YASHWANTRAO CHAVAN MAHARASHTRA OPEN UNIVERSITY (YCMOU), NASHIK

Final Year BCA Project

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PROJECT REPORT

"STUDENT DATABASE MANAGEMENT SYSTEM"

SUBMITTED BY

THOMAS BEN JOHNSON [2016017000747157]

Academic Year 2018-19

T.Y. BCA

PROJECT GUIDE

MR. ANKUR PRAJAPATI
MS. POOJA PANCHAL

CERTIFICATE OF EVALUATION

This is to certify that the undersigned have assessed and evaluated the Project Work titled

"STUDENT DATABASE MANAGEMENT SYSTEM"

SUBMITTED BY

THOMAS BEN JOHNSON [2016017000747157]

The Project Report has been accepted for **Fulfillment of**

BCA Program

Name of Examiner **Signature of Examiner**

Stamp of Study Center

CERTIFICATE OF COMPLETION

This is to certify that the below given student of BCA have completed the Project work titled

"STUDENT DATABASE MANAGEMENT SYSTEM"

Under my Guidance and Supervision, The Project Report has been written according to the guidelines provided by the,

YASHWANTRAO CHAVAN MAHARASHTRA OPEN UNIVERSITY (YCMOU), NASHIK.

NAME OF THE STUDENT	PRN NO
THOMAS BEN JOHNSON	[2016017000747157]

_____ _____

Signature of Guide Signature of Guide

[Mr.ANKUR PRAJAPATI] **[Ms.POOJAPANCHAL]**

_____

Signature of HOD

[DINESH KANOJIYA]

Stamp of Study Center

ACKNOWLEDGEMENT

It is my sincere thanks to all who are in debt to my project. Through acknowledgement it is my privilege and prestige to thank to all those for giving out their precious and valuable time for making my project more live and successful.

I would also like to express my gratitude to those who gave me the hope and possibility to complete my project. Also I would like to thank the people of St.Angelos i.e. Head of Department. **MR. DINESH KANOJIYA** for making the moves to next level and guided me to work on unique concepts. And last but not the least; I would also give my sincere thanks to **MR.ANKUR PRAJAPATI** and **MS.POOJA PANCHAL**, the guide of my project, to help me understand the difficult course and also encouraging me to go ahead with the project.

Thanks to all for the support, help, interests and valuable hints.

THANK YOU!!

INDEX

1. SYNOPSIS:

1.1. Introduction to Project:

The college administration is prepared or operates as registration form. Firstly and for admission with important information about student and retrieve information to correct it.

Student Database Management System deals with all activities done by computer such as registration and admission process, staff and class management etc. all these process are handled by computer management system.

The admission form designs and feeds the information that is required for admission and to maintain the college records.

At the time of registration the administration should feed information that is required for admission to maintain the college records.

At the time of registration the administration should fill the information correctly if any wrong information field in records. It will be edited by record list carefully.

2. PROJECT DETAILS:

2.1. Modules involved in this project:

- **Student Module:** The student can login to their accounts where they can keep track order of exam details and as well they can track record of batches. Administration or Institute should have full details of student so that they can keep all his/her records of exam and batch details.

- **Student Queries Module:** The students can ask queries to administration regarding of new batches or any other queries like leave application or they can complain regarding the facilities provided to them.

- **Admin Module:** Administration or Institute can login to the admin page and can create student profile and can perform different actions like view update, delete. As well it can create batches and as well perform other actions like view, update, delete and as well add and delete students from the batches.

- **Admin Dashboard:** It will show information regarding admin.

- **Fees / Attendance Module:** We can enter fees of students and all of fees details and as well enter the set attendance for particular batches acoording to the date they have attended lectures.

- **Profile Search Module:** The student profile can be searched on basis of the student id or student name and further actions can be performed.

- **Batch Search Module:** The batch profile can be searched using this module as a whole or by filtering the as per filtrations provided to the institute and further actions can be performed.

- **Exam Module:** Students can book exams like theory or practical and can check the exam details or on their respective login id‘s provided to them during admissions. Administrations can check the students list sitting on the booked date of exams.

- **Book Download Module:** Students can check the books uploaded by administration for student references and can be downloaded through their respective userid.

2.2. TECHNOLOGIES USED:

2.2.1. FRONT END:

- **HTML:** HTML stands for Hyper Text Mark-up Language. It describes the structure of Web pages using mark-up. The elements are the building blocks of HTML pages. The elements are represented by tags. The tags label pieces of content such as "heading", "paragraph", "table", and so on. Browsers do not display the HTML tags, but use them to render the content of the page.

- **CSS : Cascading Style Sheets** (**CSS**) is a style sheet language used for describing the presentation of a document written in a mark-up language like HTML.[1] CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.[2]CSS is designed to enable the separation of presentation and content, including layout, colors, and JavThis separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

- **JavaScript :** JavaScript [often abbreviated as JS, is a high-level, interpreted programming language that conforms to the ECMAScript specification. JavaScript has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and functions. Alongside HTML and CSS, JavaScript is one of the core

technologies of the World Wide Web. JavaScript enables interactive web pages and is an essential part of web applications. The vast majority of websites use it, and major web browsers have a dedicated JavaScript engine to execute it.

- **Java :**is a general-purpose programming language that is class-based, object-oriented, and designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere" (WORA), meaning that compiled Java code can run on all platforms that support Java without the need for recompilation. Java applications are typically compiled to "byte code" that can run on any Java virtual machine (JVM) regardless of the underlying computer architecture. The syntax of Java is similar to C and C++, but it has fewer low-level facilities than either of them. As of 2018, Java was one of the most popular programming languages in use according to GitHub particularly for client-server web applications, with a reported 9 million developers.

- **JSP:** JSP allows Java code and certain predefined actions to be interleaved with static web mark-up content, such as HTML, with the resulting page being compiled and executed on the server to deliver a document. The compiled pages, as well as any dependent Java libraries, contain Java byte code rather than machine code. Like any other Java program, they must be executed within a Java virtual machine (JVM) that interacts with the server's host operating system to provide an abstract, platform-neutral environment.JSPs are usually used to deliver HTML and XML documents, but through the use

of Output Stream, they can deliver other types of data as well. The Web container creates JSP implicit objects like request, response, session, application, config, page Context, out and exception. JSP Engine creates these objects during translation phase.

- **Servlet:** A **Java servlet** is a Java software component that extends the capabilities of a server. Although servlets can respond to any types of requests, they most commonly implement web containers for hosting web applications on web servers and thus qualify as a server-side servlet web API. Such web servlets are the Java counterpart to other dynamic web content technologies such as PHP and ASP.NET.

2.2.2. BACK END:

- **MYSQL:** is an open-source relational database management system (RDBMS).[6] Its name is a combination of "My", the name of co-founder Michael Widenius's daughter and "SQL", the abbreviation for Language. MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation)/ In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create Maria DB.MySQL is a component of the LAMP web application software stack (and others), which is an acronym for *Linux, Apache, MySQL, Perl/PHP/Python*. MySQL is used by many database-driven web applications, including Drupal, Joomla, phpBB, and Word Press. MySQL is also used by many popular websites, including Facebook, Twitter, Flickr, and YouTube.

2.3. HARDWARE / SOFTWARE REQUIREMENTS:

- 500GB HARD DISK.
- 2GB RAM (MInimum).
- Intel Dual Core Processor.
- 64 MB Graphics Ram
- Windows 7 and later.
- MYSQL
- Xampp version 7.3.5.
- Netbeans 8.2
- Apache version 7

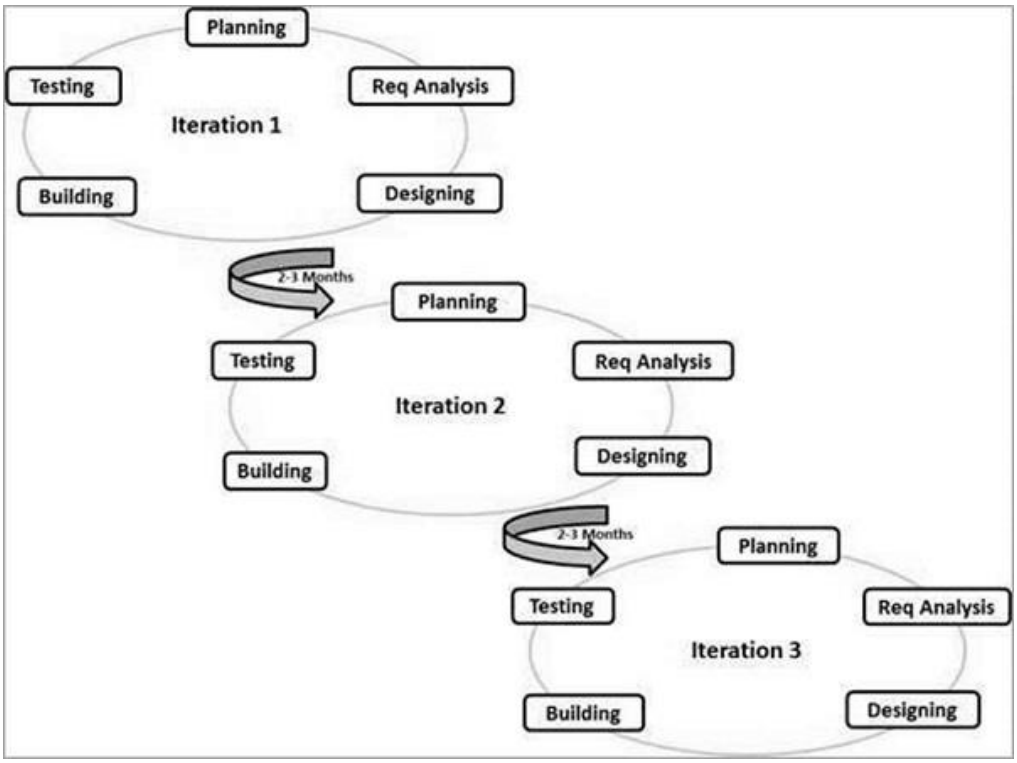
3. MODEL USED:

3.1. Agile Model:

Agile SDLC model is a combination of iterative and incremental process models with focus on process adaptability and customer satisfaction by rapid delivery of working software product. Agile model believes that every project needs to be handled differently and the existing methods need to be tailored to best suit the project requirements. In Agile, the tasks are divided to time boxes (small time frames) to deliver specific features for a release.

Agile Methods break the product into small incremental builds. These builds are provided in iterations. Each iteration typically lasts from about one to three weeks. Iterative approach is taken and working software build is delivered after each iteration. Each build is incremental in terms of features; the final build holds all the features required by the customer.

Here is a graphical illustration of the Agile Model −:



Every iteration involves cross functional teams working simultaneously on various areas like −

- Planning
- Requirements Analysis
- Design
- Coding
- Unit Testing and
- Acceptance Testing.

The Agile thought process had started early in the software development and started becoming popular with time due to its flexibility and adaptability.

The most popular agile methods include Rational Unified Process (1994), Scrum (1995), Crystal Clear, Extreme Programming (1996), Adaptive Software Development, Feature Driven Development, and Dynamic Systems Development Method (DSDM) (1995). These are now collectively referred to as **Agile Methodologies**, after the Agile Manifesto was published in 2001.

3.2. Agile Manifesto Principles:

- **Individuals and interactions** − In Agile development, self-organization and motivation are important, as are interactions like co-location and pair programming.

- **Working software** − Demo working software is considered the best means of communication with the customers to understand their requirements, instead of just depending on documentation.

- **Customer collaboration** − As the requirements cannot be gathered completely in the beginning of the project due to various factors, continuous customer interaction is very important to get proper product requirements.

- **Responding to change** − Agile Development is focused on quick responses to change and continuous development.

Agile methods are being widely accepted in the software world recently. However, this method may not always be suitable for all products. Here are some pros and cons of the agile model.

3.3. Pros of Agile Model:

- Is a very realistic approach to software development.
- Promotes teamwork and cross training.
- Functionality can be developed rapidly and demonstrated.
- Resource requirements are minimum.
- Suitable for fixed or changing requirements
- Delivers early partial working solutions.
- Good model for environments that change steadily.
- Minimal rules, documentation easily employed.

- Enables concurrent development and delivery within an overall planned context.
- Little or no planning required.
- Easy to manage.
- Gives flexibility to developers.

3.4. Cons of Agile Model:

- Not suitable for handling complex dependencies.
- More risk of sustainability, maintainability and extensibility.
- An overall plan, an agile leader and agile PM practice is a must without which it will not work.
- Strict delivery management dictates the scope, functionality to be delivered, and adjustments to meet the deadlines.
- Depends heavily on customer interaction, so if customer is not clear, team can be driven in the wrong direction.
- There is a very high individual dependency, since there is minimum documentation generated.
- Transfer of technology to new team members may be quite challenging due to lack of documentation.

4. FEASIBILITY STUDY:

4.1. ECONOMIC FEASIBILITY:

It is the analysis of the actual cost and benefits of the system.This cost is to be informed to the management can take decision whether to proceed,develop the system or retain the existing system.The proposed system can be said to become economically feasible since they have the necessary hardware's and software's and is going to work in same envoirnment.

4.2. TECHNICAL FEASIBILITY:

It involves analysing the techinal requirements such as hardware and software requirements.

5. SYSTEM ANALYSIS:

5.1. Overview of Languages Used:

5.1.1. Why to choose Java?

Java is a general-purpose programming language that is class-based, object-oriented and designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere" (WORA), meaning that compiled Java code can run on all platforms that support Java without the need for recompilation. Java applications are typically compiled to "byte code" that can run on any Java virtual machine (JVM) regardless of the underlying computer architecture. The syntax of Java is similar to C and C++, but it has fewer low-level facilities than either of them. As of 2018, Java was one of the most popular programming languages in use according to GitHub, particularly for client-server web applications, with a reported 9 million developers.

Java was originally developed by James Gosling at Sun Microsystems (which has since been acquired by Oracle) and released in 1995 as a core component of Sun Microsystems' Java platform. The original and reference implementation Java compilers, virtual machines, and class libraries were originally released by Sun under proprietary licenses. As of May 2007, in compliance with the specifications of the Java Community Process, Sun had relicensed most of its Java technologies under the GNU General Public License. Meanwhile, others have developed alternative implementations of these Sun technologies, such as the GNU Compiler for Java (byte code compiler), GNU Class path (standard libraries), and Iced Tea-Web (browser plugin for applets).

5.1.2. Why to choose MYSQL?

MySQL (My S-Q-L") is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language.

MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create MariaDB.

MySQL is a component of the LAMP web application software stack (and others), which is an acronym for *Linux, Apache, MySQL, Perl/PHP/Python*. MySQL is used by many database-driven web applications, including Drupal, Joomla, phpBB, and WordPress. MySQL is also used by many popular websites, including Facebook, Twitter, Flickr, and YouTube.

5.2. Project Constraint:

5.2.1. Compatibility:

The System should run in all operating system and hardware specifications with fewer servers.

5.2.2. Reliability & availability:

The Interfaces with User login should be available at minimum.

Backups should be spot tested.

5.2.3. Performance:

It should allow the software to run simultaneously on all machines without any hassle.

5.2.4. Security:

Security at early stage is given at basic level i.e Password protection for each user.

As future vision the System will be able to provide security to user profile data and the fields he makes on public wall.

5.2.5. Conclusion:

The overall Description constitutes the System Requirement Specification of the System.

6. DATA TABLES:

6.1. Student_details:

Field Name	Datatype	Constraint	Desciption
Stid	Bigint	PRIMARY_KEY	ID
Stprn	Bigint		
stname	varchar(50)		
stphone	Bigint		
stemail	varchar(60)		
stadmission	Date		
stcouse	varchar(50)		
stpass	varchar(50)		
stgender	varchar(50)		
Stfile	varchar(255)		
stpath	varchar(255)		
stbirth	Date		
stnational	varchar(50)		
stmobile	Bigint		
Stadd	varchar(50)		
Stcity	varchar(50)		
Ststate	**varchar(50)**		
Stcountry	varchar(50)		

6.2. Admin:

Field Name	Datatype	Constraint	Desciption
Adid	bigint	PRIMARY_KEY	ID
Adname	varchar(50)		
Adpass	varchar(50)		
Adphone	bigint		
Ademail	varchar(60)		
Adfile	varchar(255)		
Adpath	varchar(255)		

6.3. Batch_Details:

Field Name	Datatype	Constraint	Desciption
Btid	Bigint	PRIMARY_KEY	ID
Btsub	varchar(50)		
Btfal	varchar(50)		
Btstart	Date		
Btend	Date		
Btlec	bigint		

6.4. Book:

Field Name	Datatype	Constraint	Desciption
Bookid	bigint	PRIMARY_KEY	ID
Bookname	varchar(50)		
Filename	varchar(255)		
Path	varchar(255)		

6.4. Exam:

Field Name	Datatype	Constraint	Desciption
Stid	bigint	FOREIGN_KEY	fk_stid1
Exid	bigint	PRIMARY_KEY	ID
Exmode	varchar(50)		
Exdate	date		
Exsub	varchar(50)		

6.4. Student_Batch_Details:

Field Name	Datatype	Constraint	Desciption
Stid	Bigint	FOREIGN_KEY	fk_stid
Btid	Bigint	FOREIGN_KEY	fk_btid

6.5. Attendance:

Field Name	Datatype	Constraint	Desciption
Stid	Bigint	FOREIGN_KEY	fk_stid4
Atdate	Date		
Atin	varchar(50)		
Atout	varchar(50)		
Btid	Bigint	FOREIGN_KEY	fk_btid1

6.6. Fees:

Field Name	Datatype	Constraint	Desciption
Id	Bigint	PRIMARY_KEY	AUTO_INCREMENT
Dt	Date		
Chqno	varchar(255)		
Feespaid	Int		
Feesdue	Int		
Total	Int		
Stid	Bigint	FOREIGN_KEY	fk_stid5

7. SYSTEM DESIGN:

7.1. Entity-Relation Diagram:

An entity-relationship diagram (ERD) is a data modeling technique that graphically illustrates an information system's entities and the relationships between those entities. An ERD is a conceptual and representational model of data used to represent the entity framework infrastructure.

The elements of an ERD are:

- Entities
- Relationships
- Attributes

Steps involved in creating an ERD include:

1. Identifying and defining the entities
2. Determining all interactions between the entities
3. Analyzing the nature of interactions/determining the cardinality of the relationships
4. Creating the ERD

There are quite a few symbols used to represent ERD, they are:

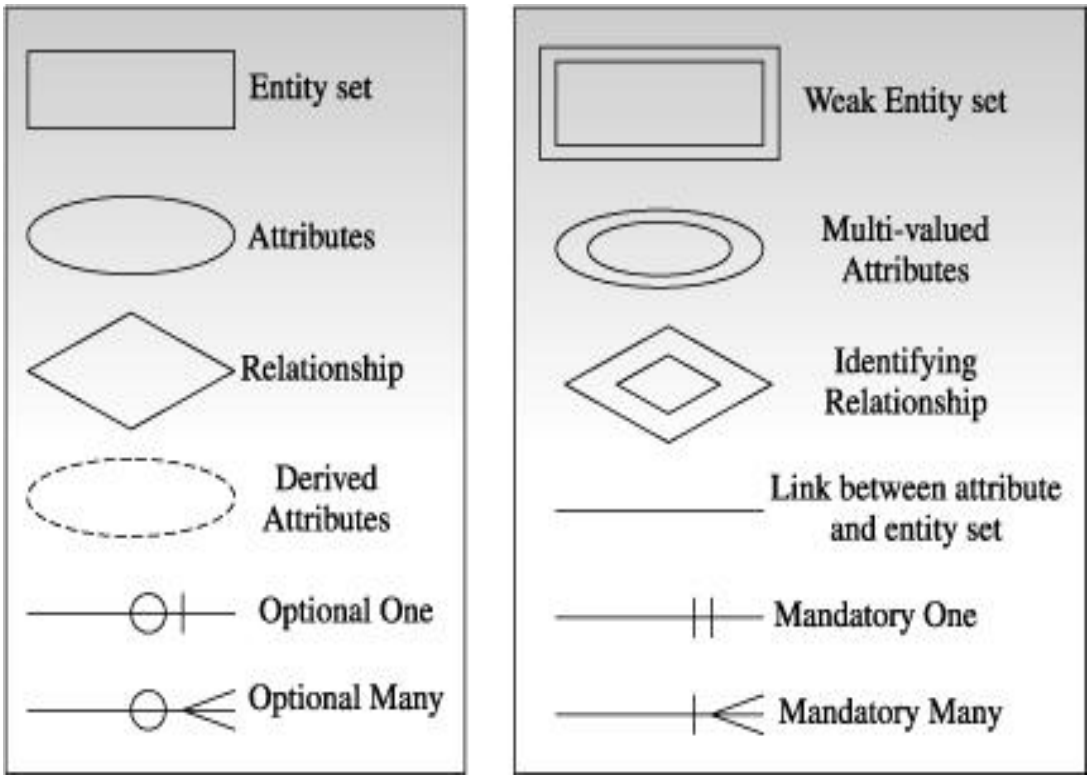
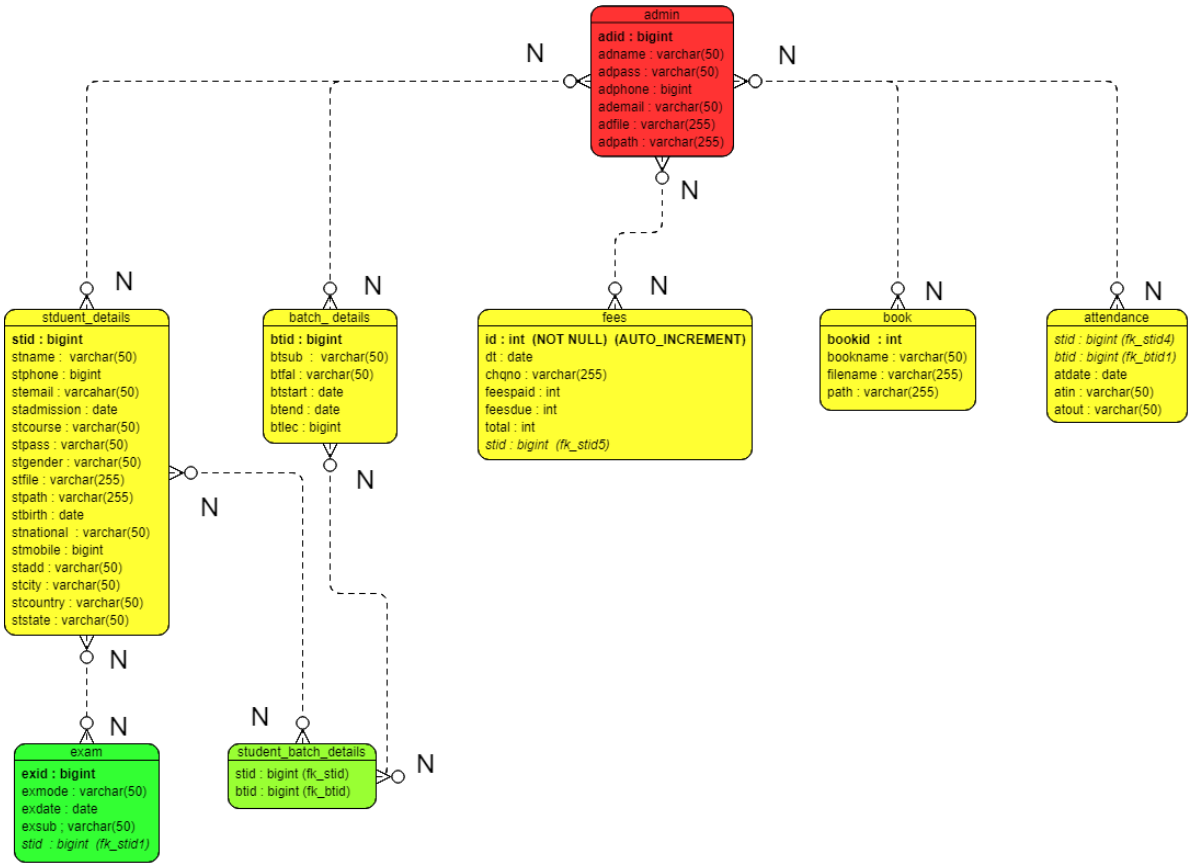


Diagram:


admin
adid : bigint
adname : varchar(50)
adpass : varchar(50)
adphone : bigint
ademail : varchar(50)
adfile : varchar(255)
adpath : varchar(255)
stduent_details
stid : bigint
stname : varchar(50)
stphone : bigint
stemail : varcahar(50)
stadmission : date
stcourse : varchar(50)
stpass : varchar(50)
stgender : varchar(50)
stfile : varchar(255)
stpath : varchar(255)
stbirth : date
stnational : varchar(50)
stmobile : bigint
stadd : varchar(50)
stcity : varchar(50)
stcountry : varchar(50)
ststate : varchar(50)
batch_ details
btid : bigint
btsub : varchar(50)
btfal : varchar(50)
btstart : date
btend : date
btlec : bigint
fees
id : int (NOT NULL) (AUTO_INCREMENT)
dt : date
chqno : varchar(255)
feespaid : int
feesdue : int
total : int
stid : bigint (fk_stid5)
book
bookid : int
bookname : varchar(50)
filename : varchar(255)
path : varchar(255)
attendance
stid : bigint (fk_stid4)
btid : bigint (fk_btid1)
atdate : date
atin : varchar(50)
atout : varchar(50)
exam
exid : bigint
exmode : varchar(50)
exdate : date
exsub ; varchar(50)
stid : bigint (fk_stid1)
student_batch_details
stid : bigint (fk_stid)
btid : bigint (fk_btid)
N

7.2. Usecase Diagram:

A UML use case diagram is the primary form of system/software requirements for a new software program under developed. Use cases specify the expected behaviour (what), and not the exact method of making it happen (how). Use cases once specified can be denoted both textual and visual representation (such as UML). A key concept of use case modeling is that it helps us design a system from end user's perspective. It is an effective technique for communicating system behavior in the user's terms by specifying all externally visible system behavior.

A use case diagram is usually simple. It does not show the detail of the use cases:

- It only summarizes some of the relationships between use cases, actors, and systems.
- It does not show the order in which steps are performed to achieve the goals of each use case.

There are quite a few symbols used to represent Use Case, they are:

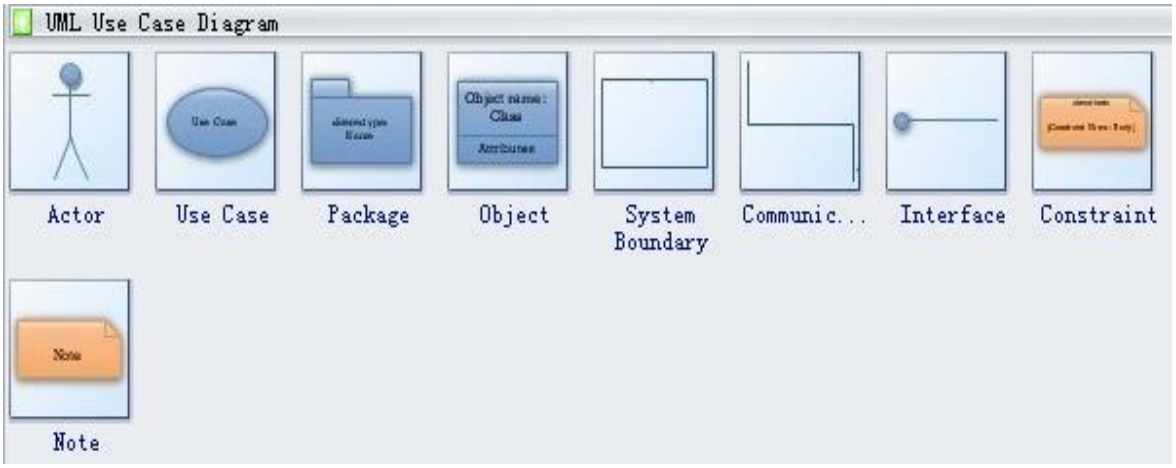
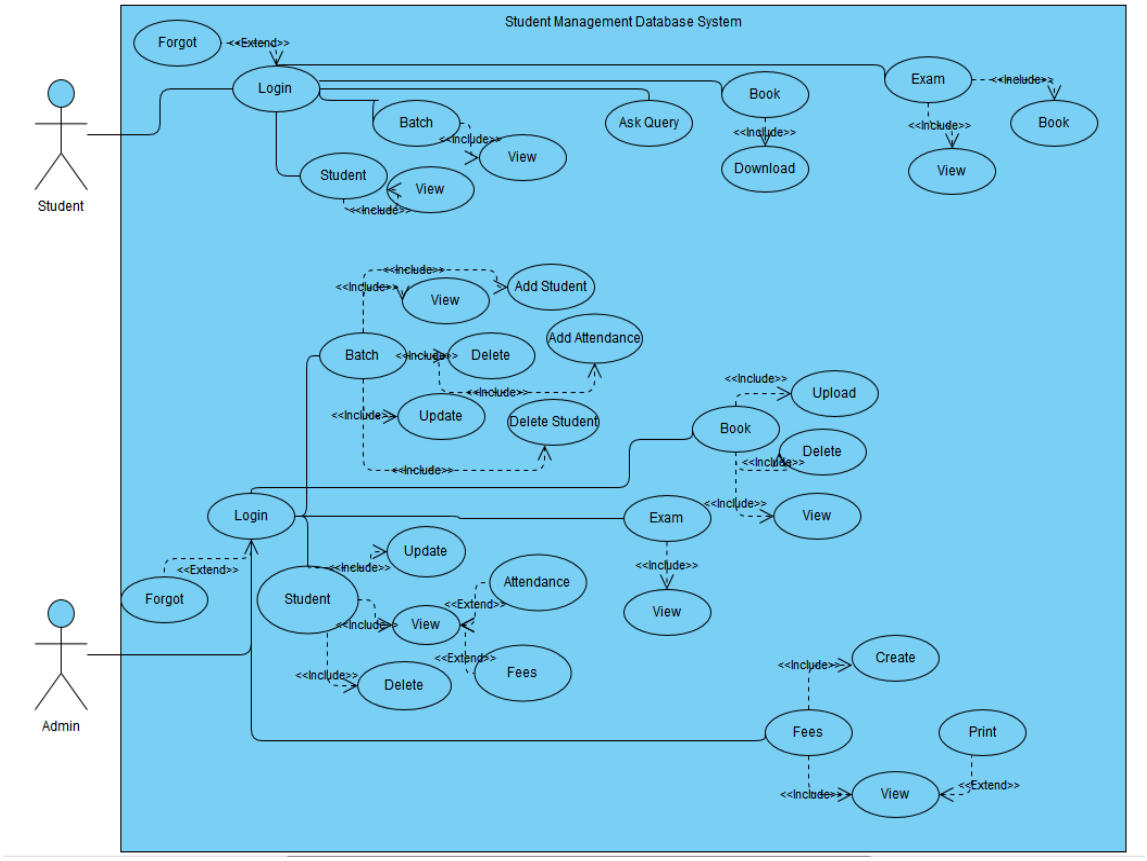


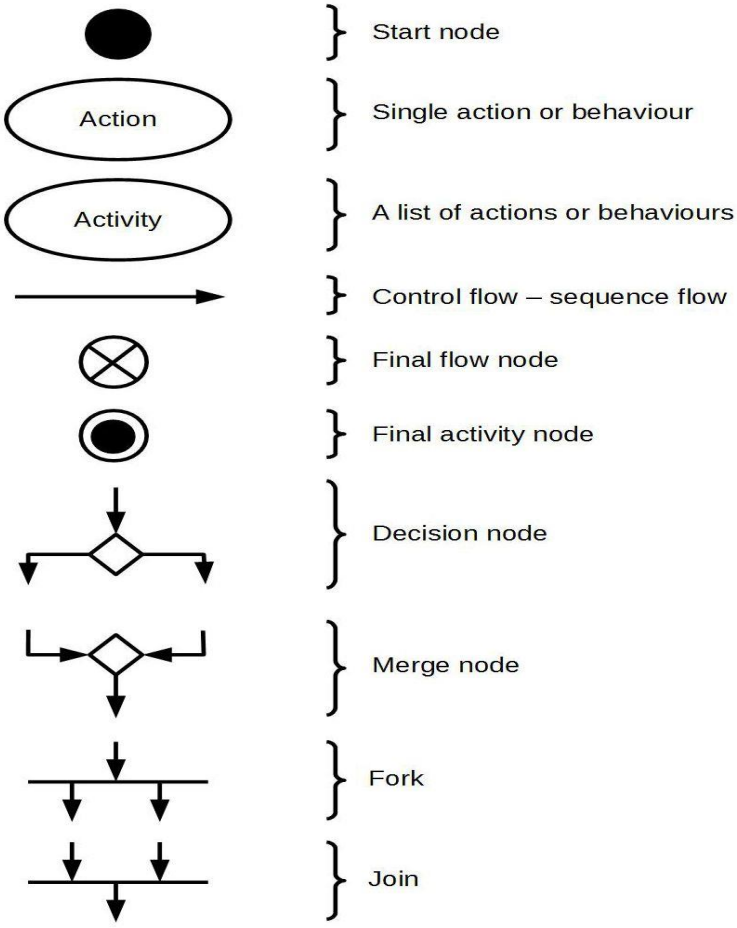
Diagram:


Student Management Database System
Forgot
<<Extend>>
Login
Batch
<<Include>>
View
Student
View
<<Include>>
Ask Query
Book
<<Include>>
Download
Exam
<<Include>>
Book
<<Include>>
View
Student
<<Include>>
View
Add Student
<<Include>>
Batch
<<Include>>
Delete
Add Attendance
<<Include>>
<<Include>>
Update
Delete Student
<<Include>>
<<Include>>
Upload
Book
Delete
<<Include>>
Login
Exam
<<Include>>
View
<<Include>>
View
Update
<<Include>>
Forgot
<<Extend>>
Student
Attendance
<<Extend>>
<<Include>>
View
<<Extend>>
Fees
<<Include>>
Delete
Admin
<<Include>>
Create
Fees
Print
<<Include>>
View
<<Extend>>

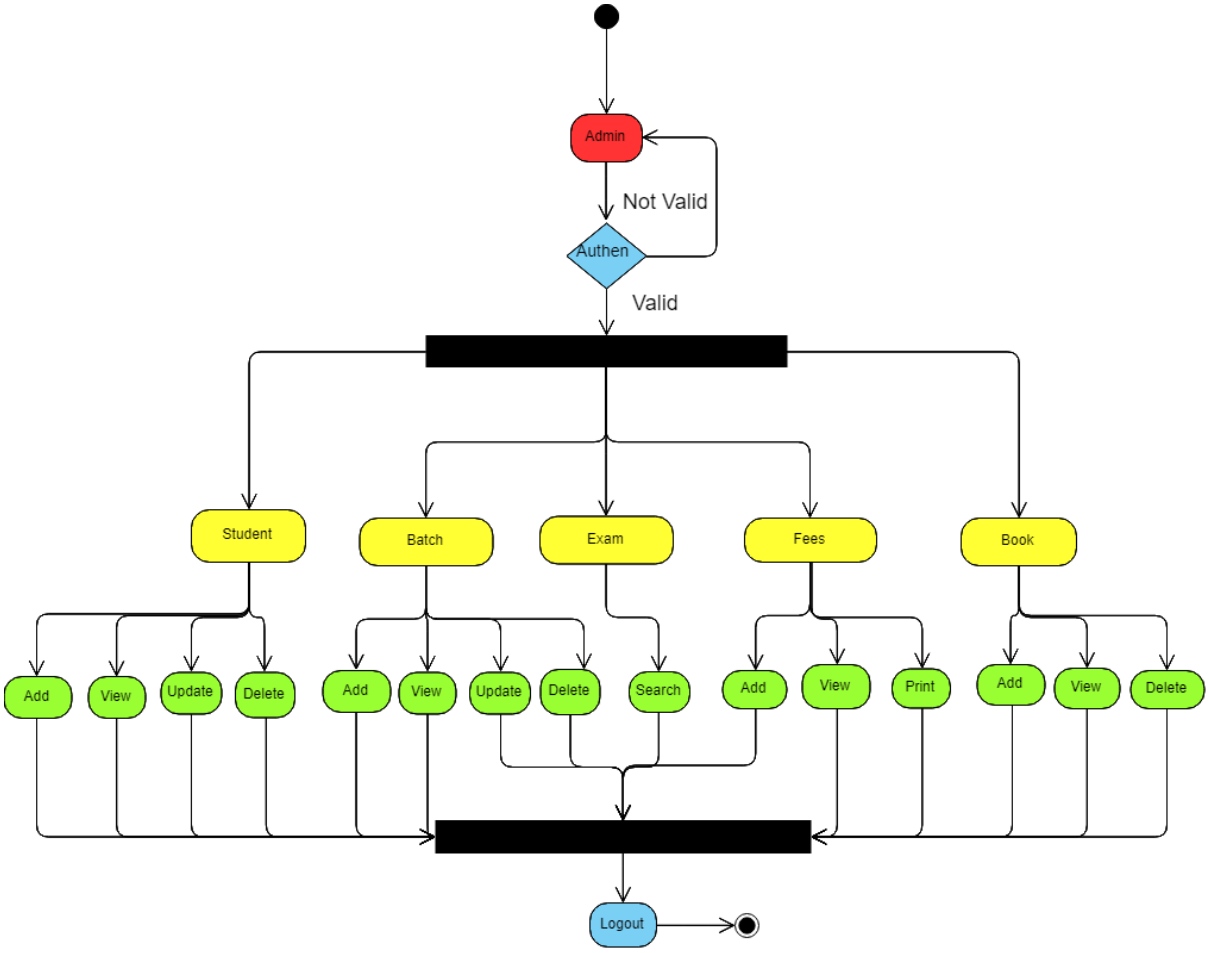
7.3. Activity Diagram:

An activity diagram visually presents a series of actions or flow of control in a system similar to a flowchart or a data flow diagram. Activity diagrams are often used in business process modeling. They can also describe the steps in a use case diagram. Activities modeled can be sequential and concurrent. In both cases an activity diagram will have a beginning (an initial state) and an end (a final state).

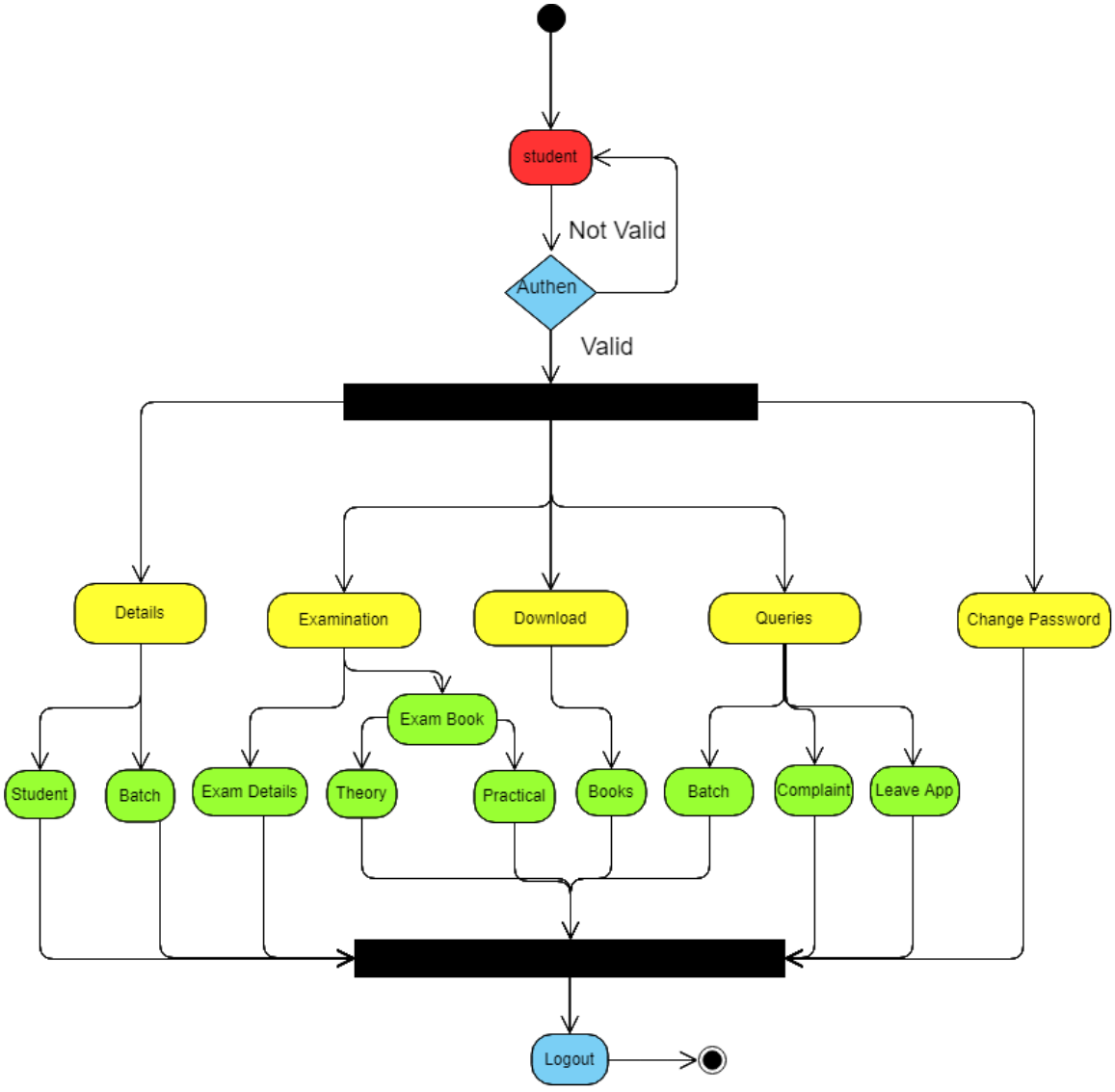
There are quite a few symbols used to represent Activity Diagram, they are:



7.3.1. Admin:


Admin
Not Valid
Authen
Valid
Student
Batch
Exam
Fees
Book
Add
View
Update
Delete
Add
View
Update
Delete
Search
Add
View
Print
Add
View
Delete
Logout

7.3.1. Student:


student
Not Valid
Authen
Valid
Details
Examination
Download
Queries
Change Password
Exam Book
Student
Batch
Exam Details
Theory
Practical
Books
Batch
Complaint
Leave App
Logout

7.4. Data Flow Diagram (DFD):

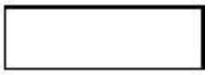
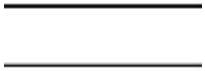
A data-flow diagram (DFD) is a way of representing a flow of a data of a process or a system (usually an information system). The DFD also provides information about the outputs and inputs of each entity and the process itself. A data-flow diagram has no control flow, there are no decision rules and no loops. Specific operations based on the data can be represented by a flowchart.

There are several notations for displaying data-flow diagrams. The notation presented above was described in 1979 by Tom DeMarco as part of Structured Analysis.

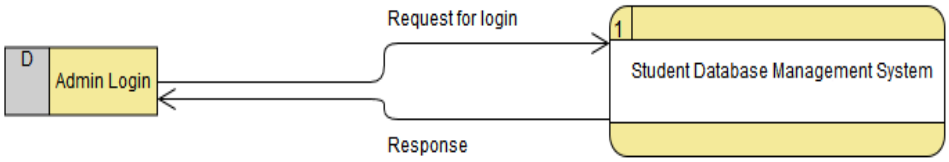
For each data flow, at least one of the endpoints (source and / or destination) must exist in a process. The refined representation of a process can be done in another data-flow diagram, which subdivides this process into sub-processes.

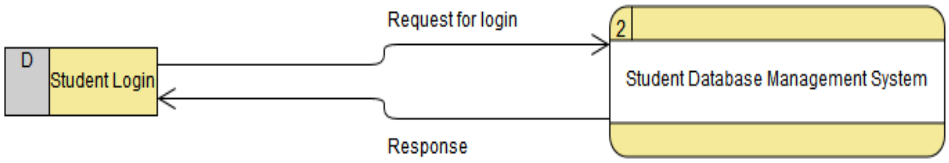
The data-flow diagram is part of the structured-analysis modelling tools. When using UML, the activity diagram typically takes over the role of the data-flow diagram. A special form of data-flow plan is a site-oriented data-flow plan.

The Data flow diagram (DFD) contains some symbol for drawing the data flow diagram.

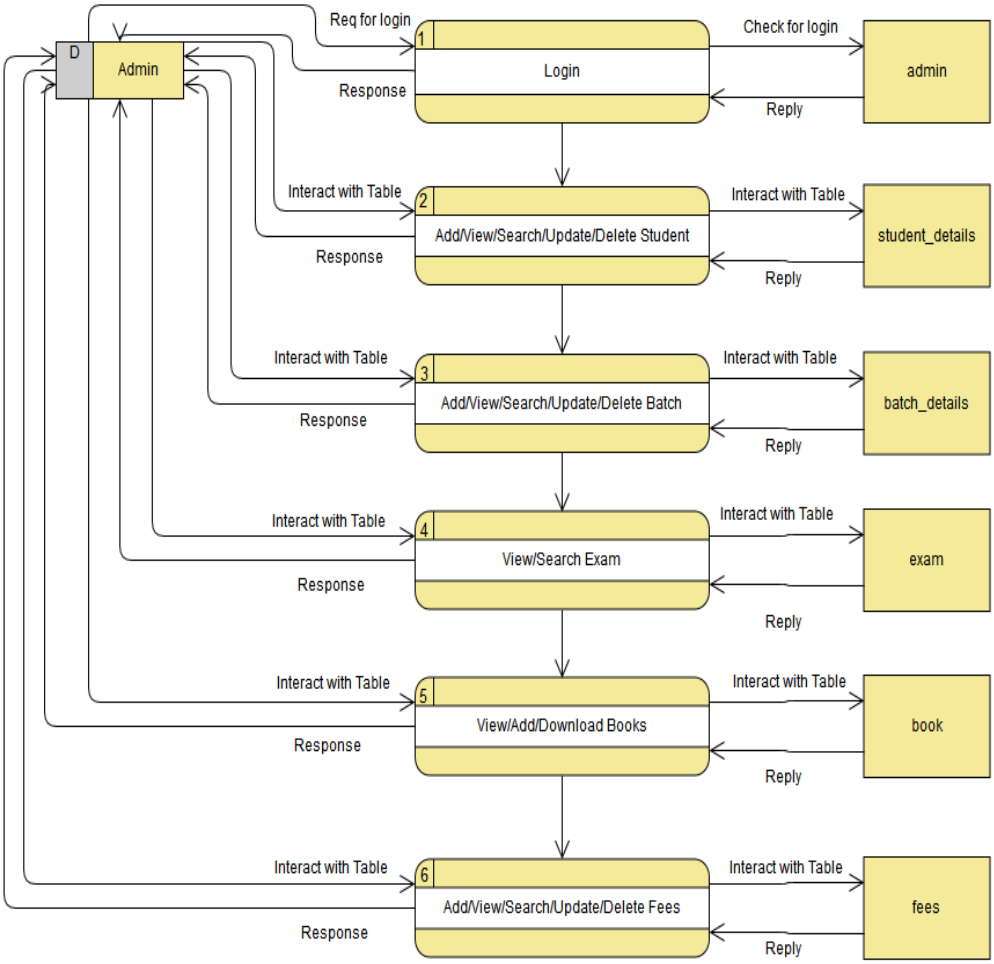
Symbol	Description
	**Data Flow** – Data flow are pipelines through the packets of information flow.
	**Process :** A Process or task performed by the system.
	**Entity :** Entity are object of the system. A source or destination data of a system.
	**Data Store :** A place where data to be stored.

DFD Level 0

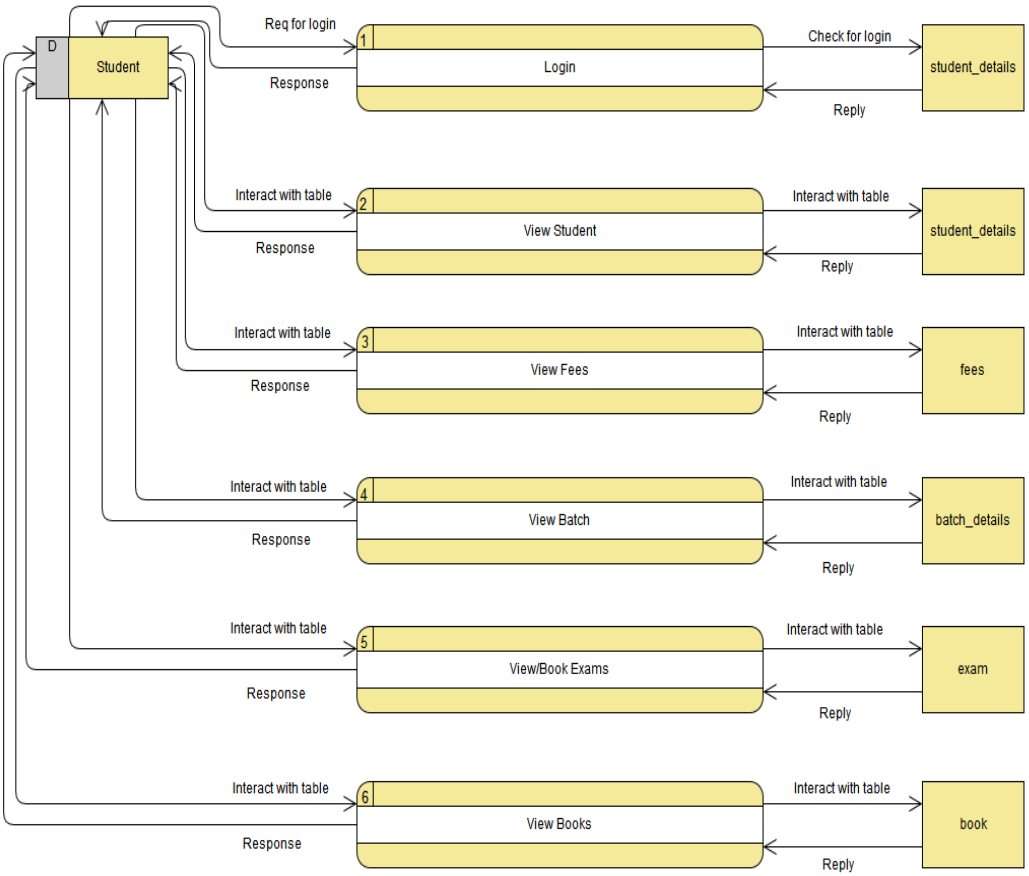

Request for login
1
D
Admin Login
Student Database Management System
Response


Request for login
2
D
Student Login
Student Database Management System
Response

DFD Level 1


D
Admin
Req for login
Response
1
Login
Check for login
Reply
admin
Interact with Table
Response
2
Add/View/Search/Update/Delete Student
Interact with Table
Reply
student_details
Interact with Table
Response
3
Add/View/Search/Update/Delete Batch
Interact with Table
Reply
batch_details
Interact with Table
Response
4
View/Search Exam
Interact with Table
Reply
exam
Interact with Table
Response
5
View/Add/Download Books
Interact with Table
Reply
book
Interact with Table
Response
6
Add/View/Search/Update/Delete Fees
Interact with Table
Reply
fees

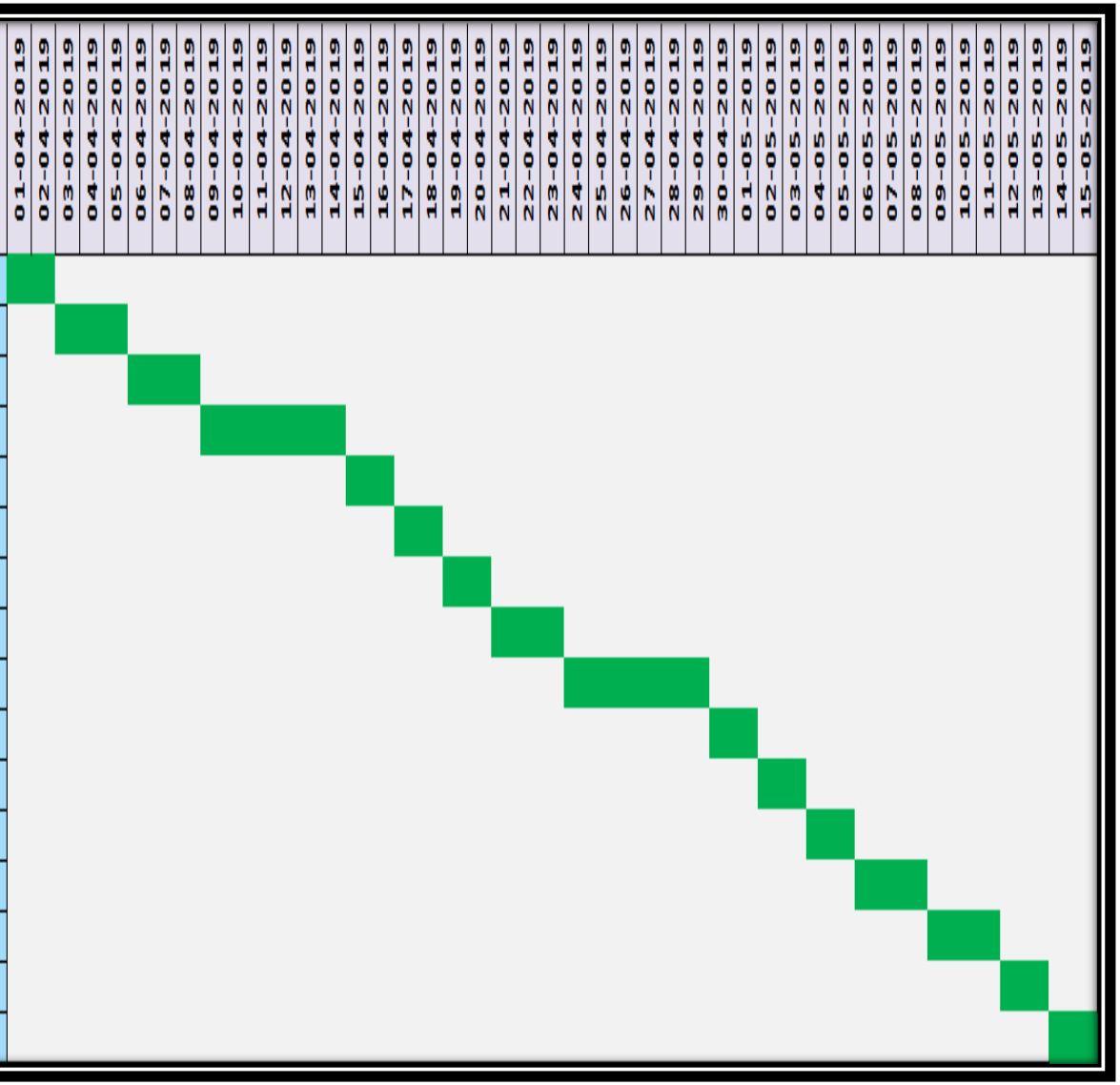
DFD Level 2


D
Student
Req for login
Response
1
Login
Check for login
Reply
student_details
Interact with table
Response
2
View Student
Interact with table
Reply
student_details
Interact with table
Response
3
View Fees
Interact with table
Reply
fees
Interact with table
Response
4
View Batch
Interact with table
Reply
batch_details
Interact with table
Response
5
View/Book Exams
Interact with table
Reply
exam
Interact with table
Response
6
View Books
Interact with table
Reply
book

7.5. Gantt Chart:

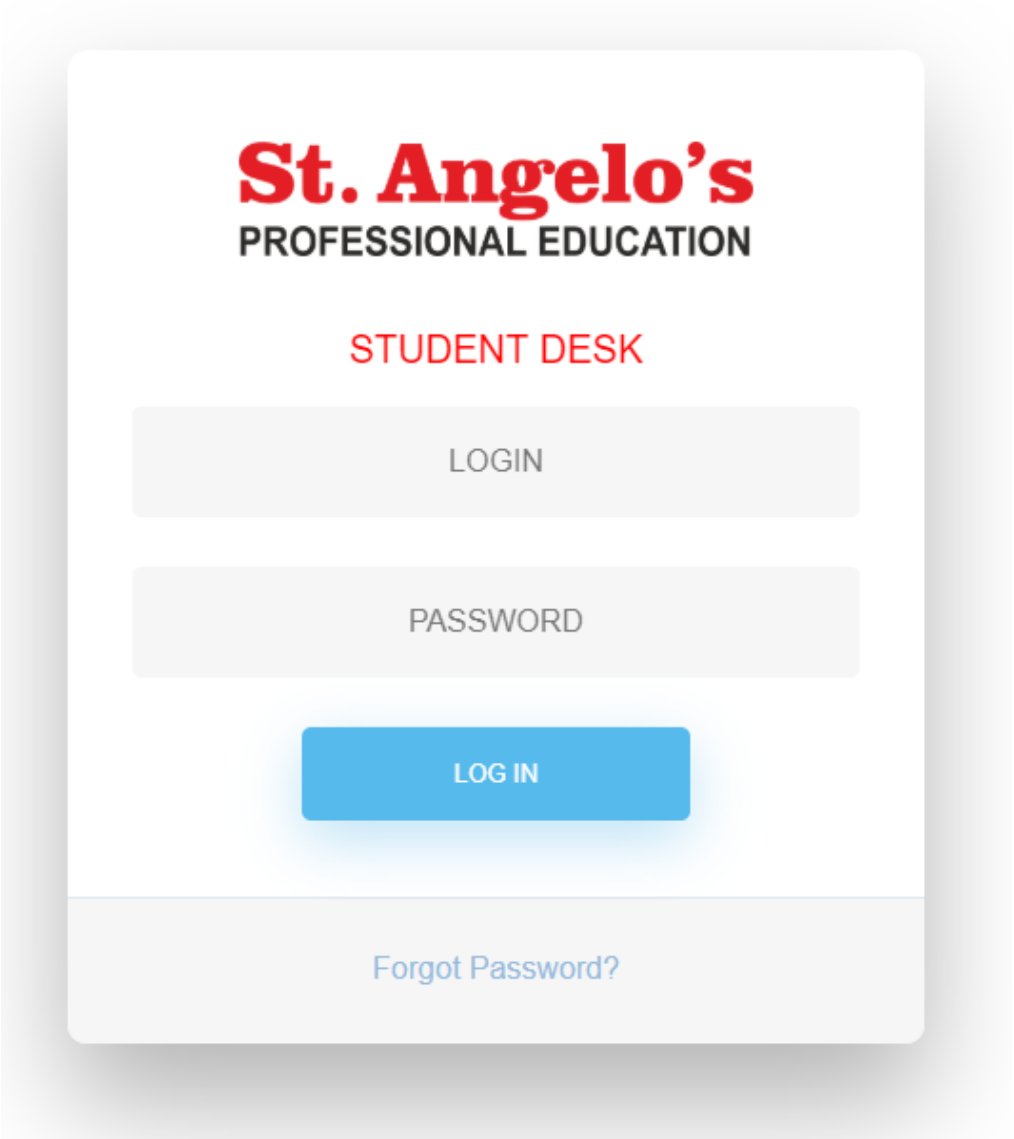
Project Name	Project Duration	Project Start Date	Project End Date
Student Database Management System	44	01-04-2019	15-05-2019

Task Id	Task Desciption	Task Duration	Start Date	End Date
1	Client Requirements	1	01-04-2019	02-04-2019
2	Planning	2	03-04-2019	05-04-2019
3	Designing	2	06-04-2019	08-04-2019
4	Front-end development	5	09-04-2019	14-04-2019
5	Code cleaning & functionality testing	1	15-04-2019	16-04-2019
6	Client feedback	1	17-04-2019	18-04-2019
7	Implementation	1	19-04-2019	20-04-2019
8	Iteration	2	21-04-2019	23-04-2019
9	Back-end development	5	24-04-2019	29-04-2019
10	Code cleaning & functionality testing	1	30-04-2019	01-05-2019
11	Client feedback	1	02-05-2019	03-05-2019
12	Implementation	1	04-05-2019	05-05-2019
12	Iteration	2	06-05-2019	08-05-2019
12	Full project functionality testing	2	09-05-2019	11-05-2019
13	Client approval	1	12-05-2019	13-05-2019
14	Deployment	1	14-05-2019	15-05-2019

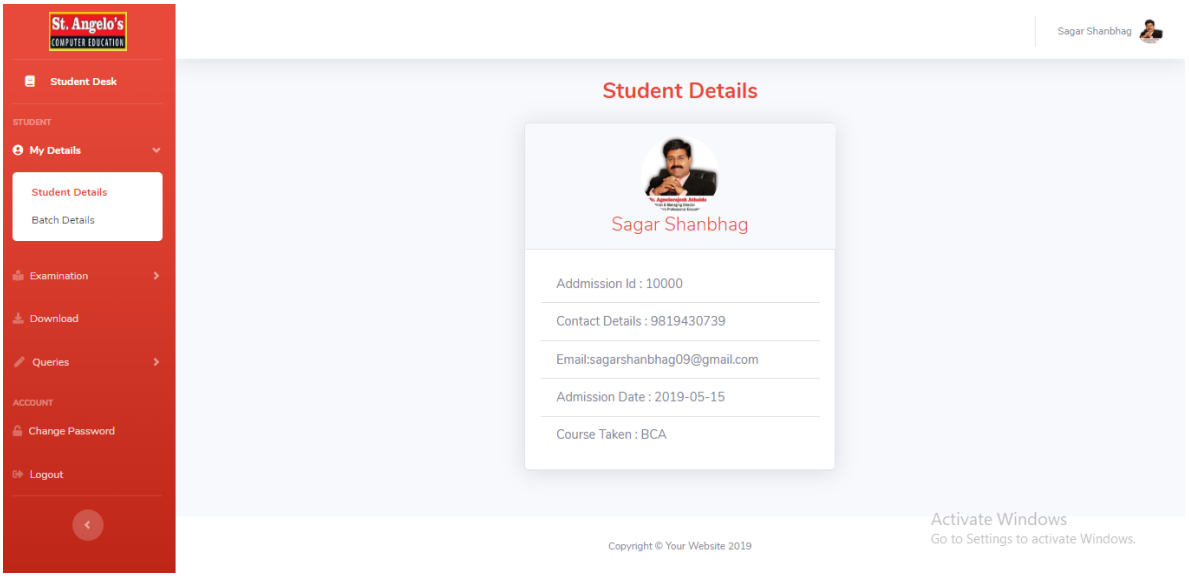


8. SCREEN SHOTS OF STUDENT DBMS:

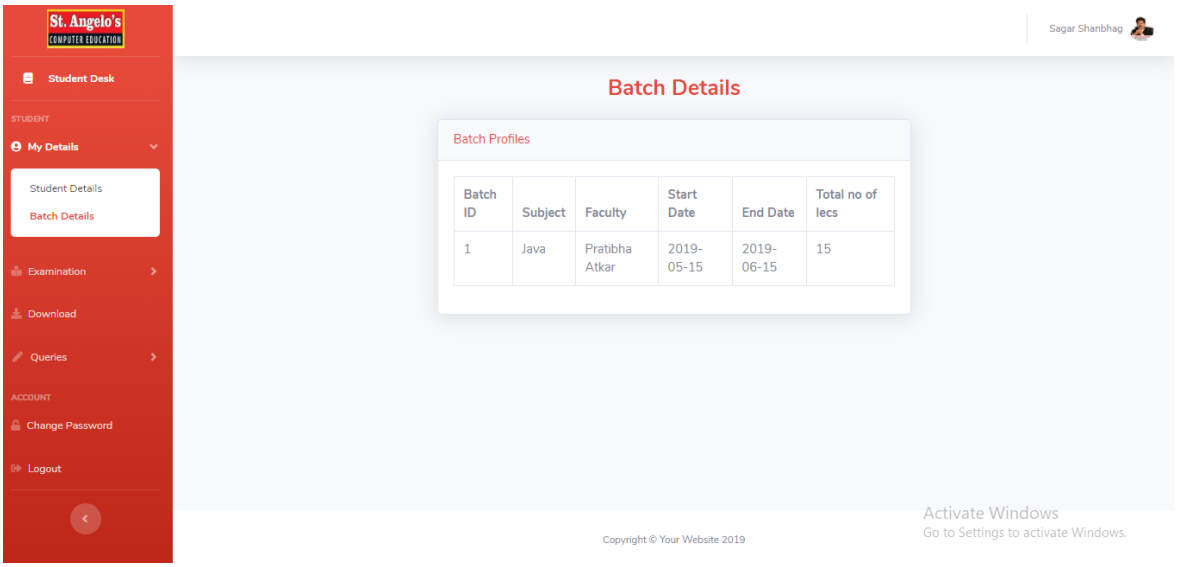
8.1. Login.jsp



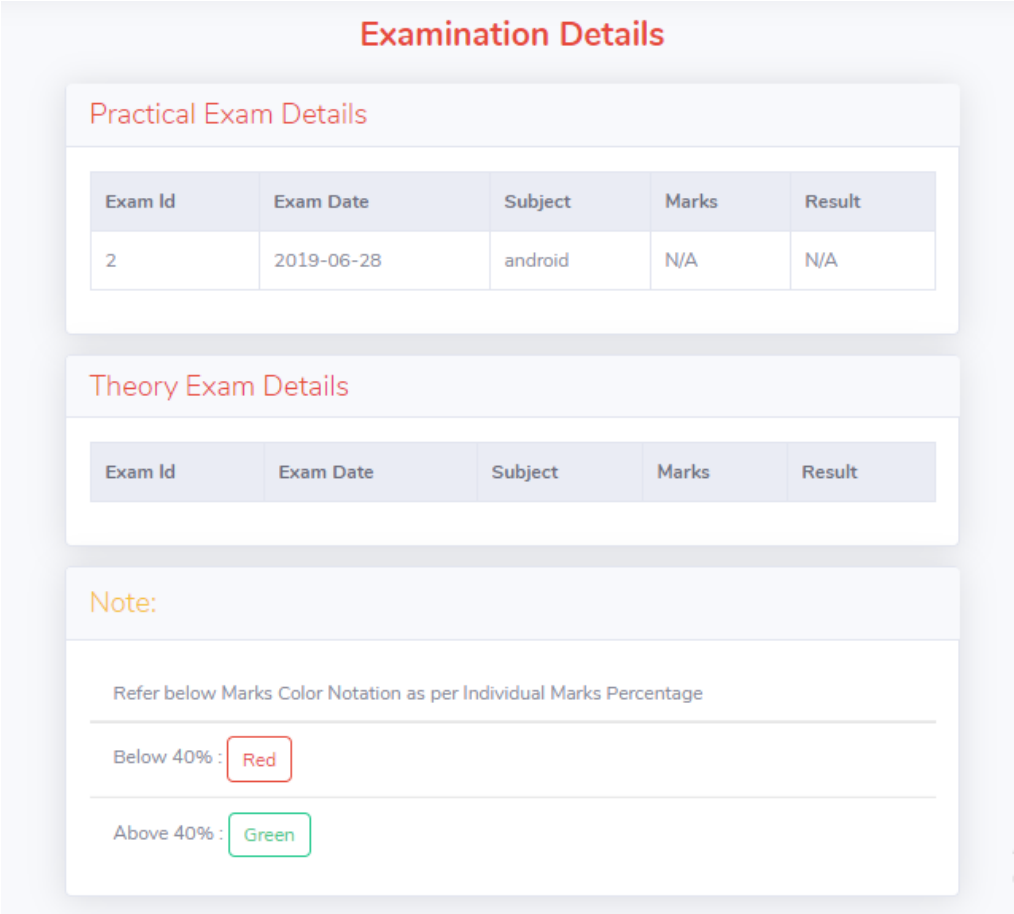
Student_details.jsp



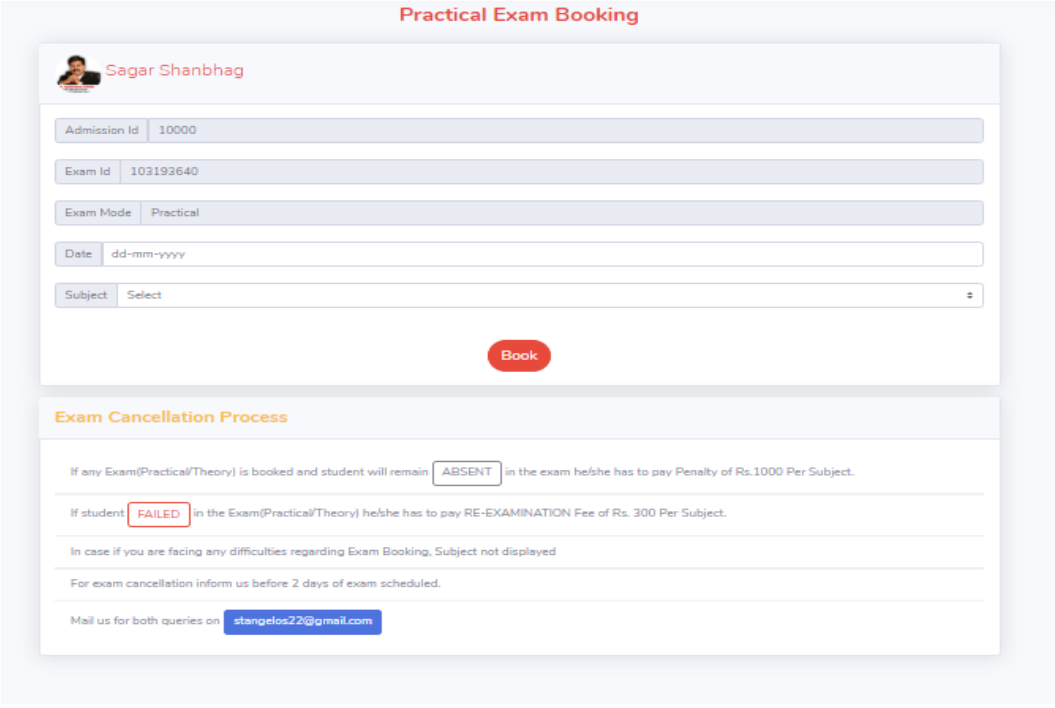
Batch_details.jsp



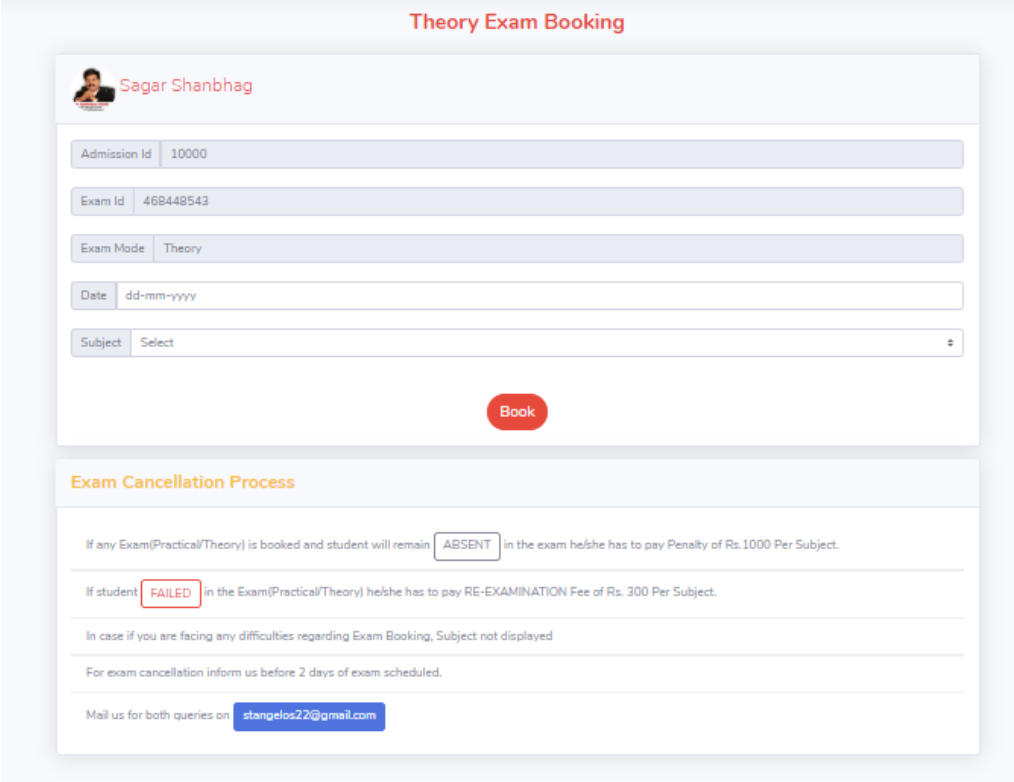
Exam.jsp



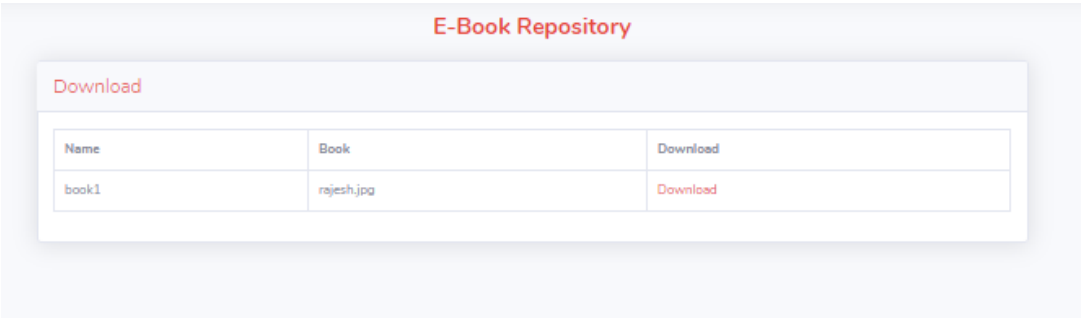
Practicalbook.jsp



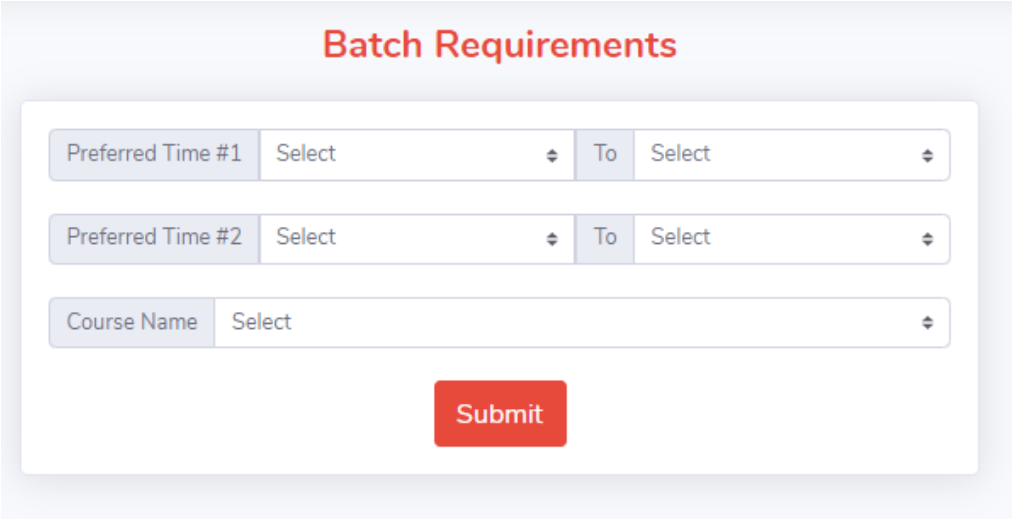
Theoorybook.jsp



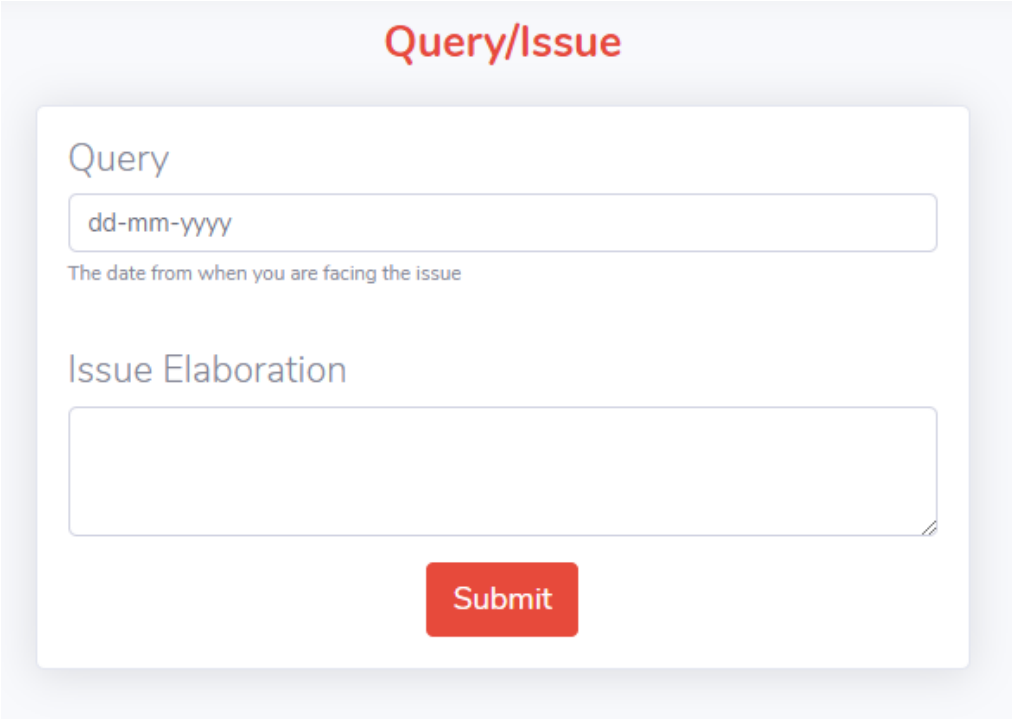
Download.jsp



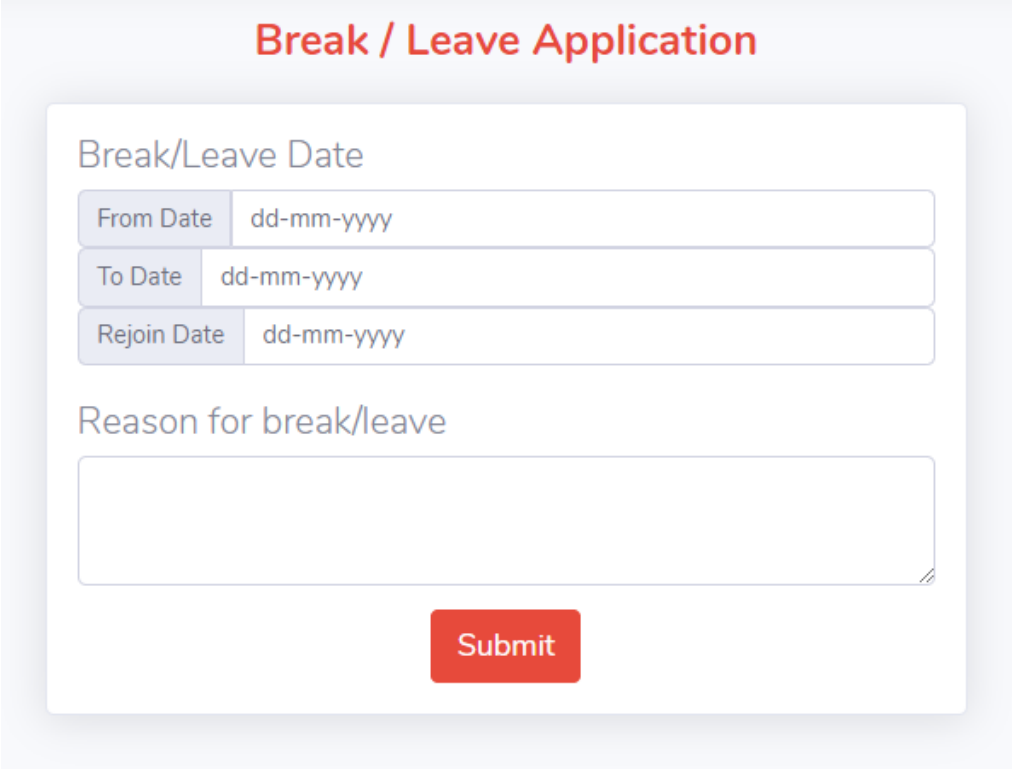
Batch_require .jsp



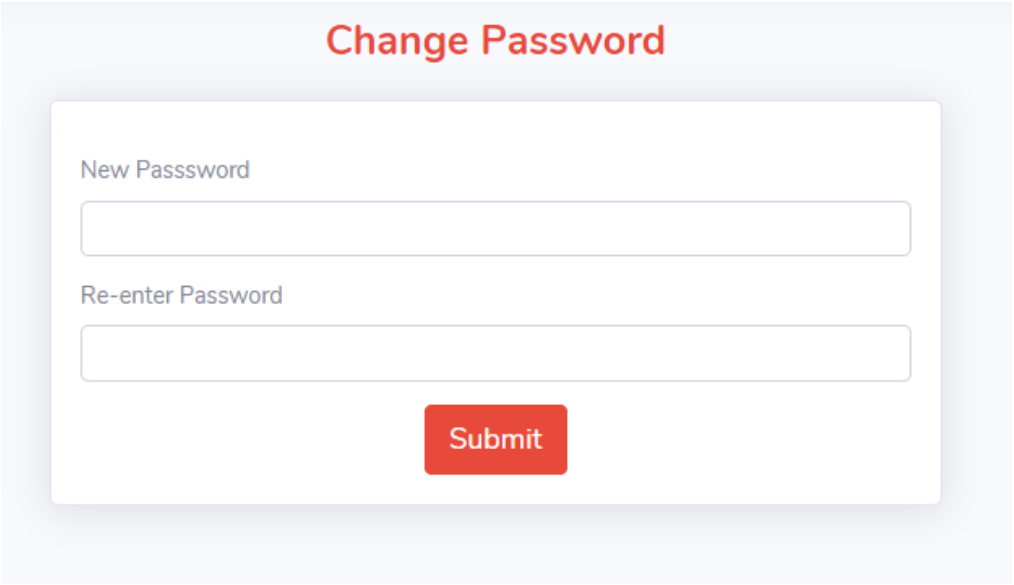
Queries.jsp



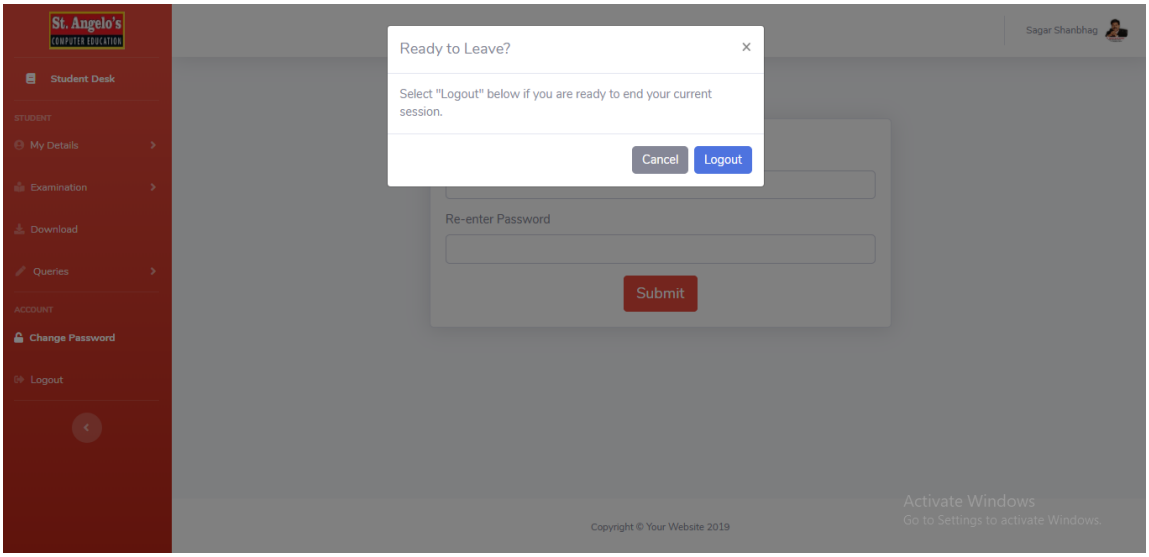
Break.jsp



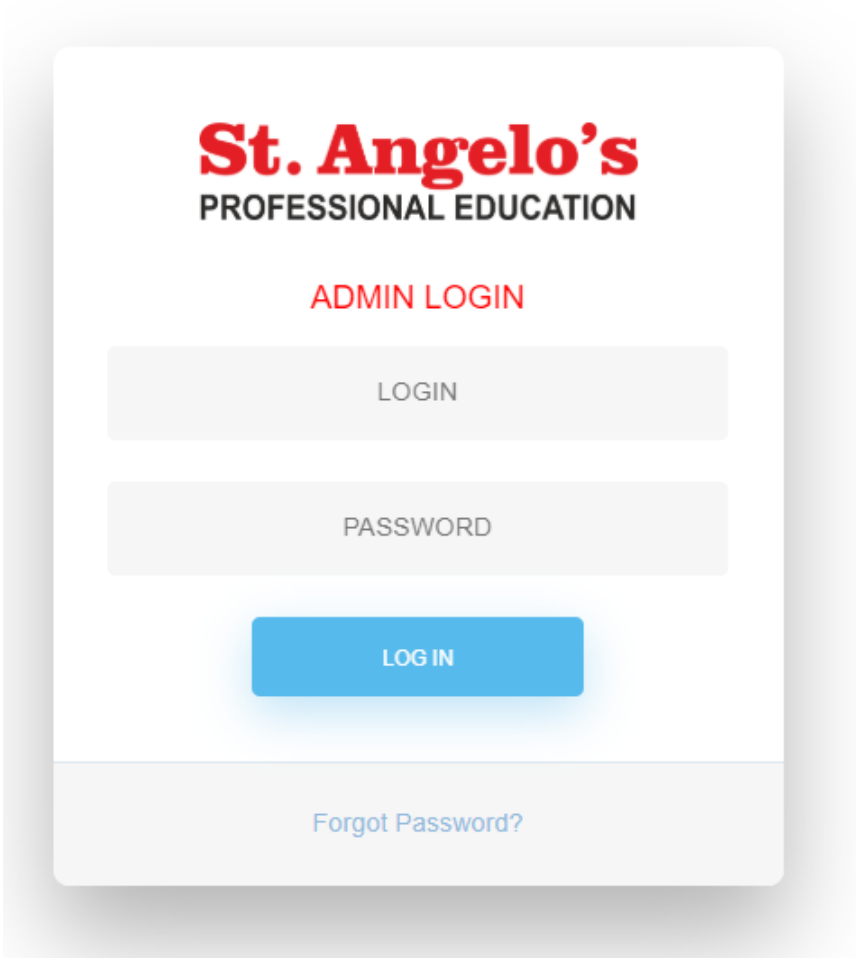
Changepass.jsp



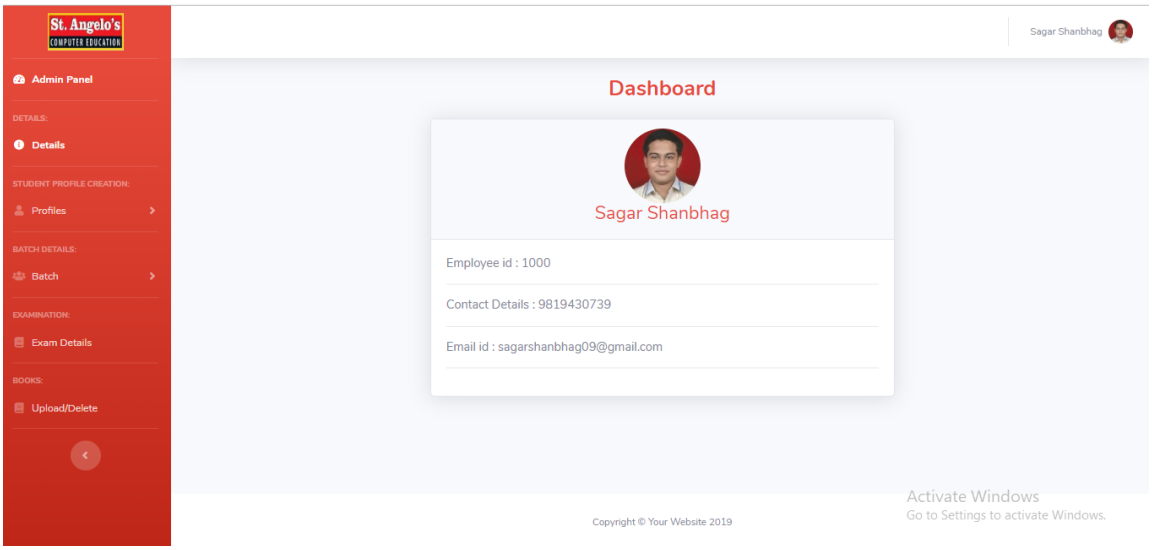
Logout.jsp



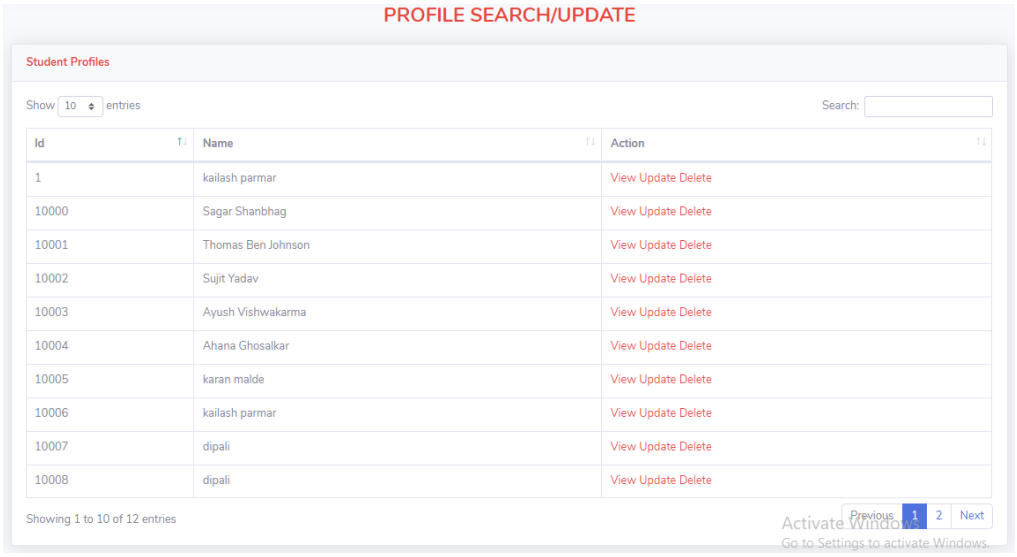
Adminlogin.jsp



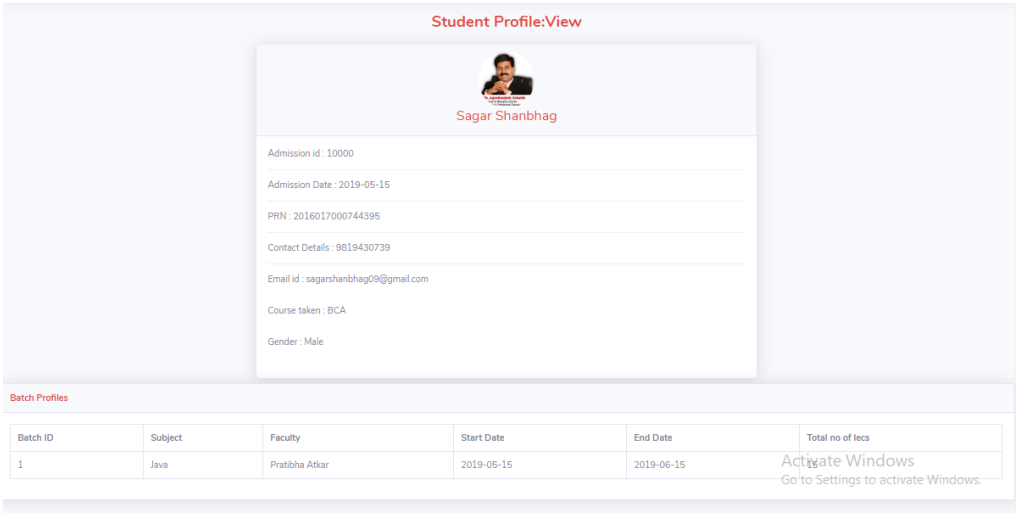
Details.jsp



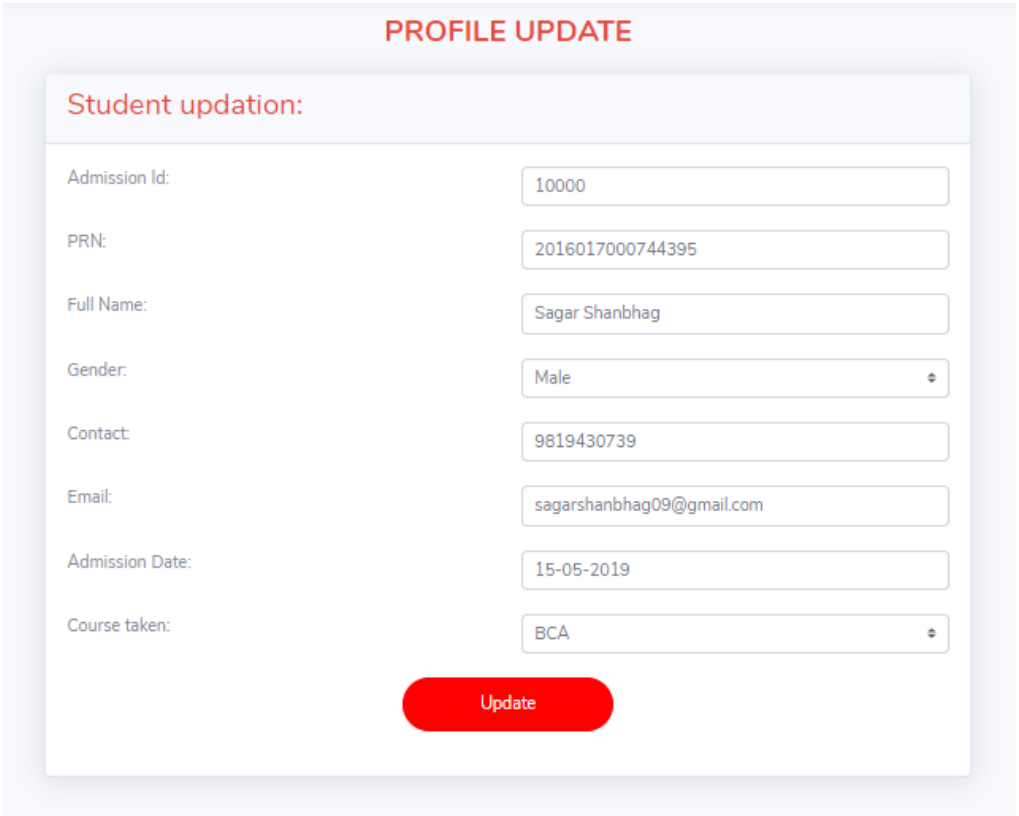
Search.jsp



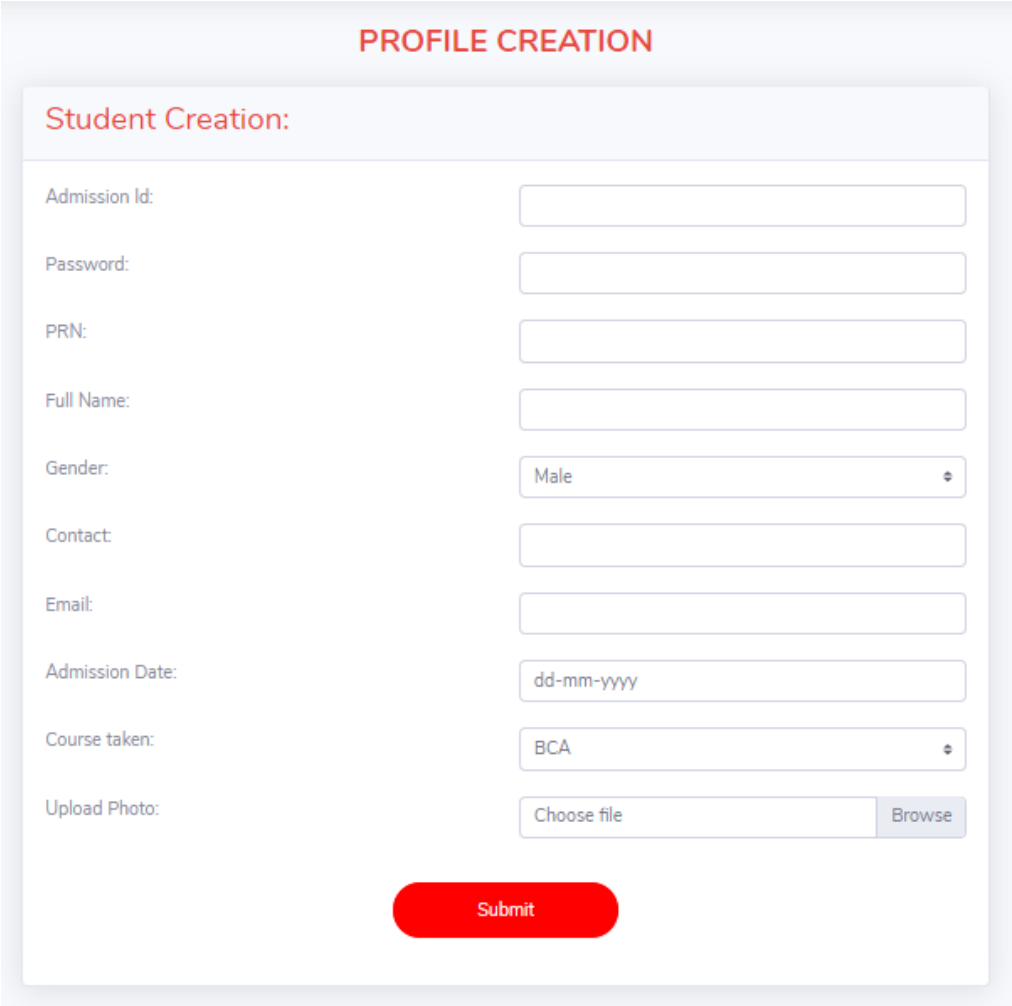
View.jsp



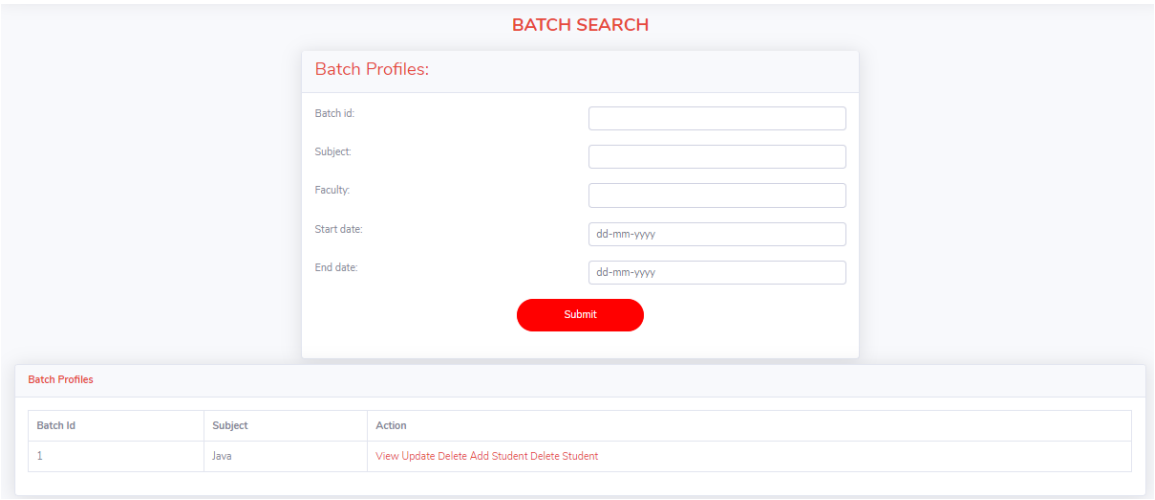
Update.jsp



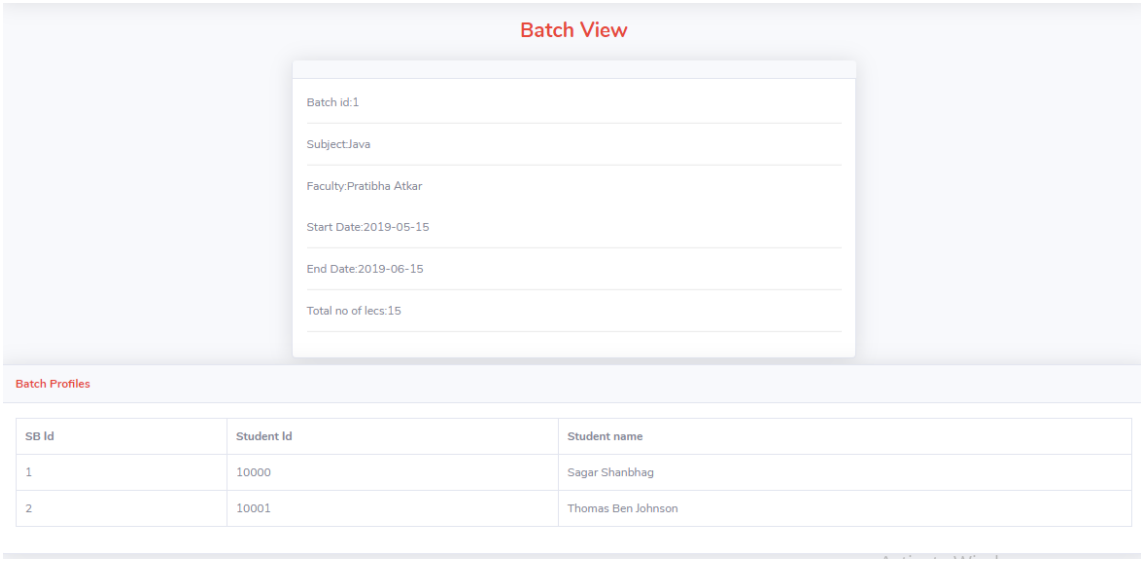
Creation.jsp



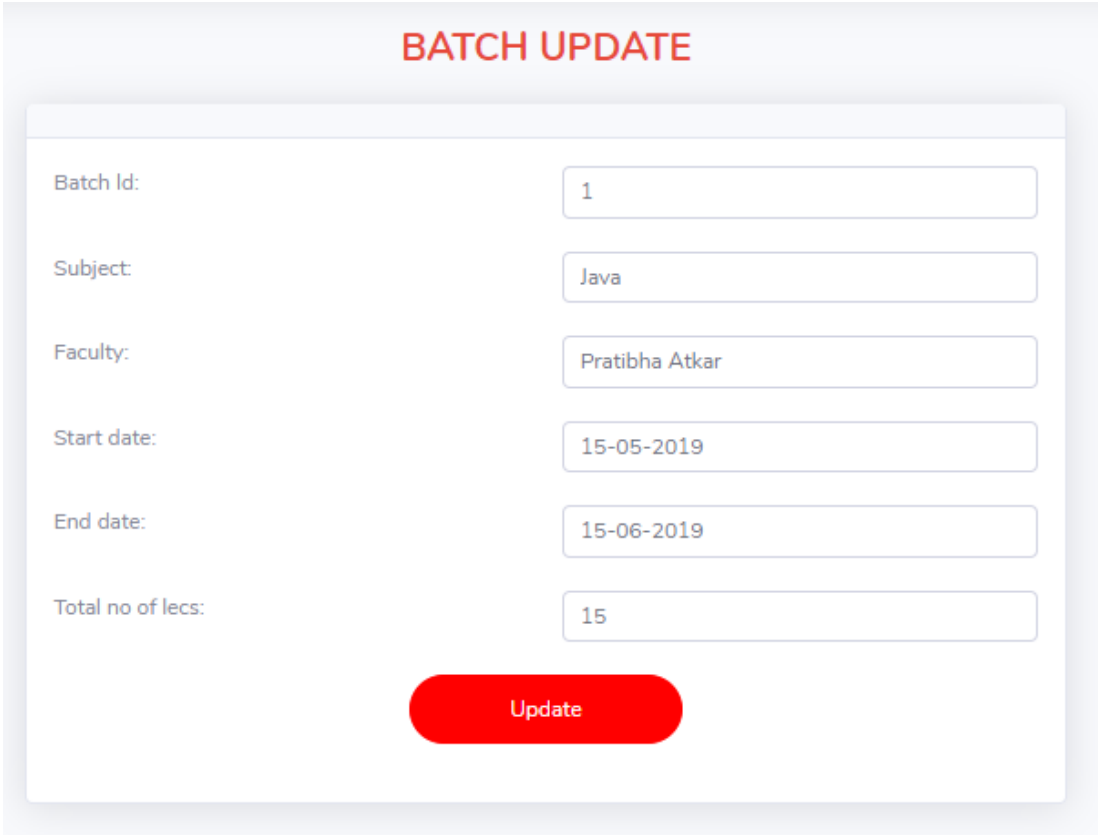
Batchsearch.jsp



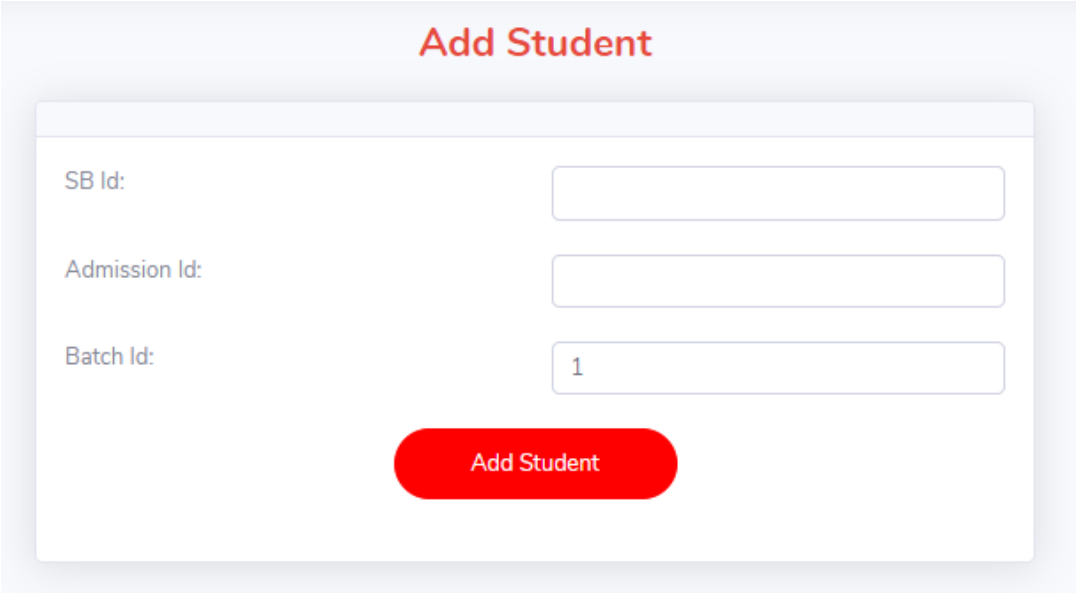
View1.jsp



Update1.jsp



Addstu.jsp



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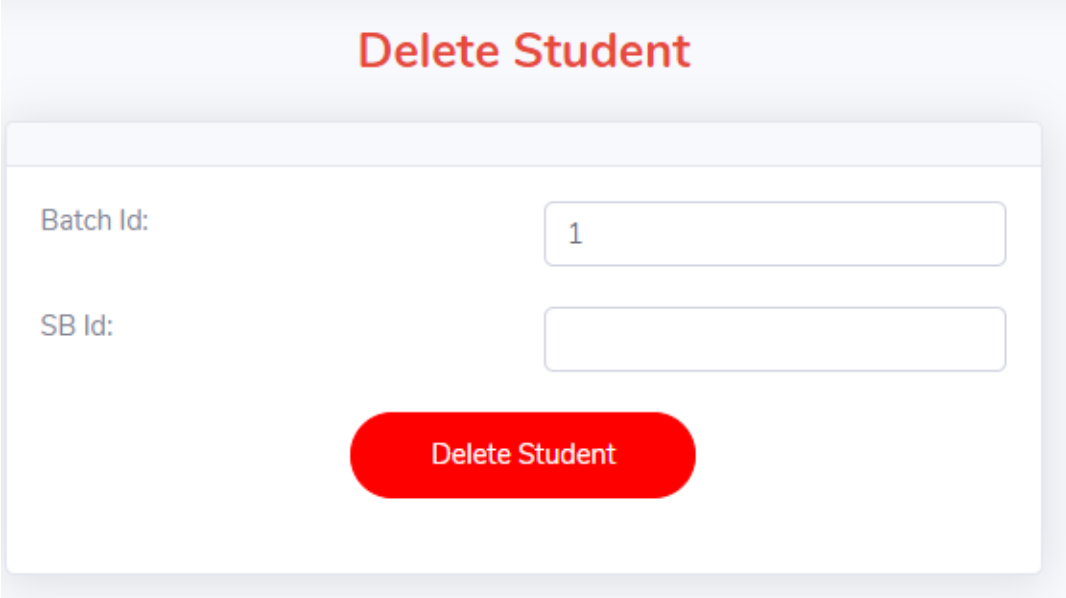
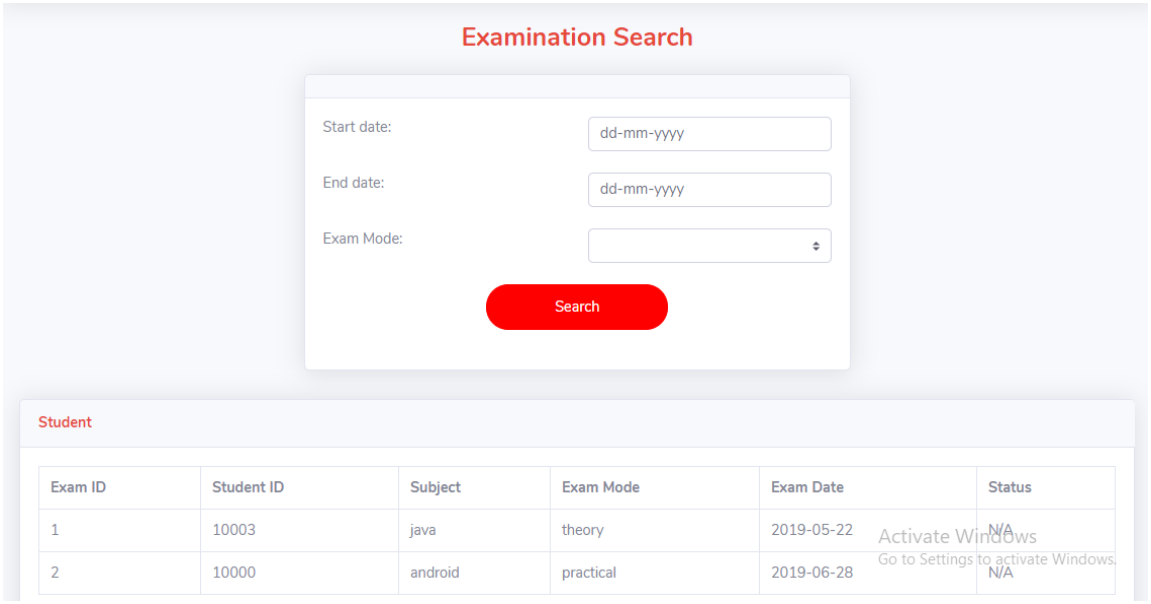
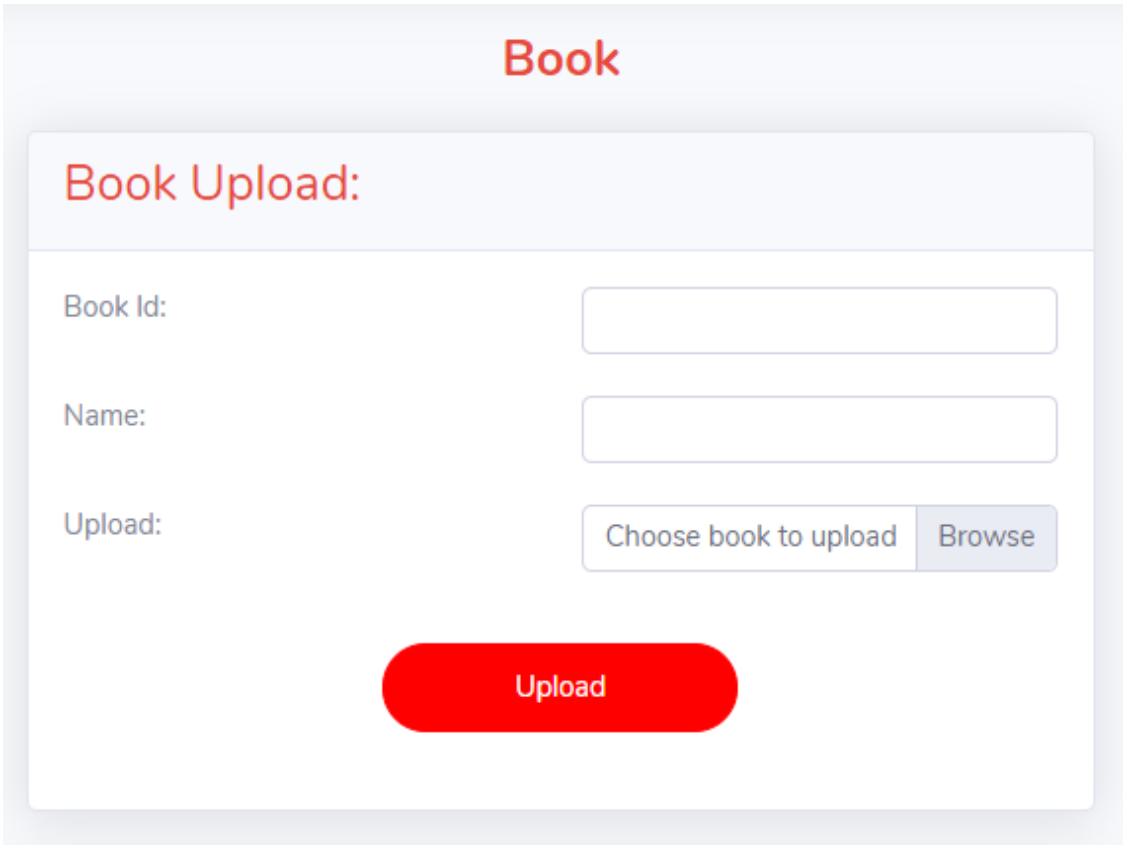


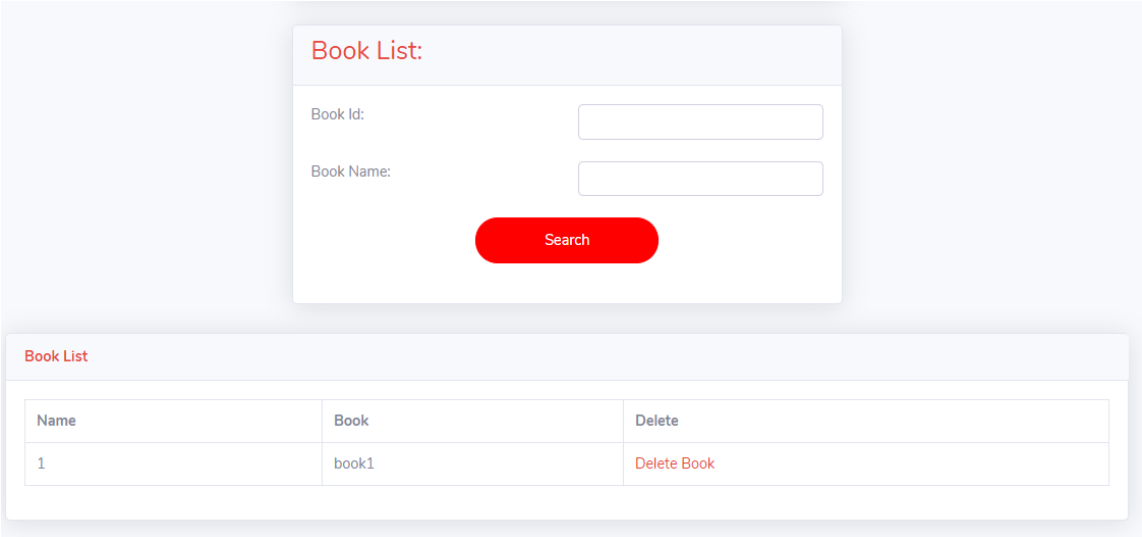
Examination.jsp



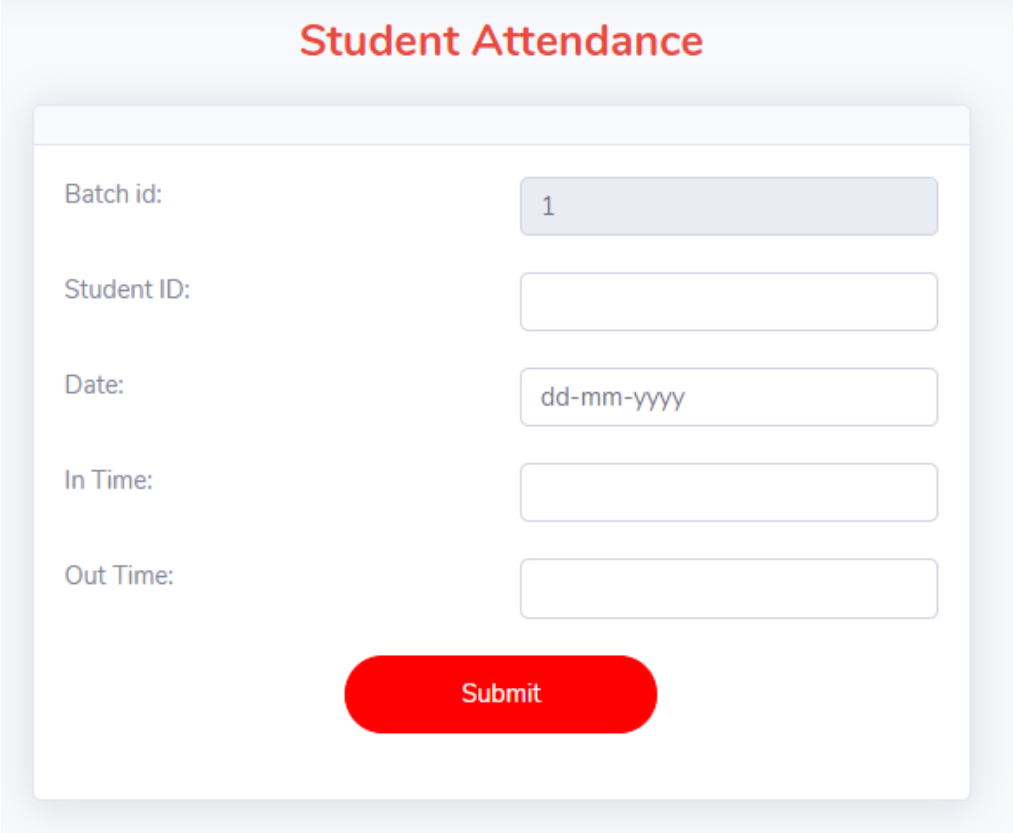
Book.jsp



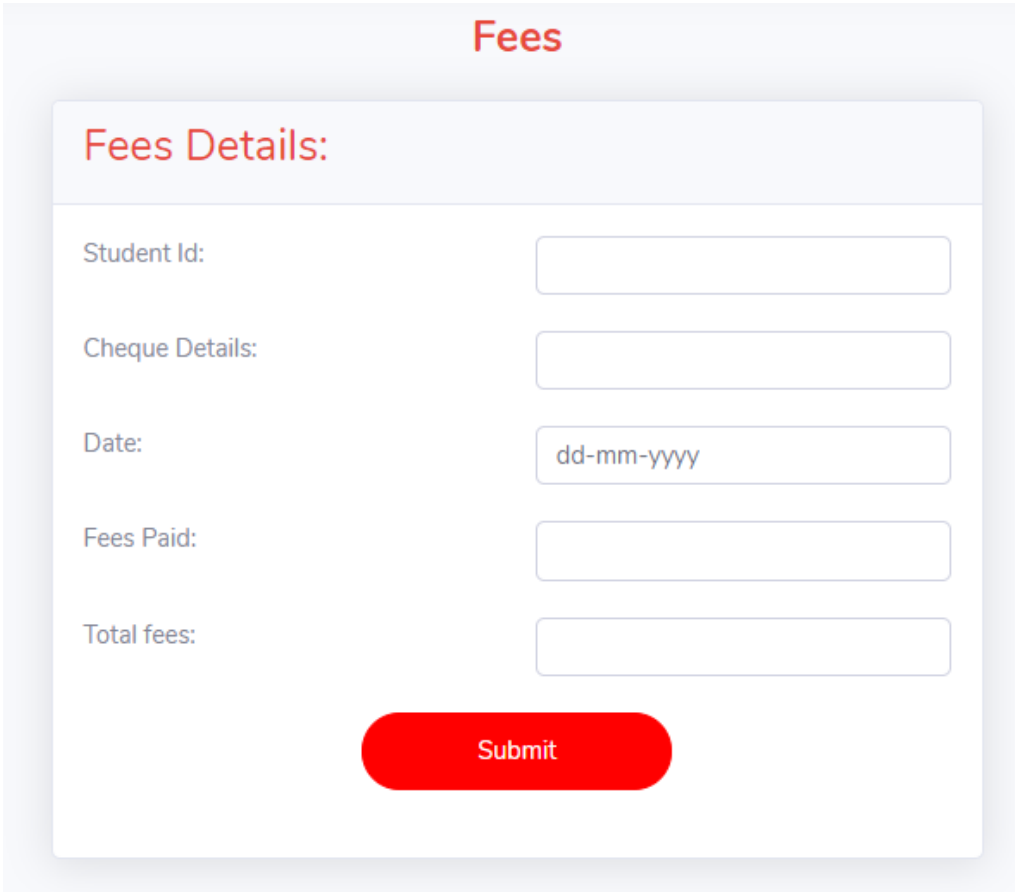
Book.jsp

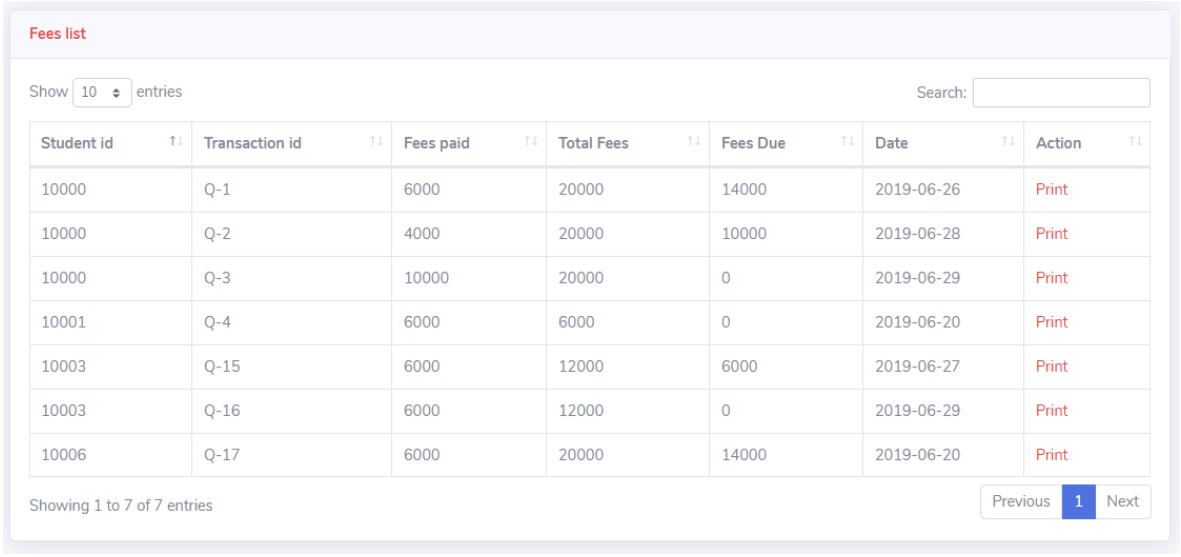


Attendance.jsp



Feespanel.jsp





Fees list

Show 10 entries Search:

Student id	Transaction id	Fees paid	Total Fees	Fees Due	Date	Action
10000	Q-1	6000	20000	14000	2019-06-26	Print
10000	Q-2	4000	20000	10000	2019-06-28	Print
10000	Q-3	10000	20000	0	2019-06-29	Print
10001	Q-4	6000	6000	0	2019-06-20	Print
10003	Q-15	6000	12000	6000	2019-06-27	Print
10003	Q-16	6000	12000	0	2019-06-29	Print
10006	Q-17	6000	20000	14000	2019-06-20	Print

Showing 1 to 7 of 7 entries Previous 1 Next

9. SYSTEM TESTING AND CONCLUSION:

Content is evaluated at both is synthetic and semantic level. At the syntactic level, spelling, punctuation, and grammar are assessed for text-based documentation .At a semantic level, correctness, consistency and lack of ambiguity are all assessed.

Function is tested: to uncover errors that indicate lack of conformance to customer requirements.Each WebApp function is assessed for correctness, instability, and general conformance to appropriate implementation standard.

Structure is assessed: to ensure that it properly delivers WebApp content and function that is extensible and that it can be supported as new content or functionality is added.

Usability is tested: to ensure that each category of user is supported by the interface and can learn and apply all required navigation syntax and semantics.

Navigability is tested: to ensure that all navigation syntax and semantics are exercised to uncover any navigation errors.

Performance is tested: under a variety of operating conditions, configurations and loading to ensure that the system is responsive to user interaction and handles and extreme loading without unacceptable operational degrading.

Interoperability is tested: to ensure that the WebApp content properly interfaces with other application and /or databases.

Security is tested: by assessing potential vulnerability and attempting to exploit each.Any successful penetration attempt is deemed a security failure.

10. FUTURE ENHANCEMENTS:

Front-end Enhancements:

- Make front-end more responsive.
- Improve code efficiency.
- Make webpages more visually attractive.
- Add more courses.
- Add teacher’s panel.

Back-end Enhancements:

- Improve code efficiency.
- Create separate table for teachers and implement it.
- Create separate table for branches and implement it.
- Create separate table for courses as per increment of courses and implement it.
- Add online examination system.
- SMS can be provided to students regarding exam details,lecture schedule etc.
- Emails for multiple students regarding the exam timetable or any another notification regarding fees, lectures etc.

11. CONCLUSION:

It was a wonderful and a very good learning experience for us while working on this project.

Student Management Database System allows the user to store student details, batch details, book details, student batch details, fees details and exam details.

This system allows storing, retrieving, updating and deleting the details related to students. The implementation of the system in this school / college / institute will considerable reduce data entry, time and also provide calculated reports.

12. Reference/Bibliography/Website User:

References/Bibliography/Websites Used

Websites:

- https://www.w3schools.com
- https://www.javatpoint.com
- https://www.youtube.com
- https://stackoverflow.com

Books:

- Java: The Complete Reference (Schildt Herbert)