

AUTOMATED STUDENT REGISTRATION SYSTEM

A Project Report for Industrial Training

Submitted by

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TABLE OF CONTENT

Content	Page no
 Acknowledgement 	3
Project Scope	4
 Requirement Specification Functional Requirement Hardware Requirement Software Requirement 	5-6 6 7
 Database Design 	8-10
Screen Shots	11-23
Application Workflow	24-34
 Future Scope of 	
Improvements	35
Conclusion	36
 Appendices 	37
 References 	38

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The assignment cannot be completed without the effort and co-operation from our group members. Last but not the least, we would like to express our gratitude to our friends and respondents for the support and willingness to spend some times with us to fill in the questionnaires.

PROJECT SCOPE

Project "Automated Student Registration System" while doing this Project we faced lots of challenges but our ultimate goal was to satisfy all functionality demanded by stakeholder and make the project user friendly such that non-technical User easily understand and access. We have also 15 days' time deadlines to complete this project and we complete project within this deadline. We deal this project on basis of our three types of Users Admin, Student, Clerk. All these users have certain responsibility and limitations or accessibility which we have to implements.

REQUIREMENT SPECIFICATION

❖ Functional Requirement

Function id	Requirement	Must/Optional	Comment
	statement		
FR01	This web application must require a Home Page whether the user visiting is new one or existing one	Must	This Home Page requirement is must
FR02	This web app required a login where three kind user may access which have different accessibility or restriction to access and manipulation of data	Must	
FR03	Different Home page for Student, Admin and Clerk so that they easily access to their information's they required	Must	
FR04	In the case of database design we required 5 Tables mention below to store the details in our database so that our user can easily	Must	

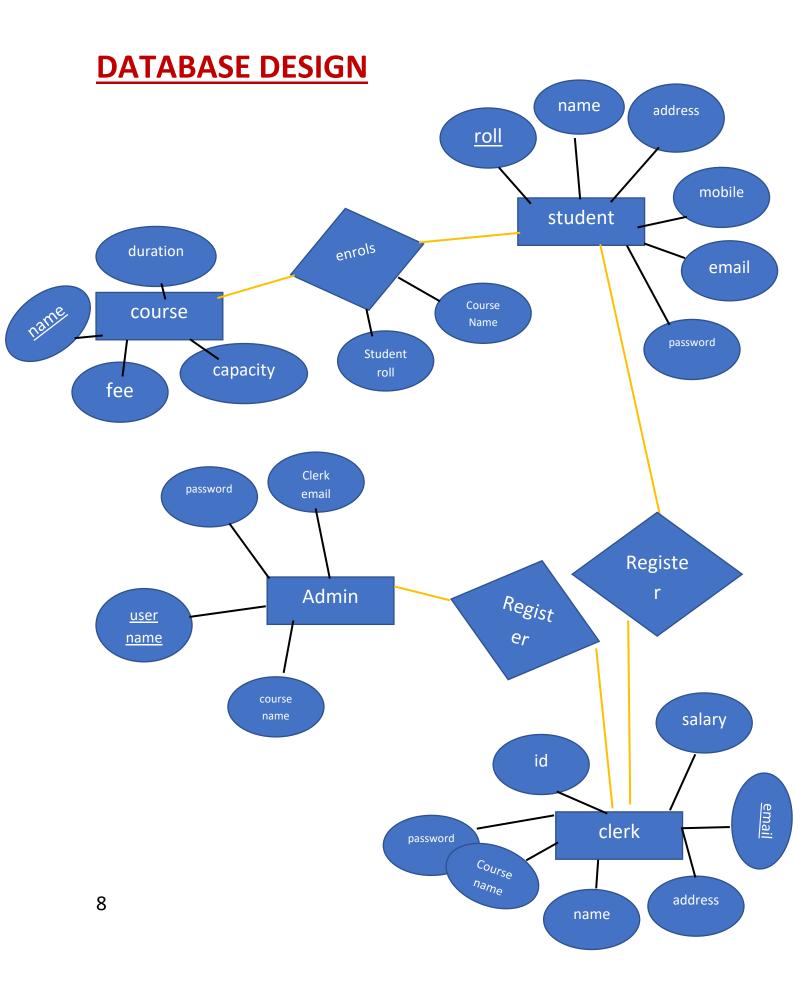
	access those details when they required		
FR05	We have many functionalities for all our 3 users .Student can registered to any courses available ,Clerk can access student ,Admin can access all the details they can even manipulate all the courses available	Must	

❖ <u>Hardware Requirement</u>

Client Machine		Server Machine	
HDD	200 MB HDD		320 GB
Processor	Dual Core or Processor newer processor		Dual Core or newer processor
Memory	1 GB	Memory	4 GB

❖ <u>Software Requirement</u>

- > Front End
 - Html
 - Cascading Style Sheet (CSS)
 - Java Script
- Back End
 - Java
 - Java Database Connectivity (JDBC)
 - Java Server Pages (JSP)
 - Servlet
- > Application Server
 - Apache Tomcat
- Database Server
 - MySQL



✓ TABLE DESIGN

> `Table: Clerk

Field	Туре	Null	Key	Default
Id	Varchar (200)	NO	PRI	NULL
Name	Varchar (20)	YES		NULL
Age	Varchar (20)	YES		NULL
Address	Varchar (20)	YES		NULL
Salary	Varchar (20)	YES		NULL
Email	Varchar (20)	YES		NULL
password	Varchar (20)	YES		NULL

> Table: Course

Field	Туре	Null	Key	Default	Extra
courseName	varchar(12)	NO	PRI	NULL	
courseDuration	varchar(12)	YES		NULL	
courseFee	int(11)	YES		NULL	
courseStartDate	varchar(12)	YES		NULL	
Capacity	int(11)	YES		NULL	
Avail	int(11)	YES		NULL	

> Table: Student

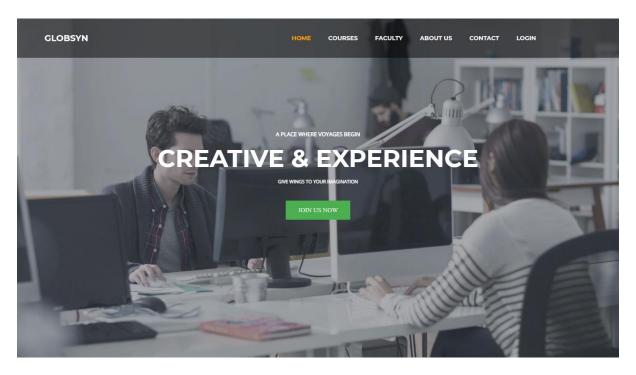
Field	Туре	Null	Key	Default
Roll	Int (11)	NO	PRI	NULL
Name	Varchar (20)	YES		NULL
Address	Varchar (20)	YES		NULL
Mobile	Varchar (20)	YES		NULL
Email	Varchar (20)	YES		NULL
Password	Varchar (20)	YES		NULL

> Table: Student Course

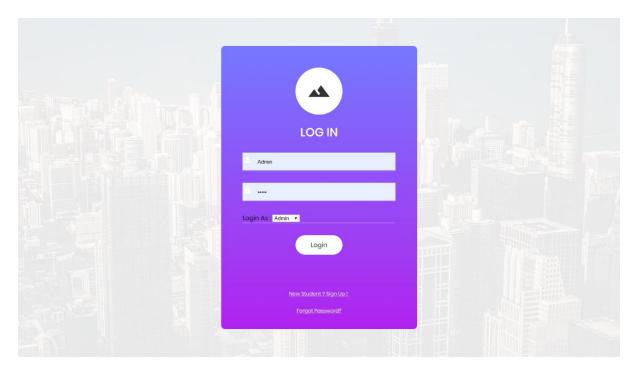
Field	Туре	Null	Key	Default
Roll	Int (11)	YES		NULL
courseName	Varchar (20)	YES		NULL

SCREEN SHOTS

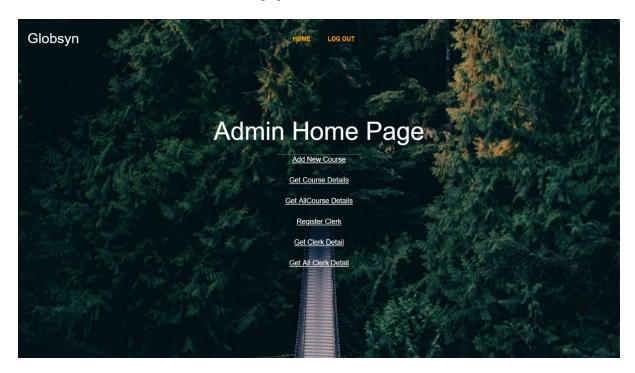
Home Page: index.jsp



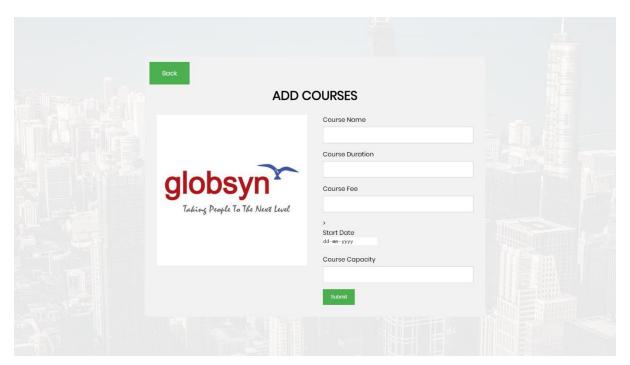
Login Page: loginPage.jsp



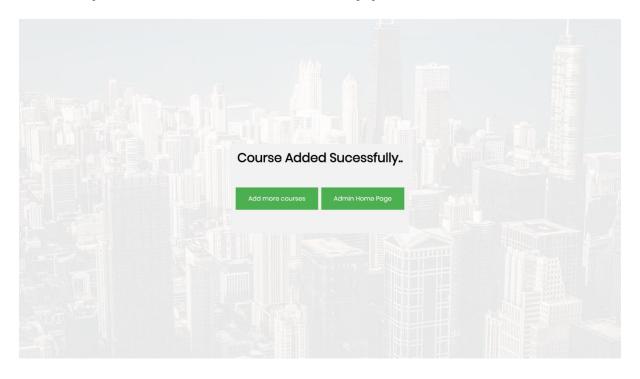
Admin Home: AdminHome.jsp



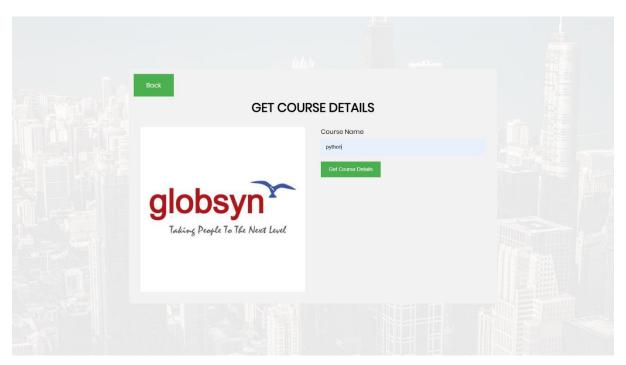
Add New Course: addCourse.jsp



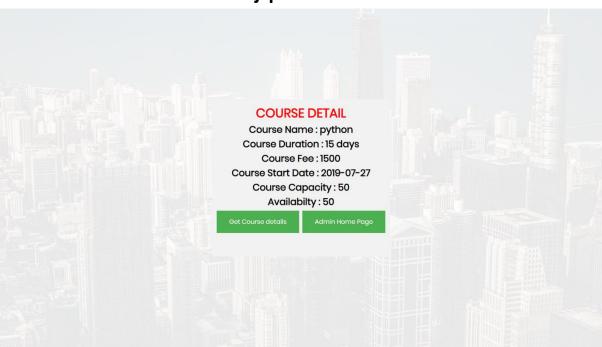
Couse Update Success: courseSuccess.jsp



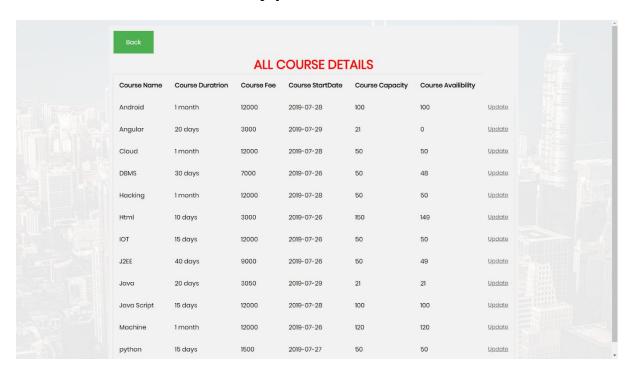
Get Course Details: getCourse.jsp



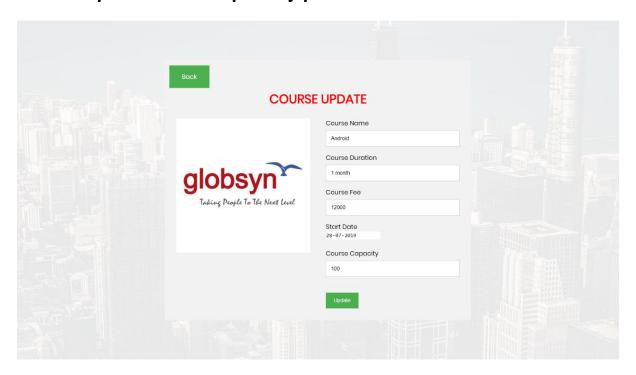
Course Details: courseDetail.jsp



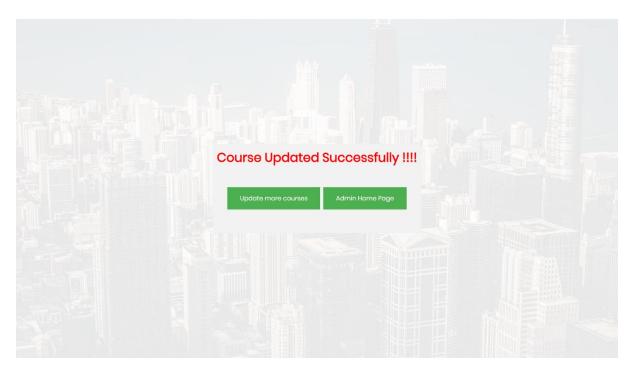
All Course Detail: allCourse.jsp



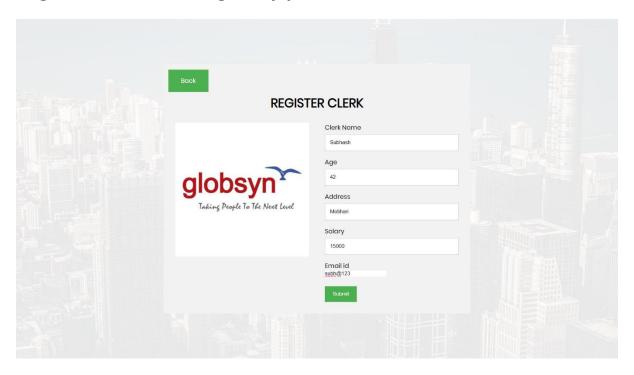
Course Update: courseUpdate.jsp



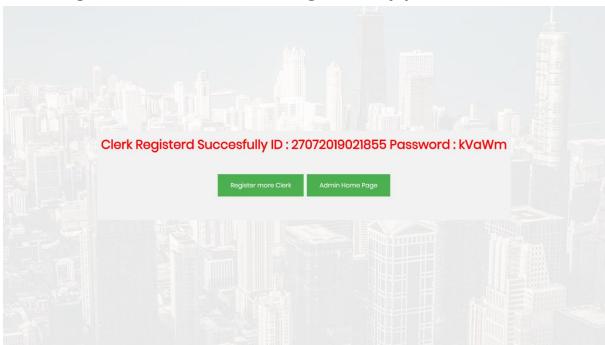
Course Updated Successful: updateCourseSucess.jsp



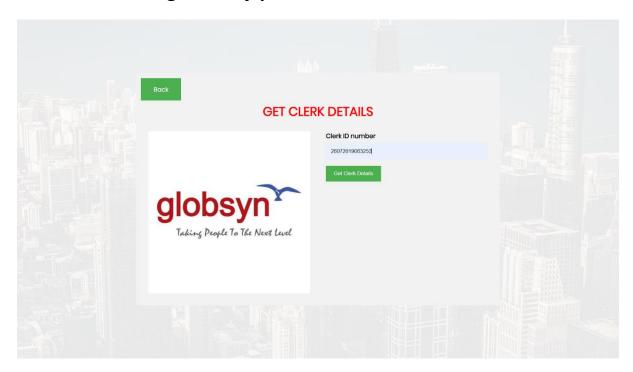
Register Clerk: ClerkRegister.jsp



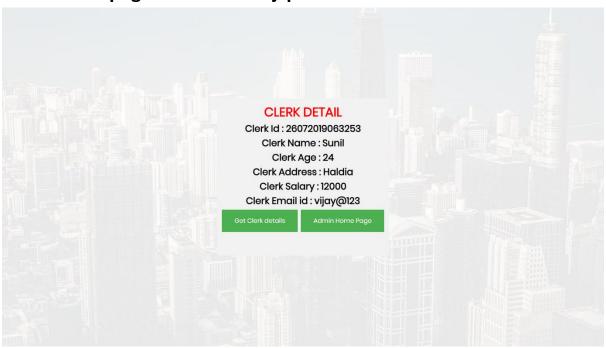
Clerk Registration success: clerkRegSuccess.jsp



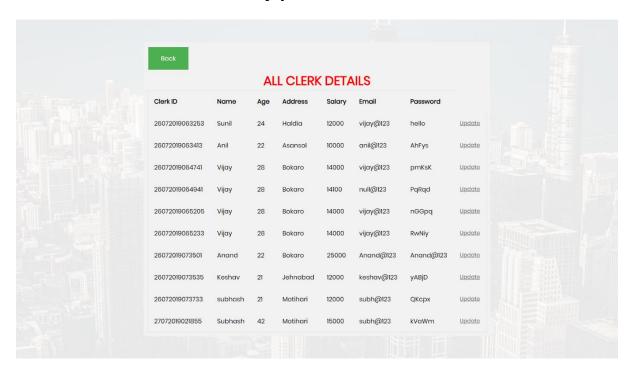
Get Clerk Detail: getClerk.jsp



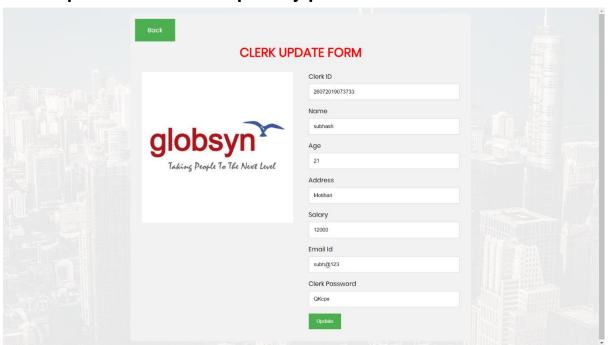
Clerk Detail page: clerkDetails.jsp



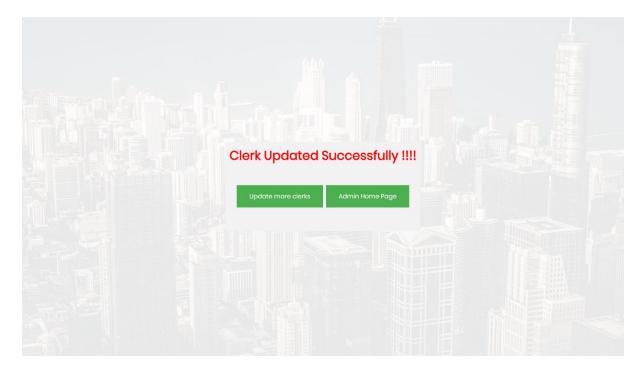
Get All Clerk Detail: allClerk.jsp



Clerk Update Form: clerkUpdate.jsp

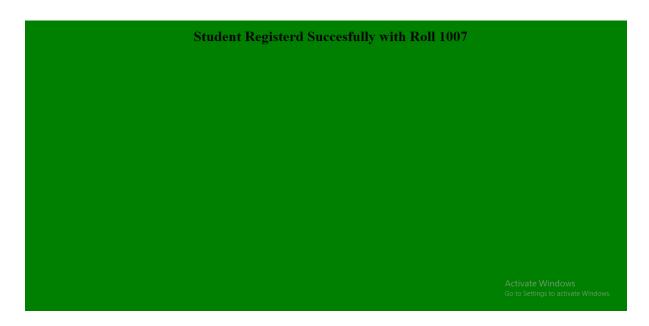


Clerk Details updated Successfully: updateClerkSucess.jsp



studentRegister.jsp

	Reg	isteration open	
		Register	
	Name:	Mohan	
	Address:	kolkata	
	Mobile:	9091891293	
	Email:	ak@gmail.com	
	Password:	••••	
		Register	
<u>ck</u>			



regSuccess.jsp(student registered successfully)

studentHome.jsp

Welcome ram View Profile	
View Courses	
Get Enrolled Course Details	
Logout	
	Activate Windows Go to Settings to activate Windows.

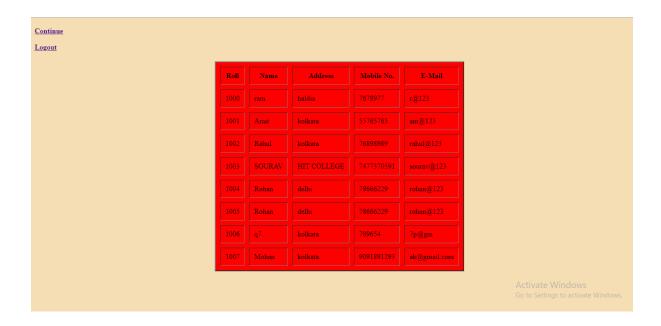
clerkHome.jsp



updatePassword.jsp

Enter Old Password:	
Enter New Password:	
Re-enter New Password:	
Update	
Back	
To Logout.!	
	Activate Windows Go to Settings to activate Windows.

allStudentdetails.jsp



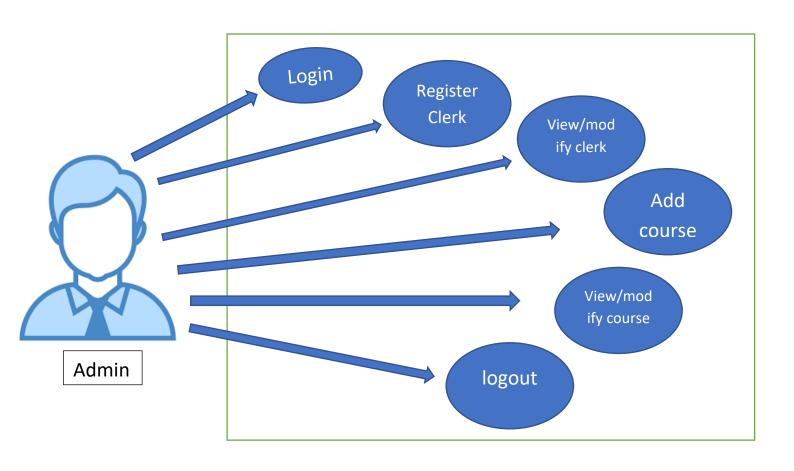
enrollStudents.jsp



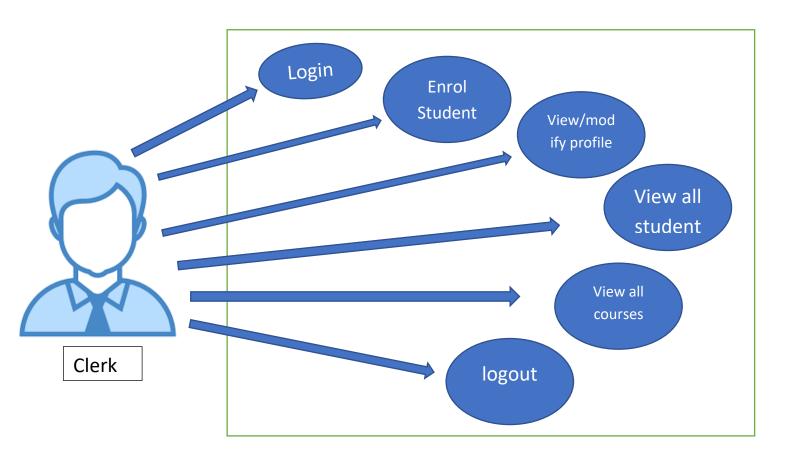
APPLICATION WORKFLOW

USING CASE DIAGRAM

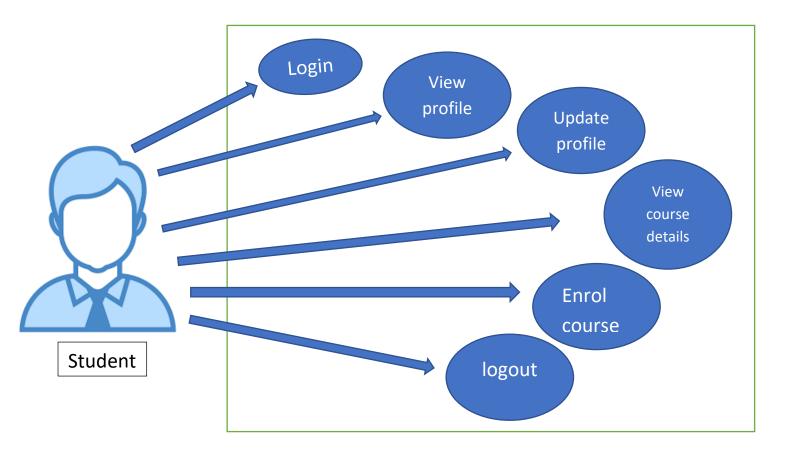
Case 1: Admin Case Diagram



Case 2: Clerk Case Diagram



Case 3: student case Diagram



► USING CASE DESCRIPTIONAdmin

Case I: Login Description

CASE	Login
Goal	All users logging into the system should be authenticated using a unique login-id and password (operations to be supported based on type of user)
Preconditions	If the user type is 'Admin', credential details should exist. If the user type is 'Clerk', he/she should be registered by the admin. If the user type is 'Student', he/she should be registered by the himself or clerk.
Success End Condition	If the user type is 'Admin', then redirect to the Admin page. If the user type is 'Clerk', then redirect to the Clerk page. If the user type is 'Student', then redirect to the Student page.

Failed End Condition	The end user is redirected to an Error Page, and/or is asked to reenter login credentials.			
Primary, Secondary Actors	Admin, Clerk, Student.			
Trigger	Login button			

DESCRIPTION	Step	Action
	1	Enter Login credentials (id & password)
	2	Click on Login button
	3	If id & password is Success, then identify user type
		Display appropriate(Admin/Clerk/student) home page
	Step	Branching Action
	1	If 'id' is not existing then return with requesting for registration
	2	If password is not matching return with suitable error message say 'Re-enter id & password'
Related Information/Use cases	Not Applicable	
Priority	P1	
Performance	5 seconds	
Frequency	10 / hour	
Assumptions	Admin/Customer/Student login credentials are available in the database and others are already registered with their credentials	

Case Description to Add new courses

USE CASE	The admin should be able to add new course and its detail.		
OSE CASE	The damin should be able to add new course and its detail.		
Goal	To enab	le Administrator to create and add new course.	
Preconditions	Adminis	trator must be logged in to be able to create a new course.	
Success End Condition	"Redired	et to Admin home page"	
Failed End Condition	"Redired	ct to Error Page"	
Primary, Secondary	Adminis	trator	
Actors			
Trigger	'Add course button'		
DESCRIPTION	Step	Action	
	1	Provide appropriate course details	
	2 Click on Add course button		
	Step Branching Action		
	1 If failed to add more course details		
	2 Display appropriate message to the admin		
Related	Not applicable		
Information/Use cases			
Priority	P1		
Performance	Approx. 4 sec		

Frequency	2 / Month		
Assumptions	Course Table is available in the database		

Case Description to get all course Detail

USE CASE #	The admin should be able to get a course detail.		
Goal	To enable	e Administrator to get course detail using course name.	
Preconditions	Administr	ator must be logged in to be able to fetch course detail.	
Success End Condition	"Redirect to Course Detail Page"		
Failed End Condition	"Redirect to No course Exist"		
Primary, Secondary	Administrator		
Actors			
Trigger	'Get Course Detail Button'		
DESCRIPTION	Step Action		
	1	Provide appropriate Course Name	
	2 Click on Get course Detail Button		
	Step Branching Action		
	1 If failed to no course exist		
	2 Display appropriate message to the admin		
Assumptions	Course Details are available in the database		

Case Description to get all course Detail

USE CASE #	The admin should be able to get all course detail and modify it.		
Goal	To enable	e Administrator to get All course Detail.	
Preconditions	Administrator must be logged in to be able to fetch course detail.		
Success End Condition	"Redirect to Course Detail Page"		
Failed End Condition	"Redirect to Admin home Page"		
Primary, Secondary	Administrator		
Actors			
Trigger	'Get All Course Detail Link'		
DESCRIPTION	Step	Action	
	1 Select Get all courses link.		
	Step Branching Action		
	1 If failed to Admin Home Page.		
	2 Display appropriate message to the admin		
Assumptions	Course Details are available in the database		

Case Description to Update Course Detail

USE CASE #	The admin should be able to modify a course.
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Goal	To enable Administrator to get update a particular course.		
Preconditions	Administrator must be logged in to be able to fetch course detail.		
Success End Condition	"Redirect to Update course page with its initial details"		
Failed End Condition	"Redirect	to Couse Updating Fails"	
Primary, Secondary	Administrator		
Actors			
Trigger	'Update link in the table'		
DESCRIPTION	Step Action		
	1	Click Get all course Detail link, from Admin home Page	
	2 Click on Update button on the particular course needs		
		to be updated	
	3	Fill the necessary course details	
	4 Select update Button to update Step Branching Action 1 If failed to Updating Fail Page		
	2 Display appropriate message to the admin		
Assumptions	Course Details are available in the database		

Case Description for Register Clerk

USE CASE #	The admin should be able to register a clerk		
Goal	To enable Administrator to register a clerk with its details required.		
Preconditions	Administr	ator must be logged in to be able register a clerk.	
Success End Condition	"Redirect to Clerk Registered Successfully"		
Failed End Condition	"Redirect to Clerk Registration Fail Page"		
Primary, Secondary	Administrator, clerk		
Actors			
Trigger	'Register Clerk Button'		
DESCRIPTION	Step Action		
	1 Click on Register Clerk Link from Admin Home page		
	2	Give the credentials needed to register a clerk.	
	3 Click on Register button to register		
	Step Branching Action		
	1 If failed to Registration Fails Page		
	2 Display appropriate message to the admin		
Assumptions	Clerk tabl	e is present in the database	

Case Description to get Clerk Detail

USE CASE #	The admin should be able to get a clerk detail.
Goal	To enable Administrator to get clerk detail using clerk ld.
Preconditions	Administrator must be logged in to be able to fetch clerk detail.
Success End Condition	"Redirect to Clerk Detail Page"

Failed End Condition	"Redirect to No clerk Exist"			
Primary, Secondary	Administ	rator		
Actors				
Trigger	'Get Cler	'Get Clerk Detail Button'		
DESCRIPTION	Step Action			
	1	Provide appropriate Clerk Id number		
	2 Click on Get clerk Detail Button			
	Step	Branching Action		
	1 If failed to no clerk exist2 Display appropriate message to the admin			
Assumptions	Clerk details are available in the database			

Case Description to get all Clerk Detail

USE CASE #	The admin should be able to get all clerk detail and modify it.		
Goal	To enable	e Administrator to get All clerk Detail.	
Preconditions	Administrator must be logged in to be able to fetch clerk detail.		
Success End Condition	"Redirect to Clerk Detail Page"		
Failed End Condition	"Redirect to Admin home Page"		
Primary, Secondary	Administrator		
Actors			
Trigger	'Get All Clerk Detail Link'		
DESCRIPTION	Step Action		
	1 Select Get all courses link.		
	Step Branching Action		
	1 If failed to Admin Home Page.		
	2 Display appropriate message to the admin		
Assumptions	Clerk Details are available in the database		

Case Description to Update Clerk Detail

USE CASE #	The admin should be able to modify a clerk.	
Goal	To enable Administrator to get update a particular clerk.	
Preconditions	Administrator must be logged in to be able to fetch clerk detail.	
Success End Condition	"Redirect to Update clerk page with its initial details"	
Failed End Condition	"Redirect to Clerk Updating Fails"	
Primary, Secondary Actors	Administrator	
Trigger	'Update link'	
DESCRIPTION	Step	Action
	1	Click Get all clerk Detail link, from Admin home Page
	2	Click on Update button on the particular clerk needs to be updated
	3	Fill the necessary clerk details
	4	Select update Button to update
	Step	Branching Action
	1	If failed to Updating Fail Page

	2	Display appropriate message to the admin
Assumptions	Clerk Details are available in the database	

Student

Case I: Login Description

CASE	Login
Goal	All users logging into the system should be authenticated using a unique login-id and password (operations to be supported based on type of user)
Preconditions	If the user type is 'Admin', credential details should exist. If the user type is 'Clerk', he/she should be registered by the admin. If the user type is 'Student', he/she should be registered by the himself or clerk.
Success End Condition	If the user type is 'Admin', then redirect to the Admin page. If the user type is 'Clerk', then redirect to the Clerk page. If the user type is 'Student', then redirect to the Student page.
Failed End Condition	The end user is redirected to an Error Page, and/or is asked to reenter login credentials.
Primary, Secondary Actors	Admin, Clerk, Student.
Trigger	Login button

Case Description to View & Update profile

USE CASE	Student can able to view their details when they are successfully login and even they update some of the details of their profile		
Goal	To view the student details and even they update their some of the details		
Preconditions	Student must be logged in to be able to update their profile.		
Success End Condition	"Redirect to StudentProfile page or Studentprofileupdate page"		
Failed End Condition	"Redirect to Error Page if update is not able to done"		
Primary, Secondary	Administrator ,student,clerk		
Actors			
Trigger	'Add update button'		
DESCRIPTION	Step	Action	
	1	Click on view profile their update profile button	
	2	Click on Update	
	Step	Branching Action	
	1	If failed to update the profile	
	2	Display appropriate message to the student	

Related	Not applicable		
Information/Use cases			
Priority	P1		
Performance	Approx. 4 sec		

Case Description to View all courses and Register

USE CASE #	Student can view all the courses available and register in them and they can even view the courses they had already registered full details		
Goal	To enable	e student to register for the courses	
Preconditions	Student can be able to register on a particular courses		
Success End Condition	"Redirect to Registration success"		
Failed End Condition	"Redirect to Not available in place of Register"		
Primary, Secondary Actors	Admin,student,clerk		
Trigger	'Get All enroll course details','register'		
DESCRIPTION	Step	Action	
	1	Select Register link.	
	Step	Branching Action	
	1	If failed to Not applicable	
	2	Display appropriate message to the student	
Assumptions	Course Details are available in the database		

<u>Clerk</u>

Case I: Login Description

CASE	Login
Goal	All users logging into the system should be authenticated using a unique login-id and password (operations to be supported based on type of user)
Preconditions	If the user type is 'Admin', credential details should exist. If the user type is 'Clerk', he/she should be registered by the admin. If the user type is 'Student', he/she should be registered by the himself or clerk.
Success End Condition	If the user type is 'Admin', then redirect to the Admin page. If the user type is 'Clerk', then redirect to the Clerk page. If the user type is 'Student', then redirect to the Student page.
Failed End Condition	The end user is redirected to an Error Page, and/or is asked to reenter login credentials.
Primary, Secondary Actors	Admin, Clerk, Student.
Trigger	Login button

Case Description to View & Update profile

USE CASE	Clerk can able to view their details when they are successfully login and even they update some of the details of their profile		
Goal	To view the clerk details and even they update their some of the details		
Preconditions	Clerk must be logged in to be able to update their profile.		
Success End Condition	"Redirect to ClerkProfile page or Clerkprofileupdate page"		
Failed End Condition	"Redirect to Error Page if update is not able to done"		
Primary, Secondary	Administrator , clerk		
Actors			
Trigger	'Add update button'		
DESCRIPTION	Step	Action	
	1	Click on view profile their update profile button	
	2	Click on Update	
	Step	Branching Action	
	1	If failed to update the profile	
	2	Display appropriate message to the student	
Related	Not applicable		
Information/Use cases			

Case Description to get all course Detail

USE CASE #	The clerk should be able to get all course detail and modify it.		
Goal	To enable Clerk to get All course Detail.		
Preconditions	Clerk must be logged in to be able to fetch course detail.		
Success End Condition	"Redirect to Course Detail Page"		
Failed End Condition	"Redirect to Clerk home Page"		
Primary, Secondary	Administrator ,clerk		
Actors			
Trigger	'Get All Course Detail Link'		
DESCRIPTION	Step	Action	
	1	Select Get all courses link.	
	Step	Branching Action	
	1	If failed to clerk Home Page.	
	2	Display appropriate message to the admin	
Assumptions	Course Details are available in the database		

Case Description to enroll any Student

USE CASE #		should be able to enroll any student to a particular	
	courses if he/she not registered		
Goal	To enable	e Clerk to enroll a particular student on a course	
Preconditions	Clerk must be logged in to be able to fetch course detail.		
Success End Condition	"Redirect to Enroll student screen Page"		
Failed End Condition	"Redirect to Clerk home Page"		
Primary, Secondary	Administrator ,clerk		
Actors			
Trigger	'Get Enroll Link'		
DESCRIPTION	Step	Action	
	1	Select Enroll link.	
	Step	Branching Action	
	1	If failed to clerk Home Page.	
	2	Display appropriate message to the clerk	
Assumptions	Course Details are available in the database		

FUTURE SCOPE OF IMPROVEMENT

Since the project has been done using html, css, Java Script for the front-end development. And the back-end is developed using JDBC, Java, JSP i.e.; using Apache tomcat server.

The technologies used are in high demand in the current scenario with the scope of enhancement.

So, therefore this project can be further enhanced using more advance java technologies.

CONCLUSION

This new system is surely to benefit the organization, with various registration and modification methodology. The system has various level of access restriction. The addition or modification is directly reflected in database design to the handle multiple query demanded by various level of accessor.

APPENDICES

- > MVC: Model View Controller
- > JDBC: Java Database Connectivity
- > JSP: Java Servlet Page
- > Servlet

REFERENCES/BIBLIOGRAPHY

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- https://stackoverflow.com/
- https://w3schools.com/
- https://geekforgeeks.com/