PROJECT PRESENTATION

ON

COURSE REGISTRATION SYSTEM (CRS Application)

Using Core JAVA, Spring, MYSQL, Rest API and Angular

PRESENTED BY -

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FRAMEWORK FOR TRAINING

- *Planning for project 10th May to 20th June 2022 (6 weeks plain).*
- *Every Day Discussion about Tools / Technologies and Doubt clearance.*
- *Discussion of Project progress & transformation based on various Technologies.*
- *Started every morning session with review of progress of project along with debugging and error solving if there's any.*
- *Every session ends with a crystal clear description of the tasks that needs to be performed for project development.*

Agenda of sessions

- *Introduction to Core Java, MySQL and JDBC*
- *Introduction to GIT And GitHub*
- *Introduction Spring boot and Rest API and Node JS*
- *Introduction to HTML, CSS, JavaScript*
- *Introduction to Typescript and Angular*
- *Simultaneously worked on Project using these tools*

Project Goals

Develop a CRS Application

The Course Registration System

The Problem Statement

- *As the head of information systems for Wylie College you are tasked with developing a new student registration system. The new system will allow students to register for courses and view report cards from personal computers attached to the campus LAN. Professors will be able to access the system to sign up to teach courses as well as record grades.*
- *At the beginning of each semester students may request a course catalogue containing a list of course offerings for the semester. Information about each course, such as professor, department, and prerequisites will be included to help students make informed decisions.*
- *At the end of the semester, the student will be able to access the system to view an electronic report card. Since student grades are sensitive information.*

OUR VISION

- *To create a Course Registration System using Java development tools and technologies, REST API, Spring with Spring Boot it with MySQL and Angular where a user can have one of the three roles.*
- *Admin*
- *Professor and*
- *Student perform actions according to role.*

- *All the functionalities like viewing courses, grades, recording grades, adding, deleting Courses , and Payment for purchasing Courses needs to be implemented.*

REFERENCE LINK

https://www.javatpoint.com/array-in-java?msclkid=5fabe89bd0de11ec969e019cc87ad322

https://developer.mozilla.org/en-US/docs/Web/JavaScript

https://developer.mozilla.org/en-US/docs/Learn/HTML

https://developer.mozilla.org/en-US/docs/Learn/CSS/First_steps

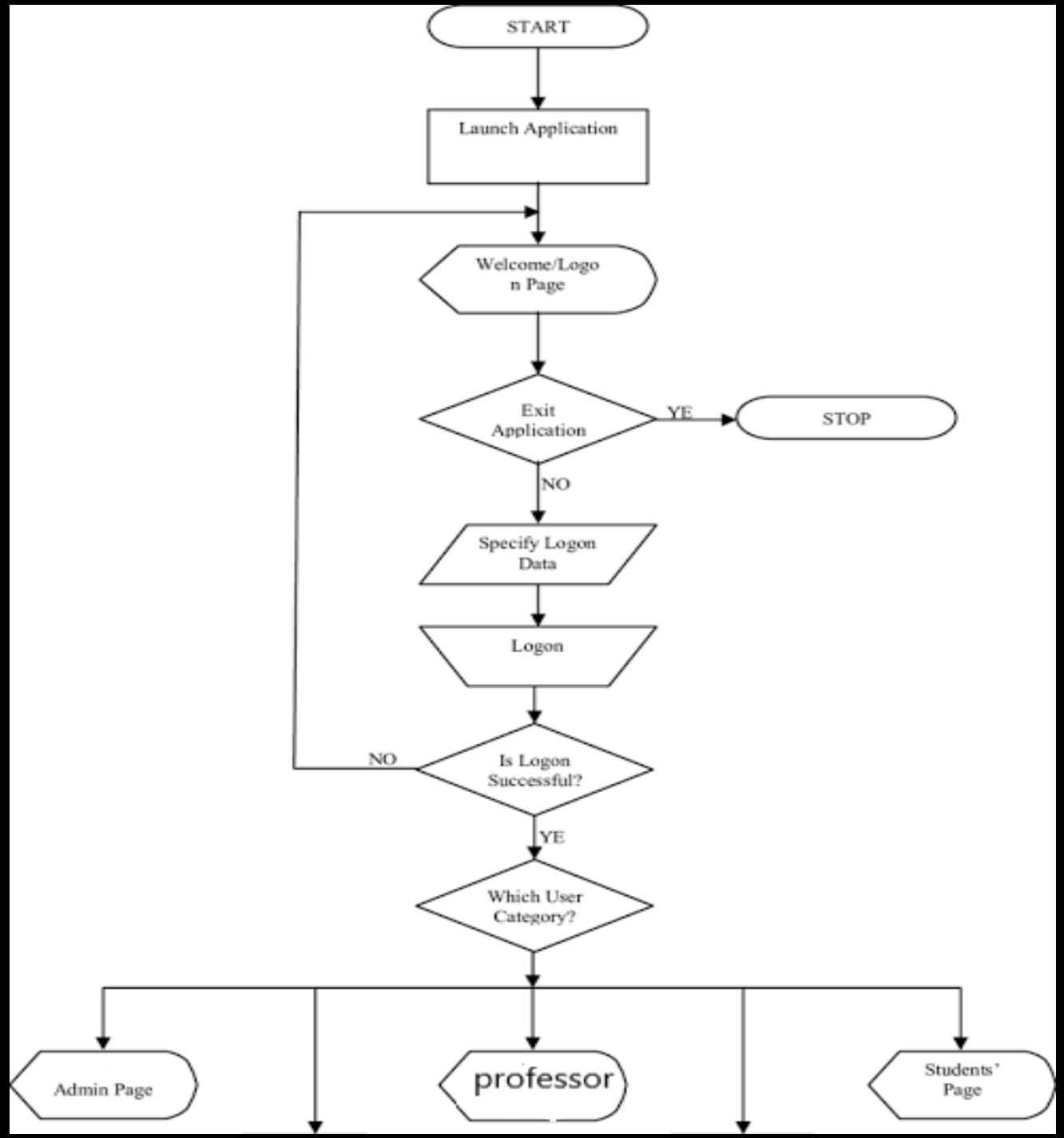
https://developer.mozilla.org/en-US/docs/Web/Javascript

https://v11.angular.io/docs

PROJECT LINK OF GROUP -3

- https://github.com/Nikhilo6/IBM-Repo-G3-FullStack.git

FLOW CHART OF CRS APPLICATION



BREIF DESCRIPTION

- **CORE JAVA** -- *By using core JAVA we have define various methods and collections then did exception handling. Advance Java covers web services and database connectivity Core Java assists us in building some general-purpose applications.*

- **REST APIs** -- *One of the advantage of RestAPIs is that they provide a great deal of flexibility. Data is not tied to resources or methods, so REST can handle multiple types of calls, return different data formats and even change structurally with the correct implementation.*

- **MYSQL JDBC** -- *We have connected to our database(MySQL) with JDBC(Java Database Connectivity) through the Java code. JDBC is one of the standard APIs for database connectivity, using it we can easily run our query, statement, and also fetch data from the database.*

- ***NODE JS*** *-- Node JS is primarily used for non-blocking, event-driven servers, due to its single-threaded nature. It's used for traditional websites and back-end API services.*

- ***JDBC TEMPLATE*** -- JDBC Template is the central class in the JDBC core package. It simplifies the use of JDBC and helps to avoid common errors. It executes core JDBC workflow, leaving application code to provide SQL and extract results.

- ***HTML, CSS AND JAVASCRIPT*** *-- HTML provides the basic structure of sites, which is enhanced and modified by other technologies like CSS and JavaScript. CSS is used to control presentation, formatting, and layout. JavaScript is used to control the behavior of different elements.*

- ***TYPESCRIPT --*** *TypeScript is a superset of typed JavaScript (optional) that help us to build and manage large-scale JavaScript projects. It can be considered JavaScript with additional features like strong static typing, compilation, and object-oriented programming.*

- ***ANGULAR*** *-- Angular help us to build interactive and dynamic single page applications (SPAs) through its compelling features that include templating, two-way binding, modularization and RESTful API handling.*

  - *NOTE -- TypeScript is a primary language for Angular application development. It is a superset of JavaScript with design-time support for type safety and tooling. Browsers can't execute TypeScript directly. Typescript must be "transpiled" into JavaScript using the tsc compiler.*

THERE ARE VARIOUS MODULES IMPLEMENTED

ADMIN
PROFESSOR
STUDENT AND
USER

NOTE – IN THE BACKEND WE HAVE IMPLEMENTED ALL THESE MODULES AND GOT THE OUTPUT FROM THE CONSOLE, BROWSER AND POSTMAN.

IMPLEMENTED ADMIN PROFILE USING ANGULAR

DESCRIPTION ABOUT ADMIN PAGE

METHODS IMPLEMENTED

- ADD COURSE
- DELETE COURSE
- STUDENT APPROVAL
- ADD PROFESSOR AND
- ASSIGN COURSE TO PROFESSOR

PRACTICAL VIEW OF CRS APPLICATION