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Online Exam

Project using J2EE

This project thesis is submitted in partial
fulfillment of the requirement for Industrial Training

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Under the guidance of Mr. SIRSENDU

INTEGRATED MASTER IN COMPUTER APPLICATION

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CERTIFICATE (MINOR PROJECT)

This is to certify that this minor project "ONLINE EXAM" is a bonafide record by the following group member of Aliah University.

PROJECT GROUP:-

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ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion of this project would be incomplete without the mention of people whose ceaseless co-operation made it possible, whose constant guidance and encouragement crown all efforts with success.

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INTRODUCTION

The project described within this document is an **Online Examination** System designed with the specific goal of reducing the hectic job of assessing the answers given by the candidates manually. Responses by the candidates will be checked automatically and instantly. Being an integrated Online Examination System it will reduce paper work. The result will be shown immediately to the participating students reducing the anxiety. It can generate various reports and graphs for evaluation purpose almost instantly when and where required. It will also send mail notifications to the students about the detailed description of tests, their results and other information through Small Message Transfer protocol (SMTP).

The system is designed for Educational Institutes like Schools, Colleges, and Private Institutes to conduct logic tests of their students on a regular basis. Design to facilitate administrator and user friendly interface complete and secure information is provided to user scope.

OBJECT AND SCOPE OF THE PROJECT

Object:

- + Corporative between the data stored in the server of the Institute and online exam system. To deal with online system in an easy way and efficient mannered.
- + Specify a privilege for each person to allow each persone use this system to create his own exam. And have complete control on his exam.
- + Allow each person to create more than one exam with different way to create variant question.

Scope:-

- + Online Exam system is designed for Educational Institute (like school, university and training center etc.).
- + The system handles all the operation and generates reports as soon as the test is finish.
- + The type of question is only multiple choice.

JUSTIFICATION AND NEED FOR THE SYSTEM

The traditional approach to measuring a person's level of knowledge in topic has been examination. These days there is often more emphasis on internal assessment, which may consist of assignment and project given out by the teacher and marked or assessed by the same teacher.

It is a modern method of conducting examination widely accepted and hastily increasing environment of conducting examination through online in all the sectors of education and job. It will considerably replace the traditional paper and pen based exam in future. In present days the

availability of the computers and the wide spread nature of the internet has laid a strong foundation paths for conducting most of the prestigious exams on-line.

OVERVIEW:

The online test created for taking online test has following stages

- Login
- Test
- Result

Login:-

There is a quality login window because this is more secure than other login forms as in a normal login window there are multiple logins available so that more than one person can access to test with there individual login. But in this project there is only one login id i.e. administrator id and password by which a person enter the site. Hence it is more secure and reliable than previously used on-line test simulators.

Test:-

Test page is the most creative and important page in this project. It consists of 2 modules namely:

- ❖ **Subject selection**
- ❖ **Utilities**

Subject selection:-

From the given choices the candidate can select his field (like C, C++ and JAVA etc.) for taking on with the test.

Utilities:-

It includes:-

- Skip and come back to the question afterwards if needed.
- Gives the list of attempted and unattempted questions and can go to any question directly and can either attempt or change the answer of the already attempted question

SYSTEM SPECIFICATION

Hardware Requirements

- i) Processor-Intel core 2 duo
- ii) RAM-512Mb (Minimum)
- iii) Hard Drive-80Gb

Software Requirements

- i) Eclipse
- ii) Apache tomcat
- iii) My SQL Server
- iv) Windows XP,7

Table Structures and Uses of Tables

`id` NOT NULL AUTO_INCREMENT, PRIMARY KEY

academic_year	`id` int(2)	`Year` varchar(20)
----------------------	-------------	--------------------

adminlogin	`id` int(3)	`Username` varchar(25)	`Password` varchar(25)
-------------------	-------------	---------------------------	---------------------------

department	`id` int(3)	`Aca_id` int(4)	`Dept_name` varchar(20)
-------------------	-------------	-----------------	----------------------------

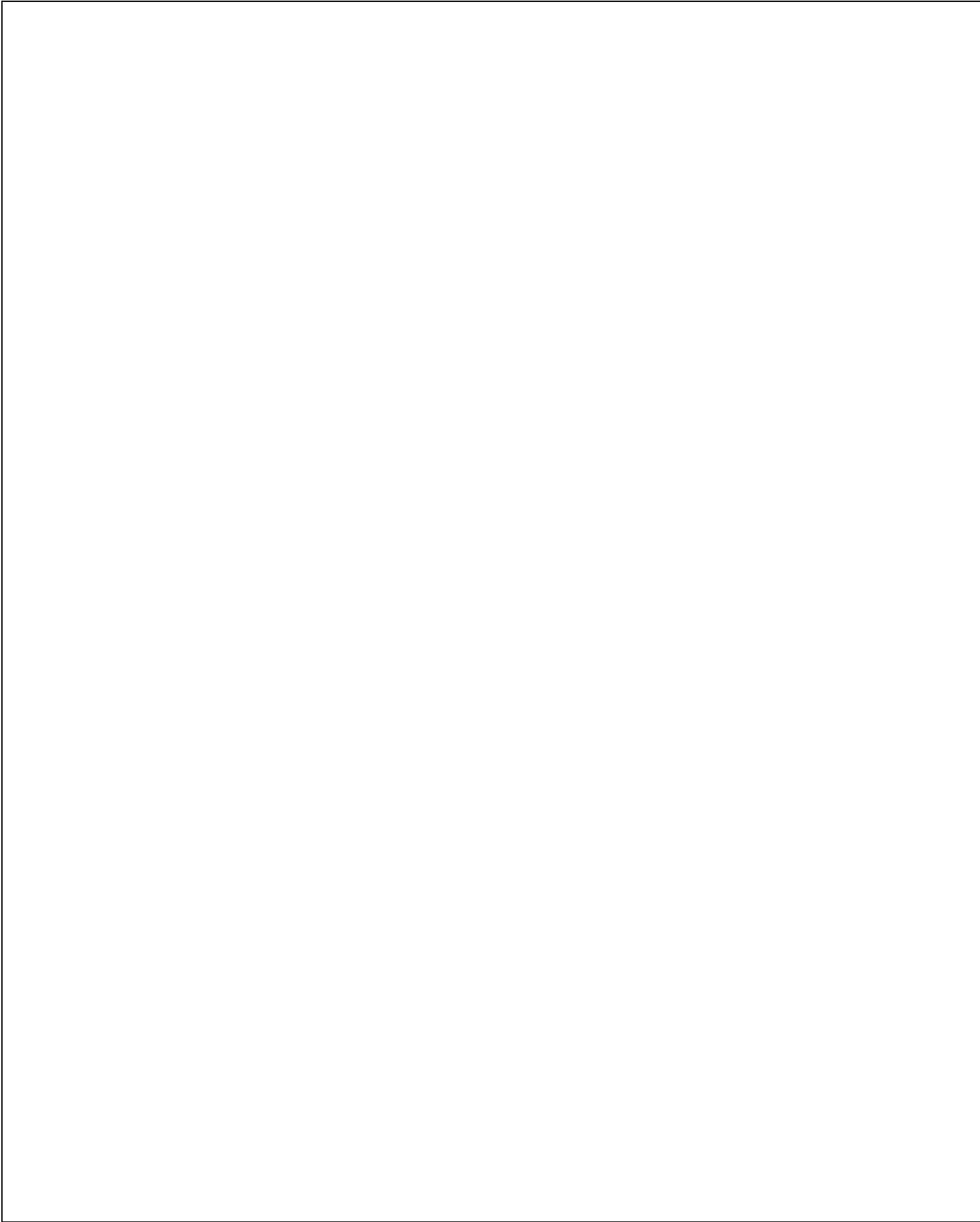
question	`id` int(5)	`academic` _year` int(5)	`department` _name` int(5)	`department` _year` int(3)	`subject` int(5)
-----------------	-------------	-----------------------------	----------------------------------	-------------------------------	---------------------

result	`id` int(5)	`Username` varchar(25)	`Date` date	`TotalQuestion` int(3)
`TotalMark` int(3)	`QuestionAttempted` int(3)		`CorrectAnswer` int(3)	`IncorrectAnswer` int(3)
`MarksObtained` int(3)				

semester	`id` int(3)	`Aca_id` int(3)	`Dept_id` int(3)	`Semester` int(3)
-----------------	-------------	--------------------	---------------------	----------------------

stuattempt	`id` int(3)	`Username` varchar(50)	`Sub_id` int(5)	`ques_id` int(5)	`stuAns` int(1)
-------------------	-------------	---------------------------	--------------------	---------------------	--------------------

subject	`id` int(3)	`Aca_id` int(3)	`Dept_id` int(3)	`sem_id` int(3)	`Sub_Name` varchar(40)
----------------	-------------	--------------------	---------------------	--------------------	---------------------------



DFD (Data Flow Diagram)

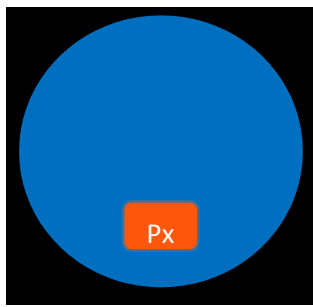
Diagram Conventions:



External Entity

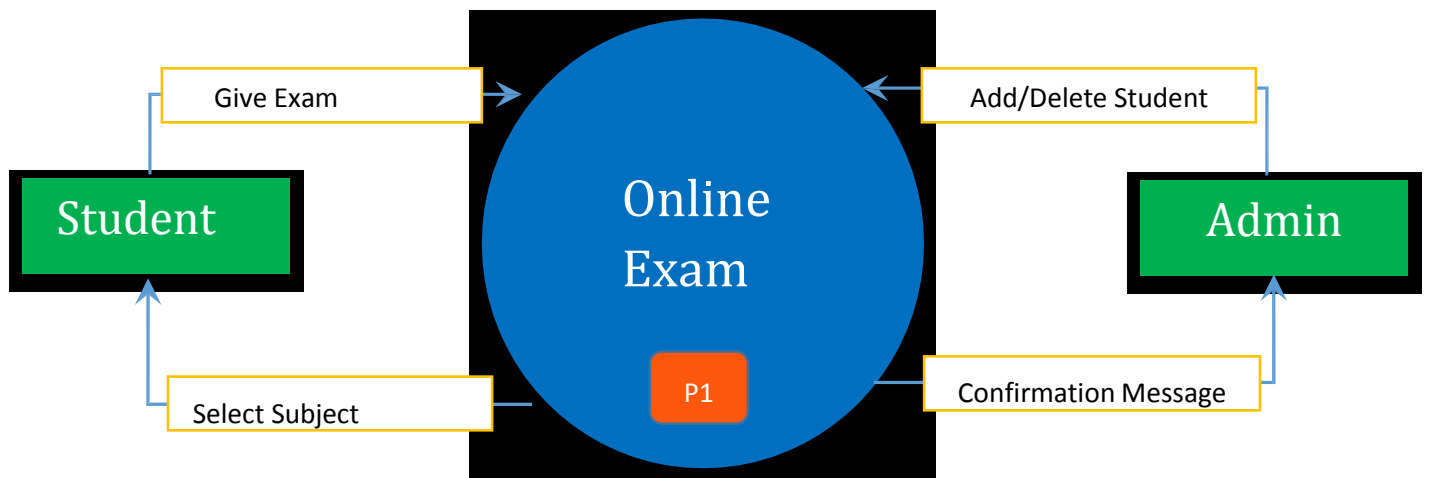


Data Store

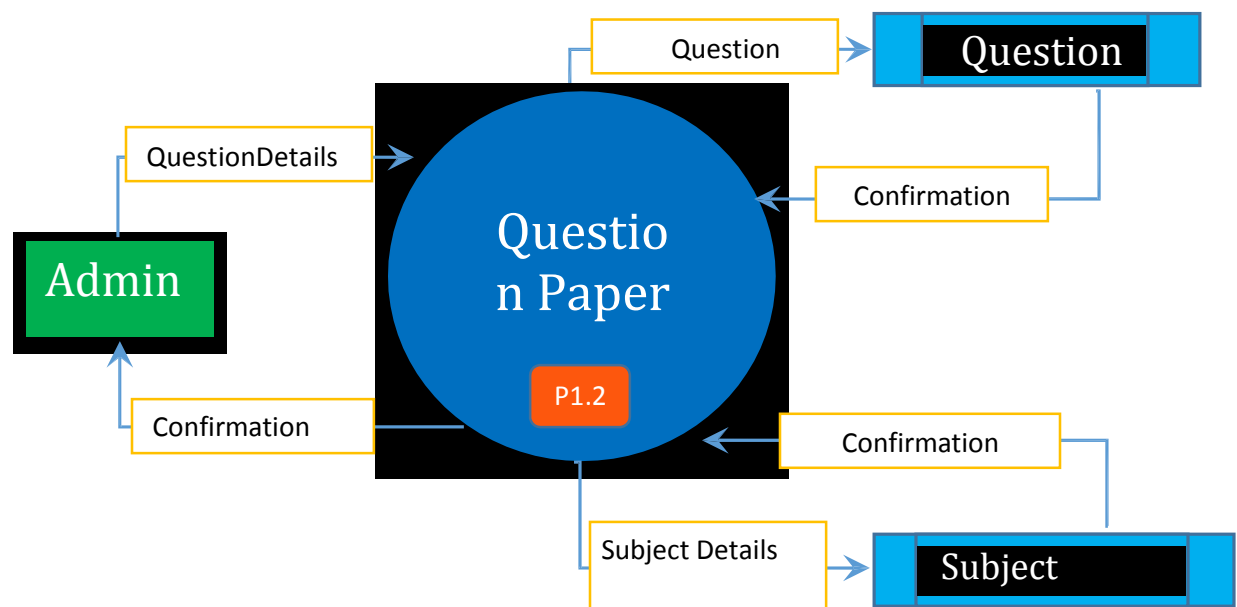
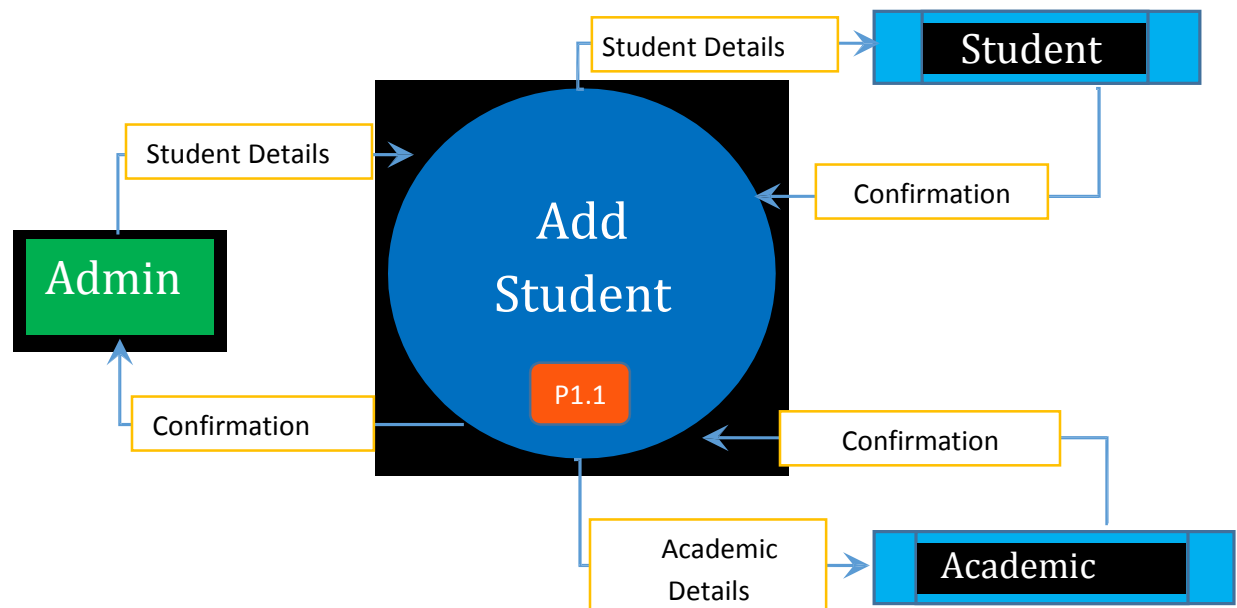


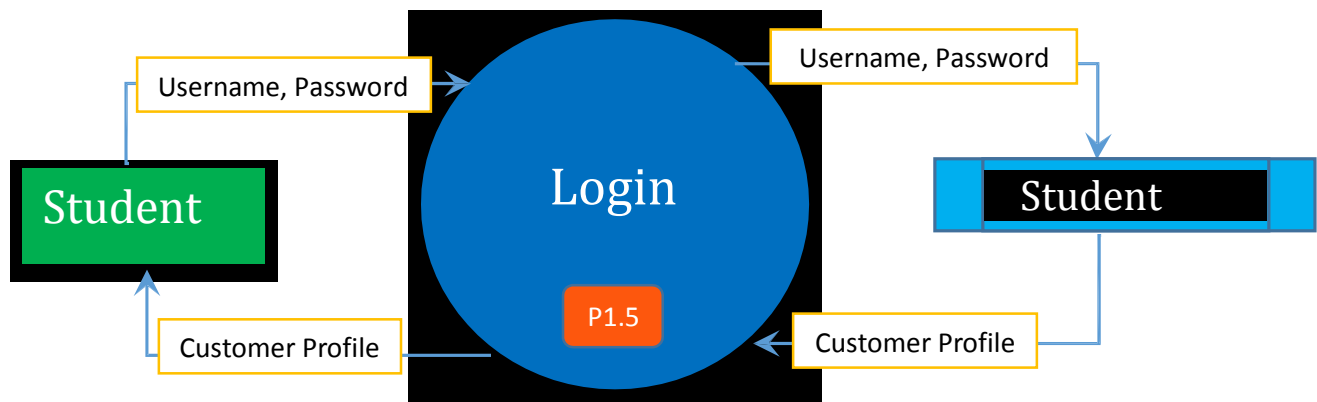
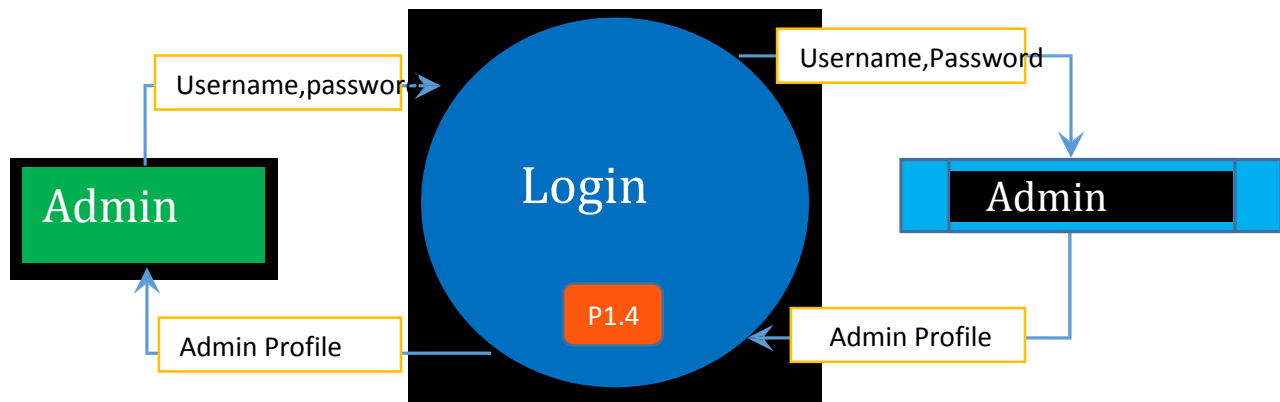
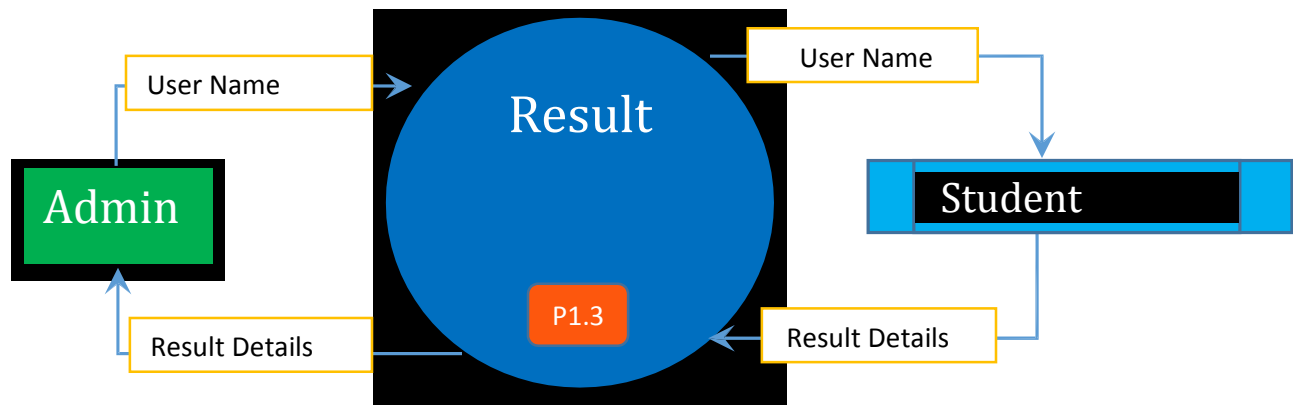
Process

Context Level:

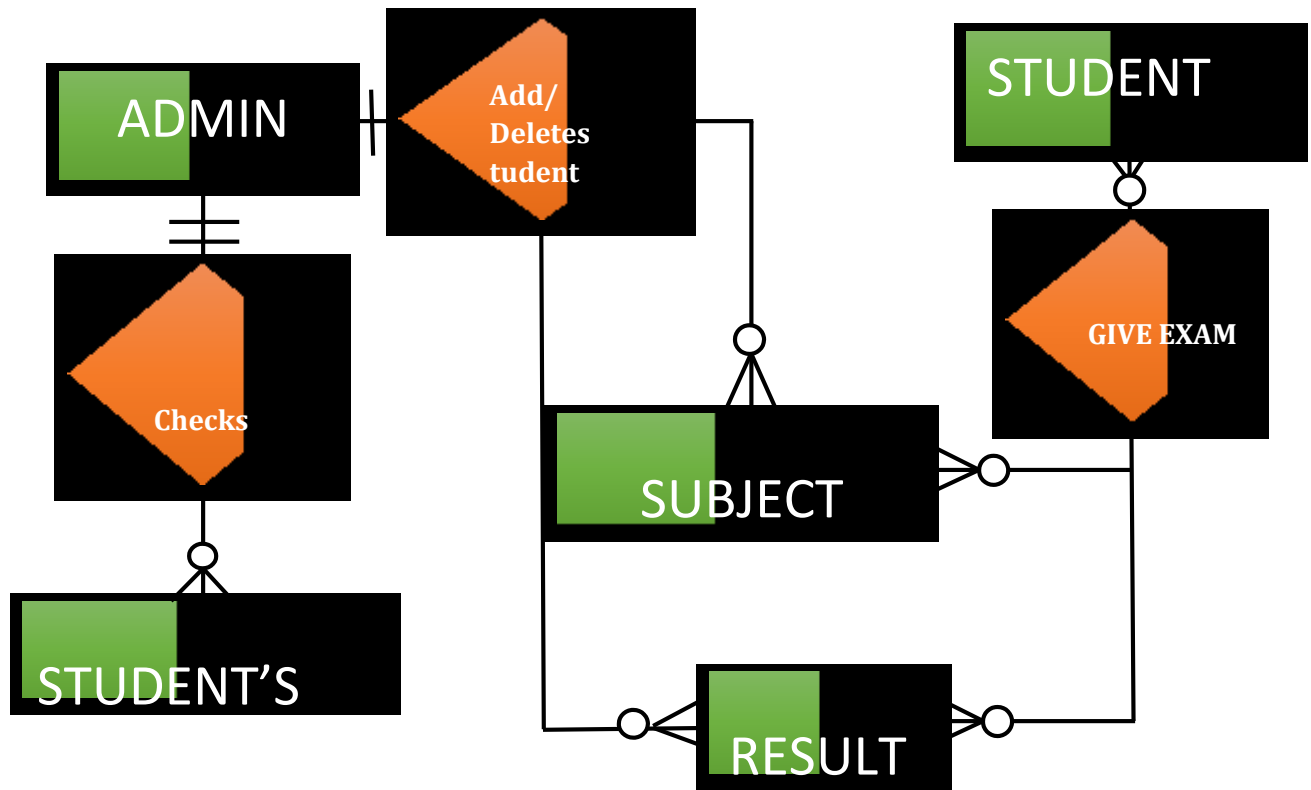


DFD:





ERD & Table Structure



SCREENSHOT

Home page:-

Welcome To Online Exam Portal

Student Login...

User name:
enter your username...

Password:
enter your password.....

Login

ADMIN

User name:
Password:

Login Reset

Admin Fuction:-

Welcome To Admin Login Page

aziz

Home >> Academic Year >> Department >> Subject >> Registration >> Questions >> Results

Welcome To Admin Login Page

aziz

Home » Academic Year » Department » Subject » Registration » Questions » Results

Add New Academic Year

To

Here you can set the Academic Year. The first Box will be receiving the starting year of a session and the next box will be receiving the end year.

Save

Reset

Welcome To Admin Login Page

aziz

Home » Academic Year » Department » Subject » Registration » Questions » Results

Academic Year

-----Select One-----

Department Name

-----Select One-----

Department Year

--Sem--

Add New Subject

Save

Reset

Welcome To Admin Login Page

aziz

Home » Academic Year » Department » Subject » Registration » Questions » Results

Student Registration Form

Personal Details

Name :

Sex:

-----Select One-----

Address:

Date Of Birth:

Contact Number:

+91

Email Id:

example@example.com

Academic Details:

Academic Year:

-----Select One-----

Semester:

Depertament:

-----Select One-----

Save

Reset

Welcome To Admin Login Page

aziz

Home » Academic Year » Department » Subject » Registration » Questions » Results

Student Registration Form

Personal Details

Name :

Sex:

-----Select One-----

Address:

Date Of Birth:

Contact Number:

+91

Email Id:

example@example.com

Academic Details:

Academic Year:

-----Select One-----

Semester:

Depertament:

-----Select One-----

Save

Reset

Welcome To Admin Login Page

aziz

Home » Academic Year » Department » Subject » Registration » Questions » Results

Academic Year

-----Select One-----

Department

-----Select One-----

Subject

-----Select One-----

Question

Option 1

Option 2

Option 3

Option 4

Student Function:-

Welcome To ALIAH UNIVERSITY


aziz

Select a Subject

Select One

Take Exam

Select a Subject

Programming language C 

Take Exam

Important Notes for the Exam:

Each Question carry 2 marks

Each correct answer carry 2 marks

Each incorrect answer carry -1 marks

You need to accept the terms and conditions before you begin

Wish you best of Luck...

☒ I accept the terms and conditions of the college



Enter the Examination

0 :: 29 :: 49

1) sf

- ☐ sdf
☐ sdf

- ☐ sdf
☐ sdf

2) nbij

- ☐ hg
☐ kj

- ☐ u
☐ m

3) sf

- ☐ SDFASF
☐ SDF

- ☐ SDF
☐ SDF

4) to use the function tolower(), which of the following header file should include

- ☐ string.h
☐ ctype.h

- ☐ conio.h
☐ Don't need any header file

5) What will the output of following code { int x = 10, y = 15; x = x++; y = ++y; printf("%d %d", x, y); }

- ☐ 10, 15
☐ 11, 16

- ☐ 10, 16
☐ 11, 15

1 2

Submit

Reset

FINAL RESULT

Total Question	10
Questions Attempted	0
Correct Answers	0
Incorrect Answers	0
Marks Obtained	0

FUTURE SCOPE

Future scope of the Project:

Software scope describes the data and control to be processed, function performance, constraints, interfaces and reliability.

Function describes in the statement of scope are evaluated and in some case refined to provide more detail prior to the beginning of the estimation. Because both cost and schedule estimates are functionally oriented, some degree of decomposition is often useful.

We can implement easily this application. Reusability is possible as and when we require in this application. We can update it next version. We can add new features as and when we require. There is flexibility in all the modules. Scope of this document is to put down the requirements, clearly identifying the information needed by the user, the source of the information and outputs expected from the system.

It is highly likely that the scope will change as the web application project moves forward; the web process model should be incremental. This allows the development team to “freeze” the scope for one increment so that an operational web application release can be created. The next increment may scope changes suggested by a review of the preceding increment, but once the second increment commences, scope is again frozen temporarily. This approach enables the Web App team to work without having to accommodate

a continual stream of changes but still recognizes the continuous evolution characteristics of most web application. Besides that, the following basic quality in the software always safeguards the future scope of the software.

Reusability:

Reusability is possible as and when we require in this application. We can update it next version. Reusable software reduces design, coding and testing cost by amortizing effort over several designs. Reducing the amount of code also simplifies understanding, which increases the likelihood that the code is correct. We follow up both types of reusability: Sharing of newly written code within a project and reuse of previously written code on new projects.

Extensibility:

This software is extended in ways that its original developers may not expect. The following principles enhance extensibility like Hide data structure, avoid traversing multiple links or methods, avoid case statements on object type and distinguish public and private operations.

Robustness:

Its method is robust if it does not fail even if it receives improper parameters. There is some facilities like Protect against errors, Optimize after the program runs, validate arguments and avoid predefined limits.

Understandability:

A method is understandable if someone other than the creator of the method can understand the code (as well as the creator after a time lapse). We use the method with small and coherent helps to accomplish this.

Cost-effectiveness:

Its cost is under the budget and make within given time period. It is desirable to aim for a system with a minimum cost subject to the condition that it must satisfy all the requirements can be rectified easily. The entire source code is well structured and commented to ensure clarity and readability.

Portability:

Since it is an Internet based application so its portability and usability depends upon the client connected with the Internet. The interface designed that is the web page designing which is one of the major parts of web application because it is the first impression regardless of the value of its contents interface should grab a potential user immediately.

Conclusion

The project Online Examination was handed to us in the end of the 9th semester and we were told to make website for the same with J2EE. In order to complete this project we have gone through several websites and several books of Software management, J2EE & MY SQL Server .While going through these books we enhanced our limited knowledge on these vast subjects which was not achieved through our semester papers. We have definitely gained a lot from this project as we came to know how to use between SQL Server and J2EE which was never known to us. Now we are able to make websites on any given requirement and these are all possible after we have done this project.

Bibliography

These are the following links which assist me at each and every step in completing this project, without them I was not being able to finish this importance project:

1. www.google.com
2. www.w3schools.com
3. www.wikipedia.com
4. www.answers.com