll_no	varchar (10)-**Primary**
Filename	text

CHAPTER 6

TESTING

6.1 TESTING PROCESS

Testing is a set of activities that can be planned in advance and conducted systematically. Testing requires that the developer discard preconceived notations of the correctness of the software just developed and overcome a conflict of interest that occurs when errors are encountered. It also provides the main objective of our project and understand the risk of implementation. It is the process of executing a program or an application with an intent of finding an error or bugs. It can be stated as the process of validating and verifying that a software program/application/product [8].

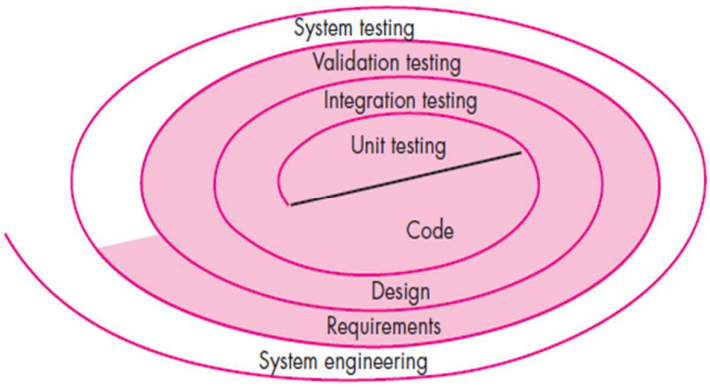

Fig 4. Testing Strategy

6.2 TEST PLAN

Test plan will describe about the scope and activities of our modules in the project. Student and Admin module. In both module we will define test cases for all phases briefly for both Student and Admin module. The Test cases will define the objectives and constraints. The main aim of test plan is to produce a correct code with all users requirements satisfied.

6.3 UNIT TESTING

Unit testing focuses verification effort on the smallest unit of software design the software component or module.

6.4 INTEGRATION TESTING

Integration testing (sometimes called Integration and Testing, abbreviated "I&T") is the phase in software testing in which individual software modules are combined and tested as a group. It occurs after unit testing and before validation testing

6.5 VALIDATION TESTING

The process of evaluating software during the development process or at the end of the development process to determine whether it satisfies specified business requirements. Validation Testing ensures that the product actually meets the client's needs. The two major areas, when validation testing should take place are in the early stages of software development and towards the end, when the product is ready for release. In other words, it is acceptance testing which is a part of validation testing.

Test cases for Register:

- Before logging the user had to register himself as in Fig 5.
- A user can register himself only once.
- The registered student can login to both portal quiz and assignment, who had done the registration to any portal.

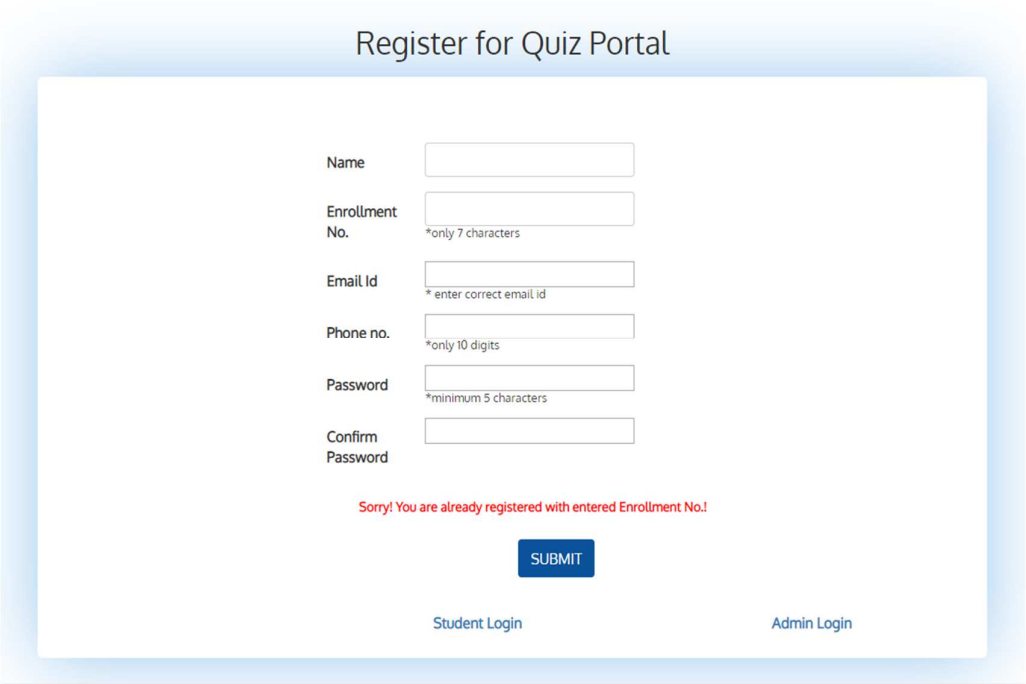

Fig 5. Registration

Test cases for Student Login:

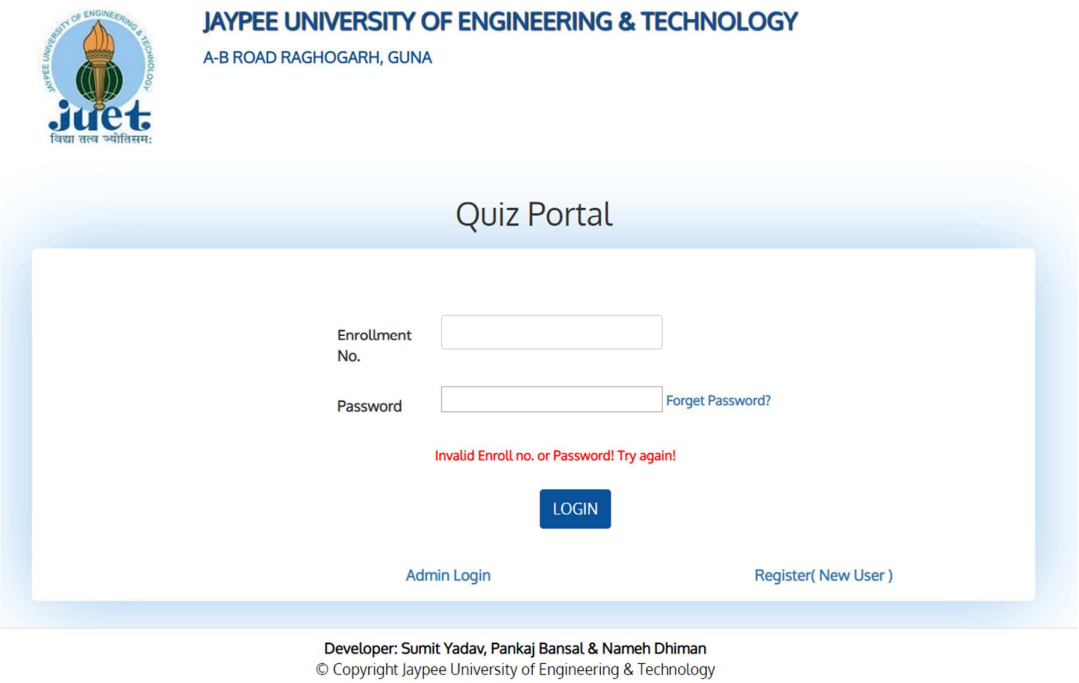

Fig 6. Student Login

- The user can login with their Enrollment No. and Password, entered at the time of registration as shown in Fig 6.

- Once quiz submitted you can't login and once assignment submitted you can't submit assignment again.

Test cases for Admin Login:

- Admin can login only with their given ID and password.
- Admin can't register himself as shown in Fig 7.

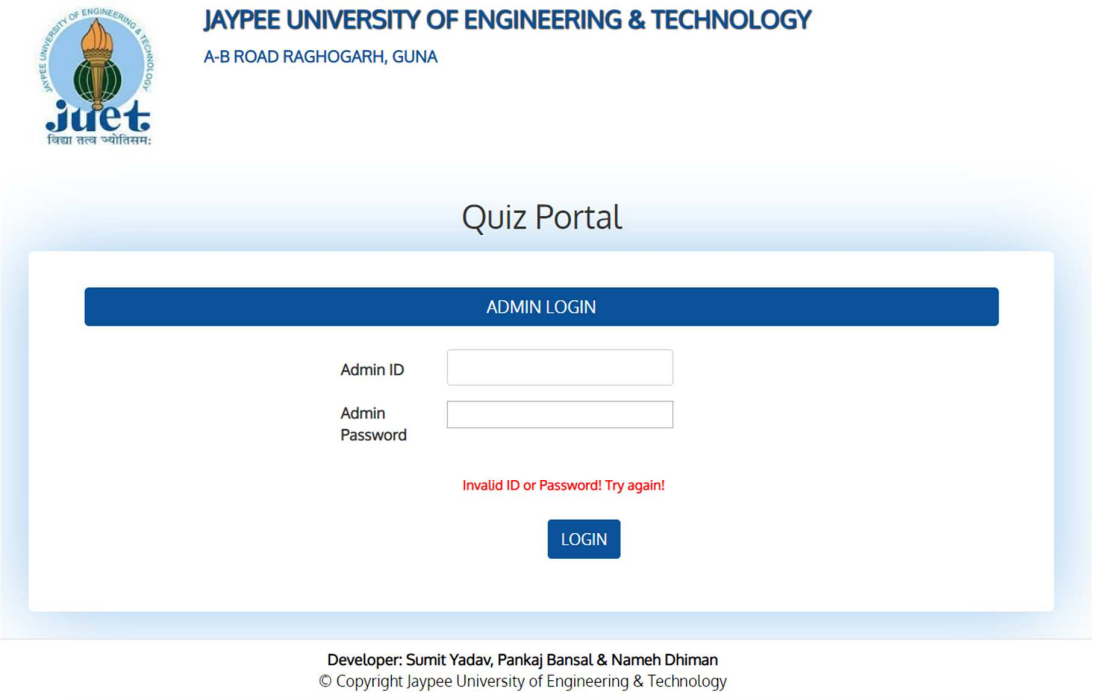

Fig 7. Admin Login

Test cases for Create Quiz:

- Till now the quiz is working only for text (.txt) file, so Admin can upload question and answer file through text file only.
- Only one quiz can happen at one time.

Test cases for Question and Answer File for Quiz:

- Question file should contain question no., question, question mark (?) and then options separated by comma (,) and full stop as shown in Fig 8.

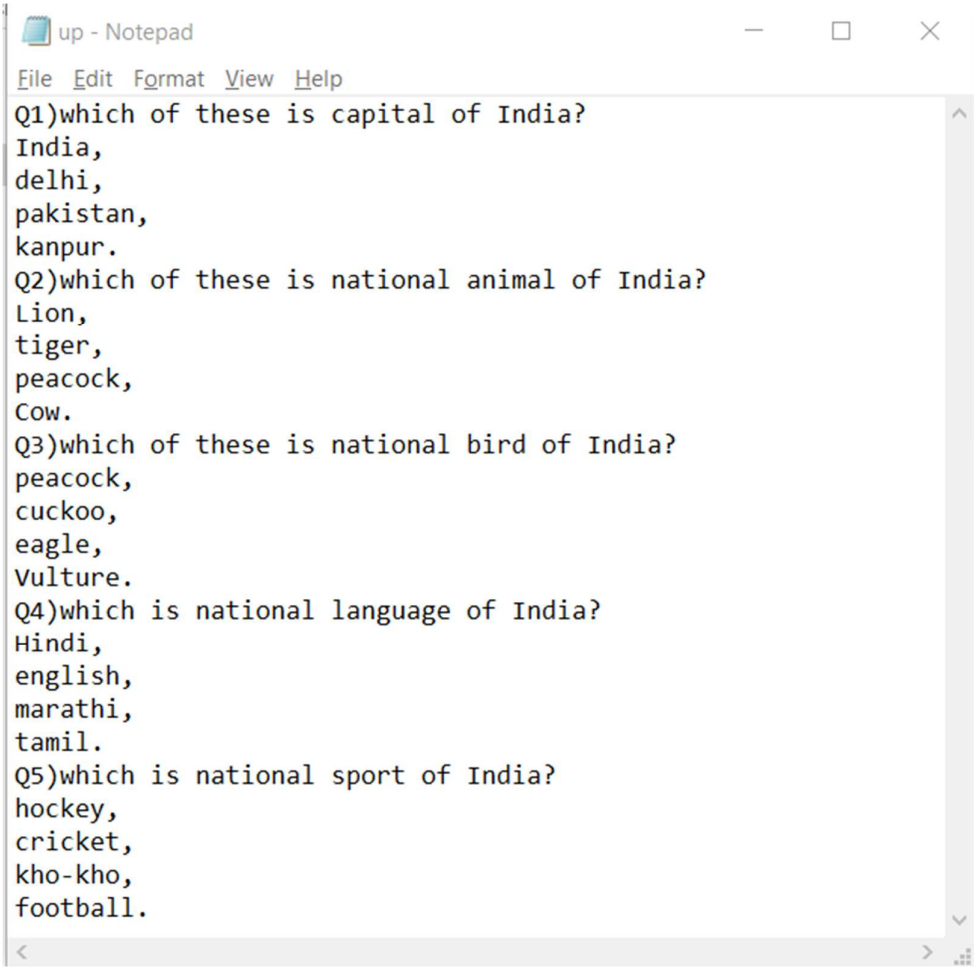

Fig 8. Question Format

- Answer file should contain option no. separated by dot (.) and next line as shown in Fig 9.

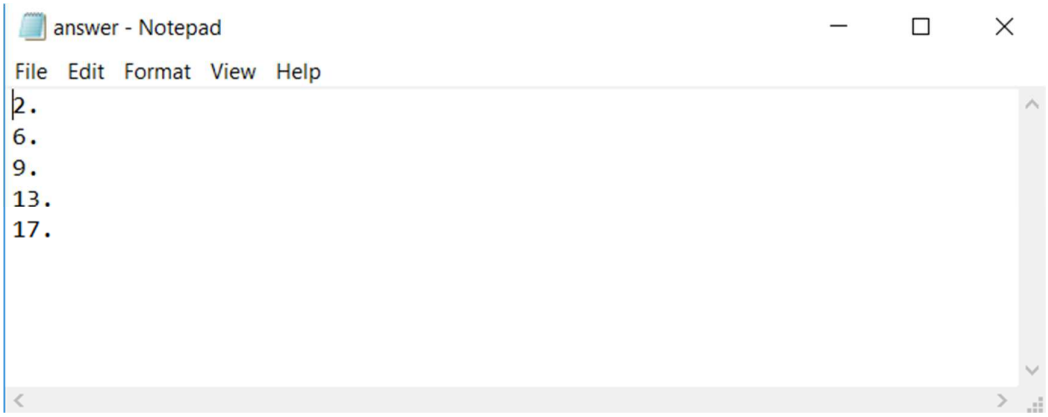

Fig 9. Answer Format

Test cases for Float Assignment for Assignment:

- Admin can upload assignment file with any format like .doc, .txt or .pdf.

Test cases for Check Plagiarism for Assignment:

- For Checking Plagiarism Admin had to give two File Name in which he wants to find plagiarism as shown in Fig 10.

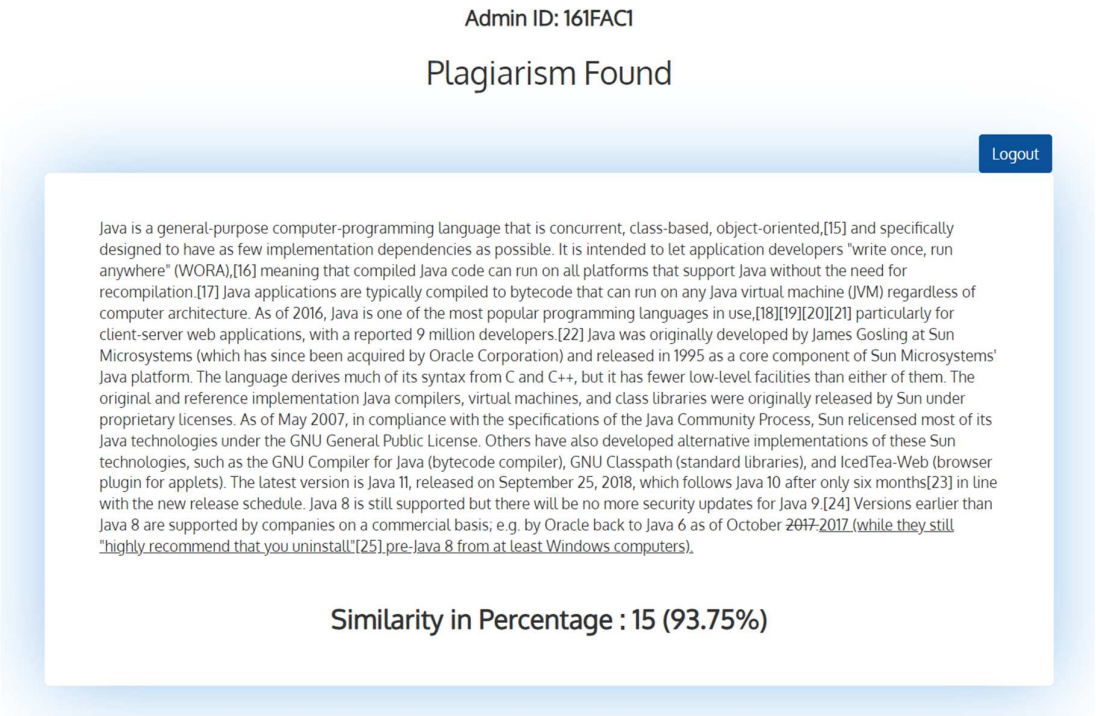

Fig 10. Plagiarism Check

Test cases for Submit for Assignment:

- Students can submit assignment only once in any two format .txt or .doc.
- After dead date of assignment Students can’t submit assignment after dead date gets over.

Test cases for Forget Password:

Students can use the Forget Password feature if in case they forget password as shown in Fig 11, they had to enter the enrolment no. and email id registered at the time of registration and email will be sent to their email id which contain password.

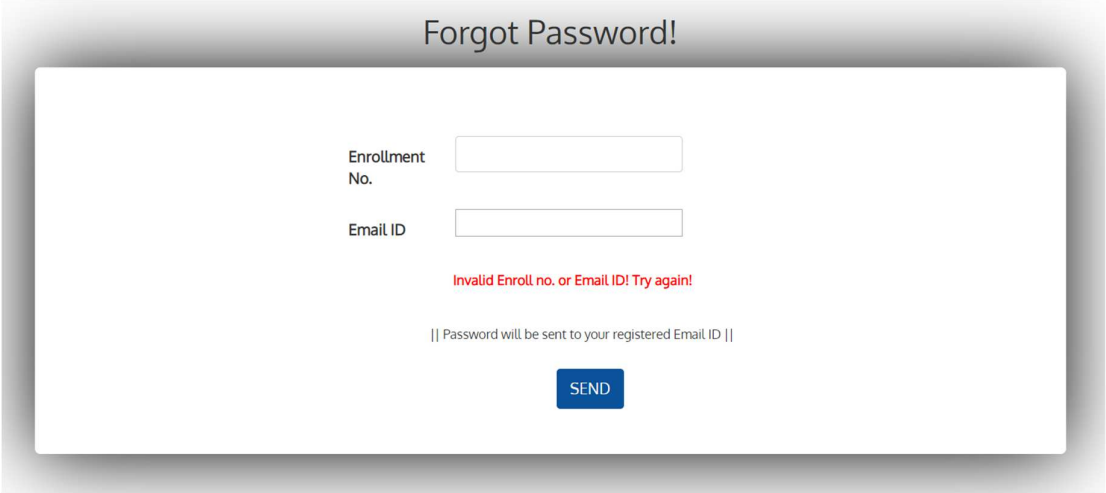

Fig 11. Forgot Password

CHAPTER 7

RESULTS & GUIDELINES

These are the following things that we have attained during our project:

- Authenticated and validated the users and admin
- Provided the dynamic feature for negative marking.
- Uploaded the Ques/Ans through a ".txt" format.
- Successfully showing the quiz marks to the user and the admin.
- Successful in showing plagiarism in the submitted assignment file at low level.
- Successful in giving Forget Password feature.

The following guideless should be followed while using the system:

FOR STUDENTS

- Student should register himself with their correct Enrollment No. only, if he found register himself with other Enrollment no. then his quiz and assignment submission will be evaluated as 0.
- Student should remember their password and should never tell your password to others.
- Student should read the instructions of the quiz carefully.
- Student should logout before closing the tab.

FOR ADMIN

- Admin should login with their given ID and password.
- Admin should upload question and answer file through ".txt" format file only for the quiz.
- Admin should create the ".txt" file for quiz as prescribed & should give their default names.
- Admin should logout before closing the tab.
- Admin should give file name correctly in checking plagiarism of the particular file.

CHAPTER 8

CONCLUSION & FUTURE WORK

This Web Quiz and Assignment Portal provides an online platform for conducting Quizzes and submitting Assignments. It is an efficient manner and no time wasting for checking the quiz and assignment, saves a lot of time, paper and effort.

Only the registered users can login to the quiz and assignment portal with his Enrollment no. and Password. As the quiz gets over, marks scored will display so no need to wait for the result and administrator can view the marks of all the students. Administrator has a privilege to generate the quiz, modify and delete the particular questions. Admin can enable or disable the negative marking for a particular quiz. Question and Answer file uploaded by the admin should be in ".txt" format with the format defined in Test cases.

In Assignment portal admin can float the Assignment file with float date and dead date and can view the submitted assignment by the students and can check plagiarism in the submitted file. It reduces the task of checking plagiarism for the faculty. Students can view the floated assignment question file and can submit the assignment solution in a "txt" file format. Student can submit assignment only once and after dead date of assignment gets over student can't submit assignment.

These are the following thing which we would like to attain as part of our future work:

- In future we will work for hosting multiple quizzes at a time.
- We will work in showing 1 question at a time to the user in the quiz and when the user click on "next" button, next question will be displayed to him.
- We will work in uploading question and answer file of quiz in various formats like doc or pdf.
- In our future assignment portal, we will work on checking plagiarism between the files at the best level so that it will be easy for admin to give right marks to the students.
- We will also provide more security to our portal so that it may not be hacked.

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