



SOFTWARE ENGINEERING **PROJECT REPORT**

School name: Vellore Institute of technology(VIT),
Chennai

Faculty name(EPR No.): Dr. N. Ilakiyaselvan
(50183)

Academic Year: Fall -2020.

Title of the project: Online Examination Portal.

Number of students involved: 3

Student:

1. Aayush Kumar Singh 19BCE1113.
2. Dhruv Patel 19BCE1578.
3. Pujara Rahi 19BCE1777.



Project description

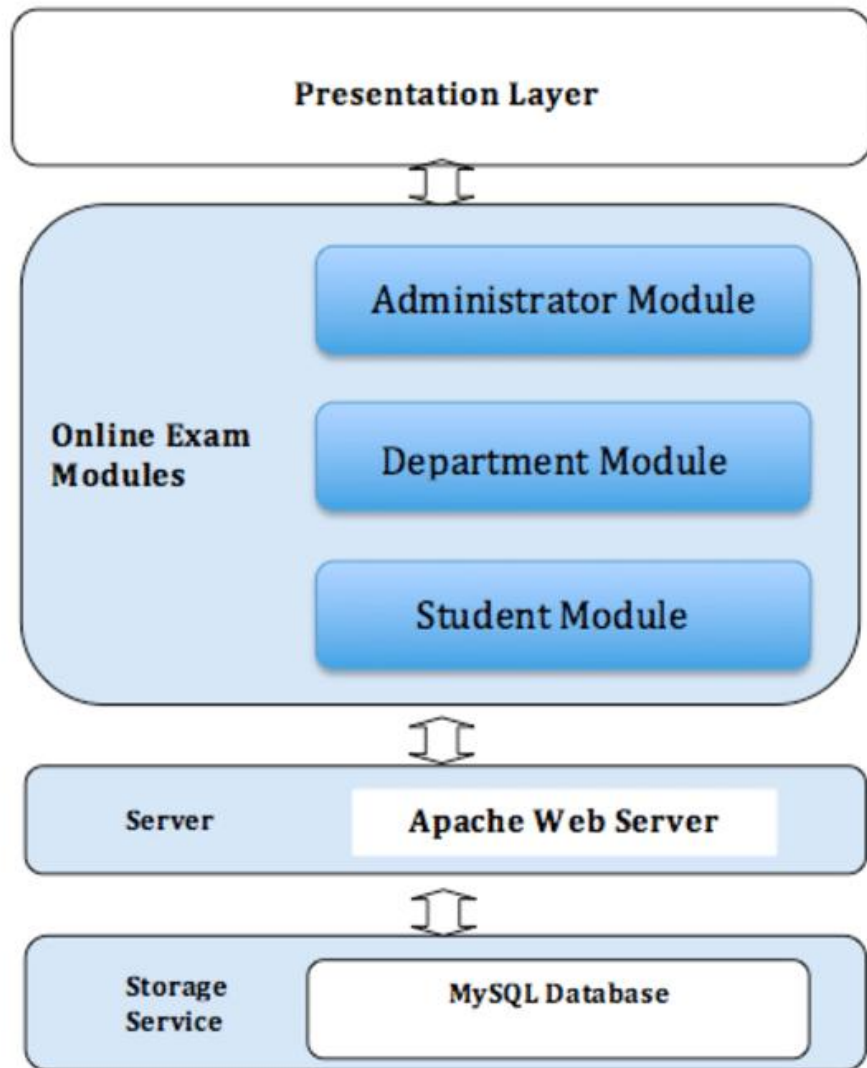
Life Cycle Model

We use Waterfall Model for our project where each phase has to be completed and signed off before subsequent phase can begin. This model is named “Water Fall” because its diagrammatic representation resembles a cascade of waterfalls (the natural wonders of falling water). This model is easy to understand and reinforces the notion of “define” and “design” before “code”.

The water fall model is one of the earliest attempts to describe the software development life cycle. In the waterfall model, the project is split up into phases: requirements capture, analysis, design, implementation, testing, maintenance, etc., i.e. development moves from concept, through analysis, design, implementation, testing, installation, troubleshooting, and ends up at operation and maintenance. Each phase of development proceeds in strict order, without any overlapping or iterative steps. In the strict case, each phase must be finished before development proceeds to the next phase.



Architecture





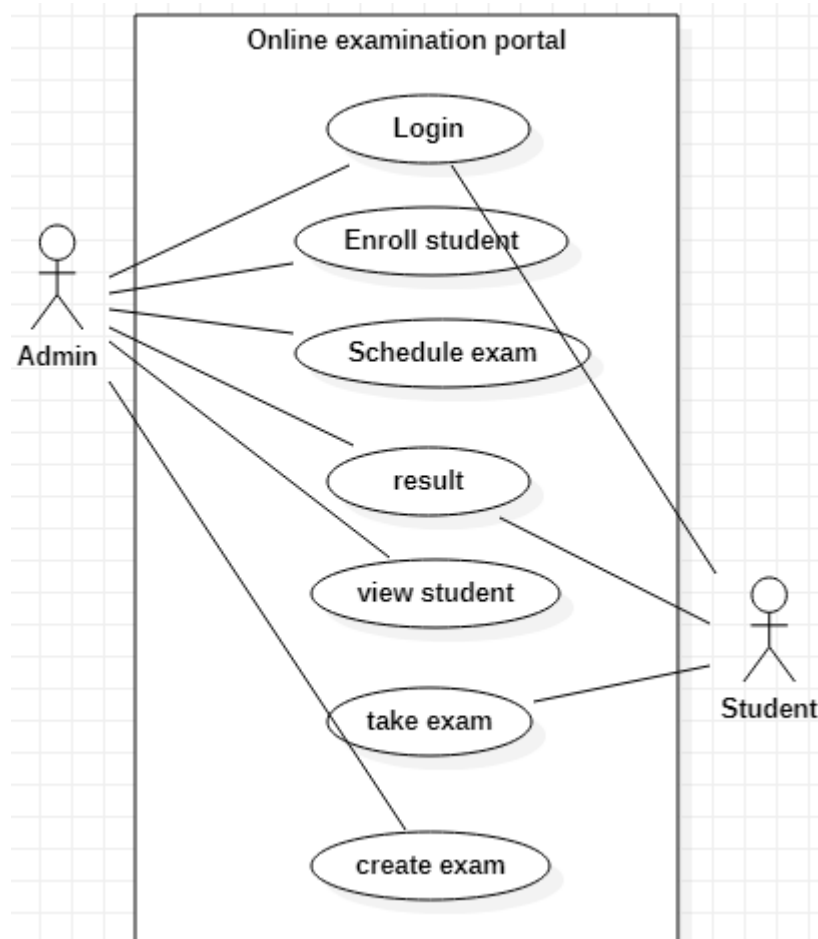
System Architecture

We use layered architecture for our project. This pattern can be used to structure programs that can be decomposed into groups of subtasks, each of which is at a particular level of abstraction. Each layer provides services to the next higher layer.

The most commonly found 4 layers of a general information system are as follows.

1. Presentation layer.
2. Application layer.
3. Domain layer.
4. Data access layer.

UML DIAGRAMS



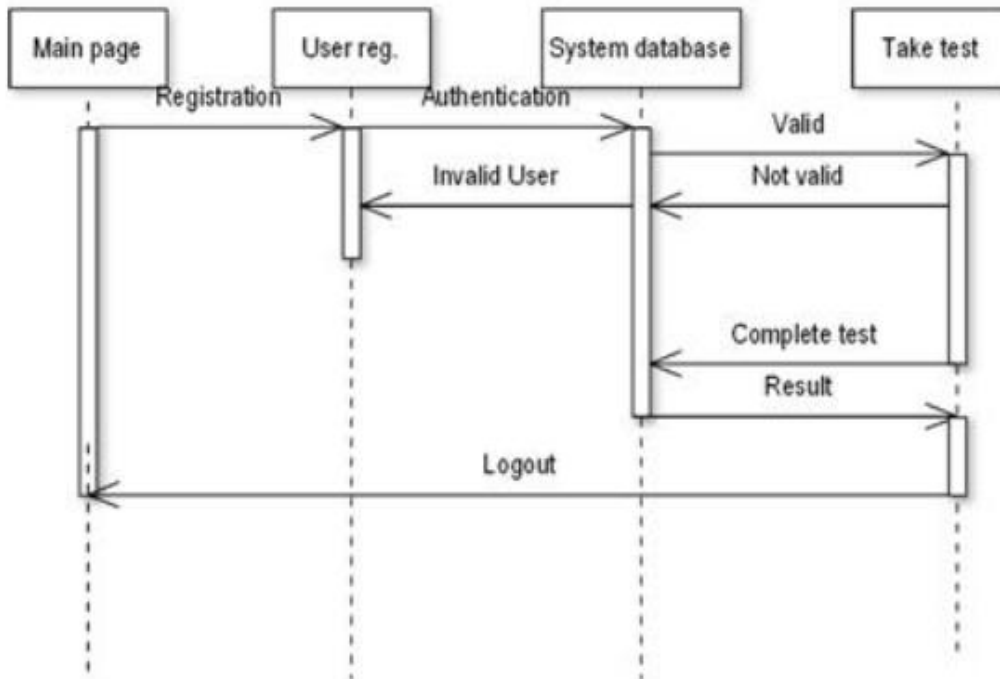
There are 2 kinds of the user

Student: The student will login to the system and take his/her exam. The student will get result immediately after the completion of the exam.

Administrator: The administrator is the main user of the system, and he/she can control complete website.



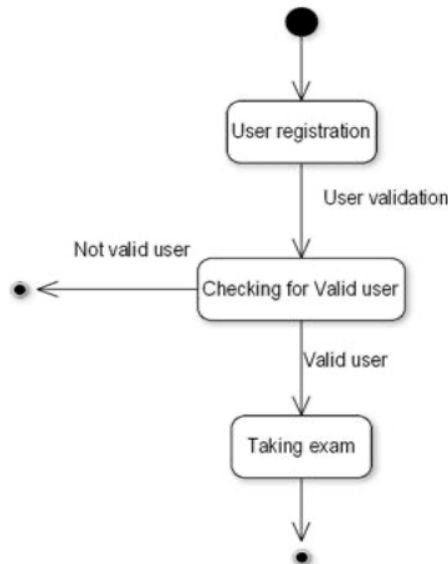
SEQUENCE DIAGRAM



A sequence diagram shows object interactions arranged in time sequence. It depicts the objects involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario.

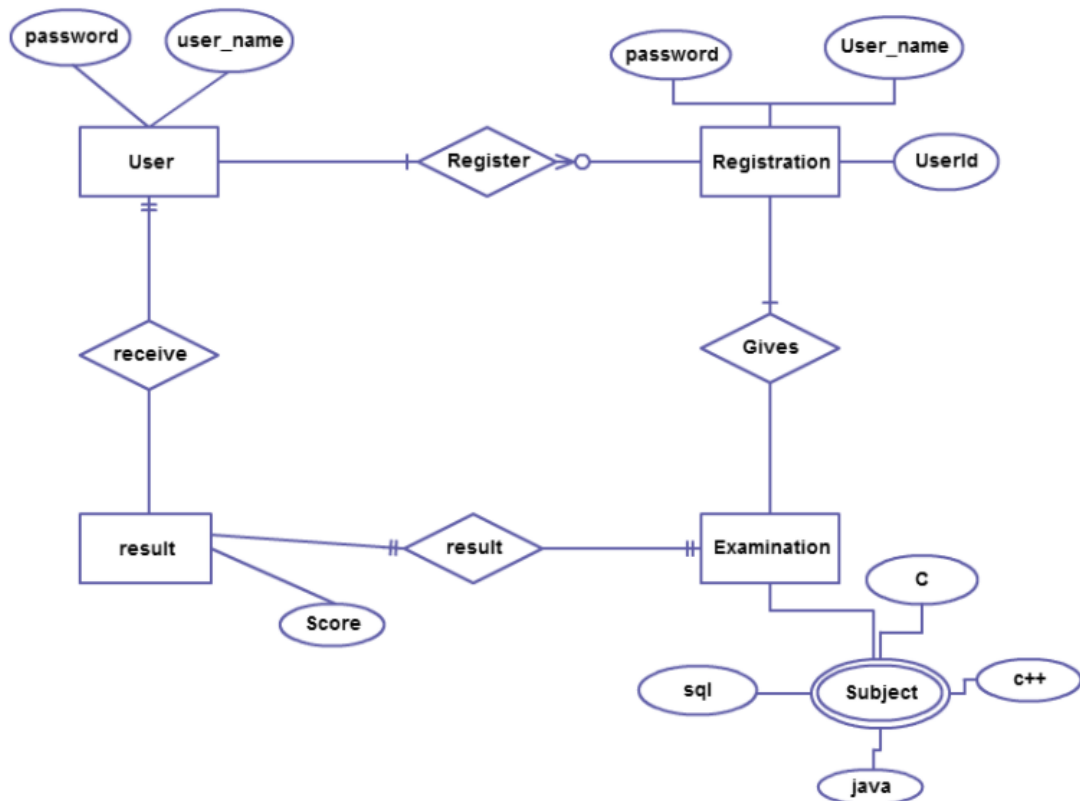


STATE CHART DIAGRAM



A state diagram is a type of diagram used in computer science and related fields to describe the behavior of systems. State diagrams require that the system described is composed of a finite number of states; sometimes, this is indeed the case, while at other times this is a reasonable abstraction. It shows the various states that each user that has to go through that to access the functions of the programs and also depicts which all functions that the user has to go through to get to the next state or function of the program. It also shows the beginning and ending states of the program from where the user can begin to use and where the user can finally stop using the program.

ER Diagram

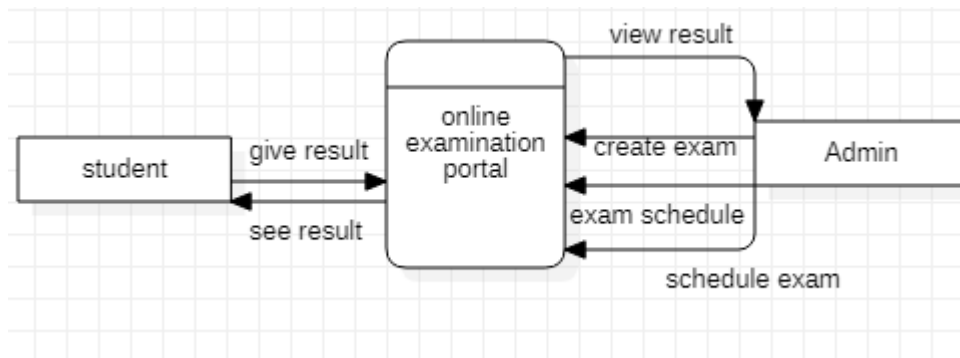


An entity–relationship model describes interrelated things of interest in a specific domain of knowledge. A basic ER model is composed of entity types and specifies relationships that can exist between entities. In software engineering an ER model is commonly formed to represent things a business needs to remember in order to perform business processes.

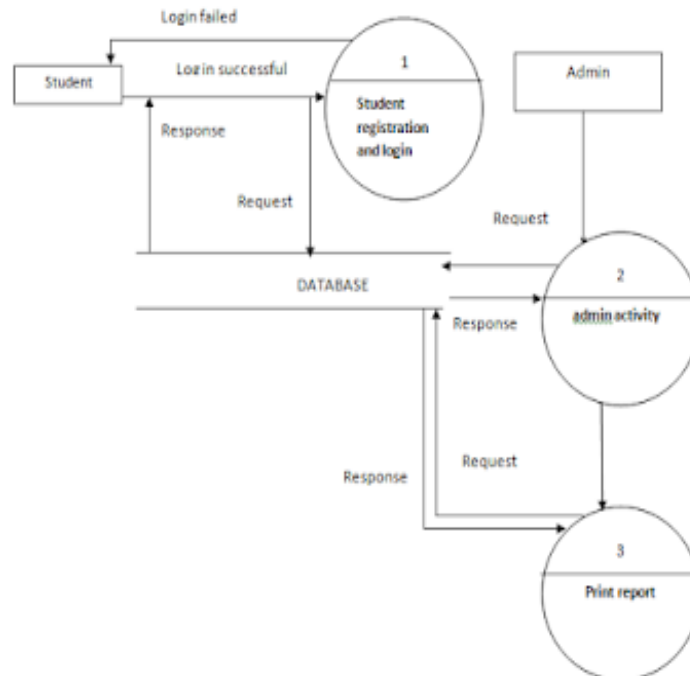


DFD

Level-0



Level-1



A data-flow diagram is a way of representing a flow of data through a process or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself. A data-flow diagram has no control flow, there are no decision rules and no loops. Level 0 shows the basic flow of data between the users and the program. Level 1 shows the intricate inner data flows between the inner modules and the user information. It gives a detailed idea about how the information flows between the users and the various modules.



Testing Phase

The testing phase is an important part of software development. This system will help in automate the process of finding errors and missing operations and also a complete verification to determine whether the objectives are met and the user requirements are satisfied.

online examination portal test case [Compatibility Mode] - Microsoft Excel

Home Insert Page Layout Formulas Data Review View

Clipboard Font Alignment Number Styles Cells Editing

B4

	A	B	C	D	E	F	G	H	I
1		Project Name:	Online Examination portal	Test Designed by:	Aayush kumar singh				
2		Release Version:	1	Test Designed date:	11/17/2020				
3				Test Executed by:	Aayush kumar Singh				
4									
5									
6									
7									
8									
9									
10	Test Case	Test Title	Test Summary	Test Steps	Test Data	Expected Result	Post-condition	Actual Result	Status
11	1	Verify that there is a portal to create exam in the system.	We are checking we can create the exam.	1.login as an admin 2.go through admin page 3.select the option of create exam	Create exam page.	TRUE		TRUE	Passed
12	2	Checking after creating an exam that the exam have correct details.	We are just checking Whether a newly added exam has all the necessary details	1.After passing the Preconditions of login and test page 2.Admin has added a new exam. 3.Verified that all the fields are filled Before being added to the database 4.Verified that the entered values Are of correct type	Exam Details of a particular exam.	TRUE		TRUE	Passed
		Check Whether the details Entered by the	We are checking whether the admin entered a proper	1.login as an admin 2.enter exam details 3. click on add button	Exam Details of a particular exam.	TRUE		TRUE	Passed

Test Case Template Example Sheet2 Sheet3 Sheet1

Ready

Type here to search

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IN 11/17/2020



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	A	B	C	D	E	F	G	H	I
13	3	Check Whether the details Entered by the admin Are feasible(in range)	We are checking whether the admin entered a proper question and proper option.	1.login as an admin 2.enter exam details 3. click on add button 4.The values get verified using validation	Exam Details of a particular exam.	TRUE		TRUE	Passed
14	4	Verify that student can search for exam and its schedule.	A student can search for a exam and its schedule.	1.login as student. 2.go to search exam page 3input the data for a particular exam. 4.press on search button	An Exam details page.	TRUE	Verify that search results have exam details.	TRUE	Passed
15	5	Verify that student can see their result.	result of the exam.	1.log in as an student 2. enter a particular exam 3.click on search button 4.click on view result button.	Exam result	TRUE	Verify that search results have exam result and student appear for the exam.	TRUE	Passed
16	6	Verify that student can take the exam.	exam page.	1.log in as an student 2. enter a particular exam 3.click on search button 4.click on take exam button.	exam page.	TRUE	Verify that search results have exam details.	TRUE	Passed
17									
18									
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22									
23									

Test Case Template Example Sheet2 Sheet3 Sheet1

Ready

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VIT[®]
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Program Output

Online Examination Portal

➔ Signin

sign up

Admin Login

Developers

Log In

Close

Log in



S.N.	Topic	Total question	Marks	Time limit	
1	Computer Fundamentals - Dbms	10	10	10 min	Start
2	Networking ✓	2	4	5 min	Restart
3	C++ Coding ✓	2	4	5 min	Restart

S.N.	Quiz	Question Solved	Right	Wrong	Score
1	Networking	2	1	1	1
2	C++ Coding	2	0	2	-2



Rank	Name	Gender	College	Score
1	Dhruv	M	VIT	8
2	Rahi	M	VIT	7
3	Student1	M	VIT	-1

Question 1 ::
A collection of related data.

- ☐ Information
- ☐ Valuable information
- ☐ Database
- ☐ Metadata

Submit



LOGIN

Login

S.N.	Name	Gender	College	Email	Mobile	
1	Dhruv	M	VIT	dhruv@vitstudent.ac.in	9889977665	
2	Rahi	M	VIT	rahi@vitstudent.ac.in	9887766554	
3	Student1	M	VIT	student1@vitstudent.ac.in	9889989976	



Rank	Name	Gender	College	Score
1	Dhruv	M	VIT	8
2	Rahi	M	VIT	7
3	Student1	M	VIT	-1

Add Quiz :

Enter Quiz Details

Enter Quiz title

Enter total number of questions

Enter marks on right answer

Enter minus marks on wrong answer without sign

Enter time limit for test in minute

Enter #tag which is used for searching

Write description here...

Submit



Enter Question Details

Question number 1 :

Write question number 1 here...

Enter option a

Enter option b

Enter option c

Enter option d

Correct answer:

Select answer for question 1

Question number 2 :

Write question number 2 here...

Enter option a