

PRESENTATION TOPIC : STUDENT PERFORMANCE MONITORING SYSTEM

GROUP-17 : ERROR 404

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SPMS 4.0

Student Performance Monitoring System

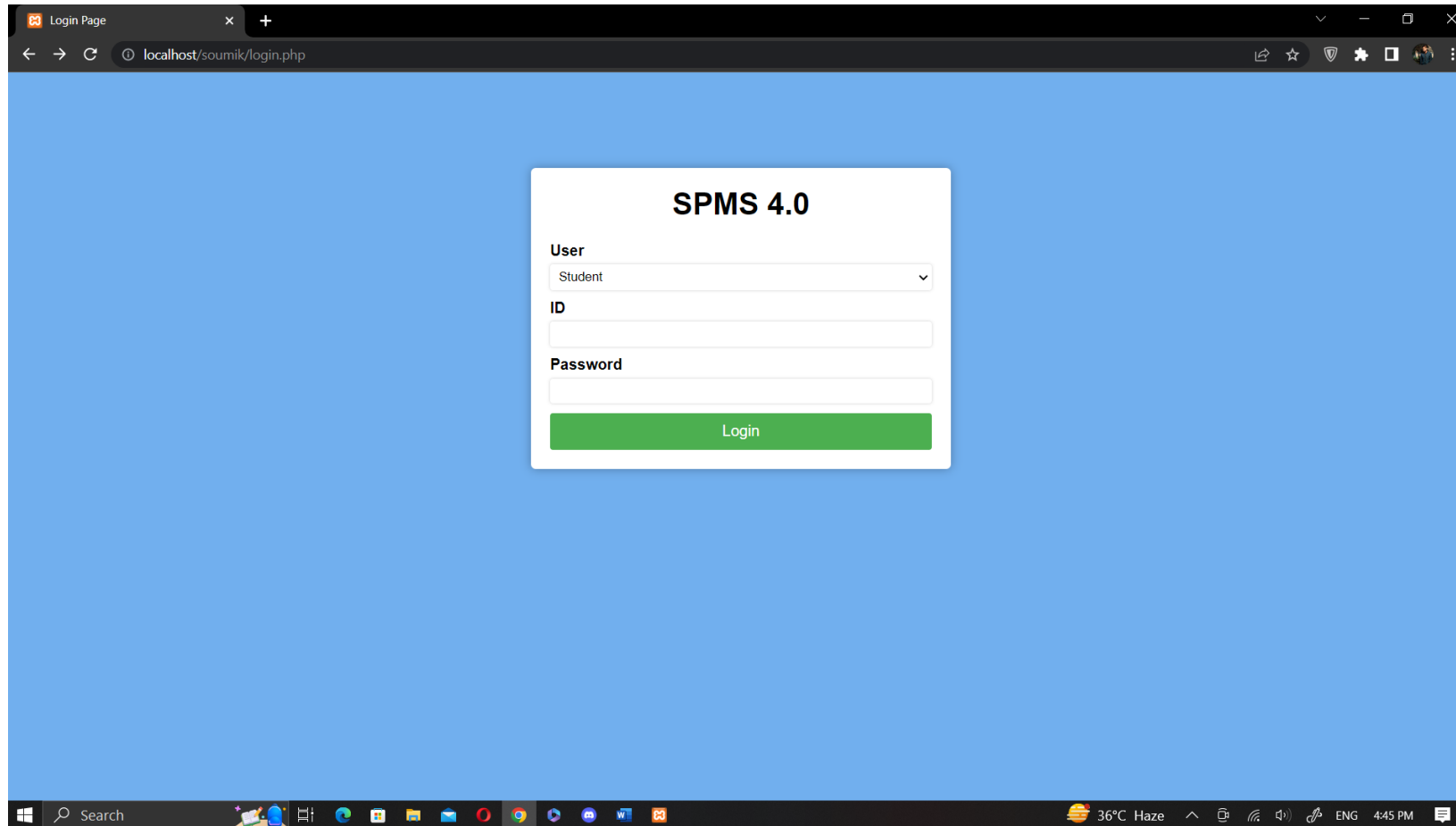
INTRODUCTION:

In order to manage and track students' academic progress, educational institutions must use a student performance monitoring system. The system makes use of a database management system (DBMS) to gather, store, and analyze many sorts of data about student performance, including grades, attendance, and disciplinary records. With the use of this data, teachers are better equipped to support specific kids, spot weaknesses in their lesson plans and instructional strategies, and make sure that all students are meeting the necessary academic standards. Implementing a system to track student achievement can raise the standard of instruction offered by a school and eventually assist students in achieving their academic objectives. Organizing and managing the necessary data in this situation requires the use of DBMS.



LET'S DIVE INTO THE WEB-
BASED STUDENT
PERFORMANCE MONITORING
SYSTEM

LOGIN PAGE OF STUDENT PERFORMANCE MONITORING SYSTEM:



The image shows a web browser window displaying the login page of the Student Performance Monitoring System (SPMS 4.0). The browser's address bar shows the URL `localhost/soumik/login.php`. The page has a solid blue background. In the center, there is a white rectangular login form. The form is titled "SPMS 4.0" in bold black text. Below the title, there are three input fields: a dropdown menu for "User" with "Student" selected, a text box for "ID", and a text box for "Password". At the bottom of the form is a green button labeled "Login". The Windows taskbar is visible at the bottom of the screen, showing the search bar, task view button, and several application icons. The system tray on the right shows the date and time as 4:45 PM on ENG.

Login Page

localhost/soumik/login.php

SPMS 4.0

User
Student

ID

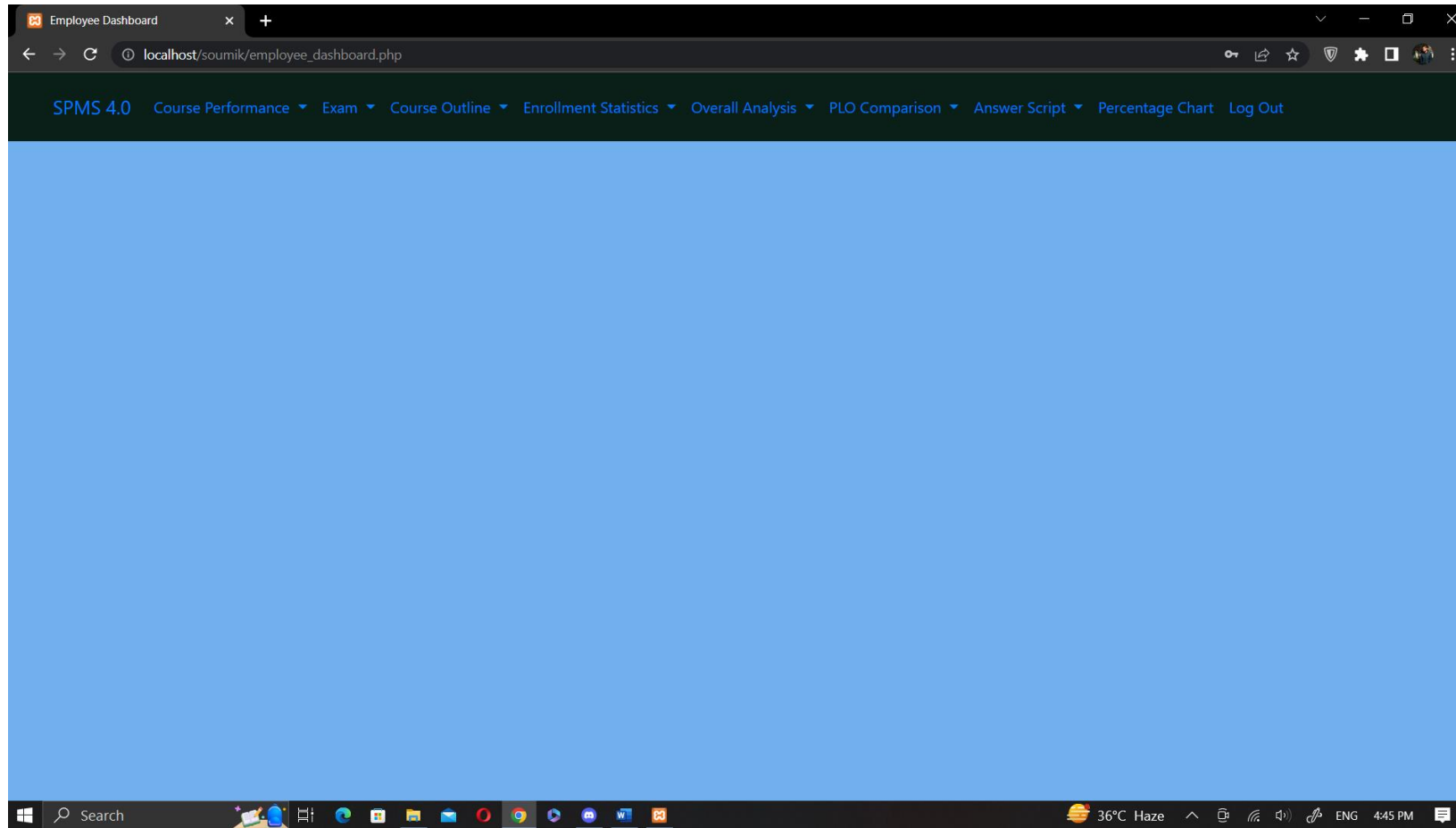
Password

Login

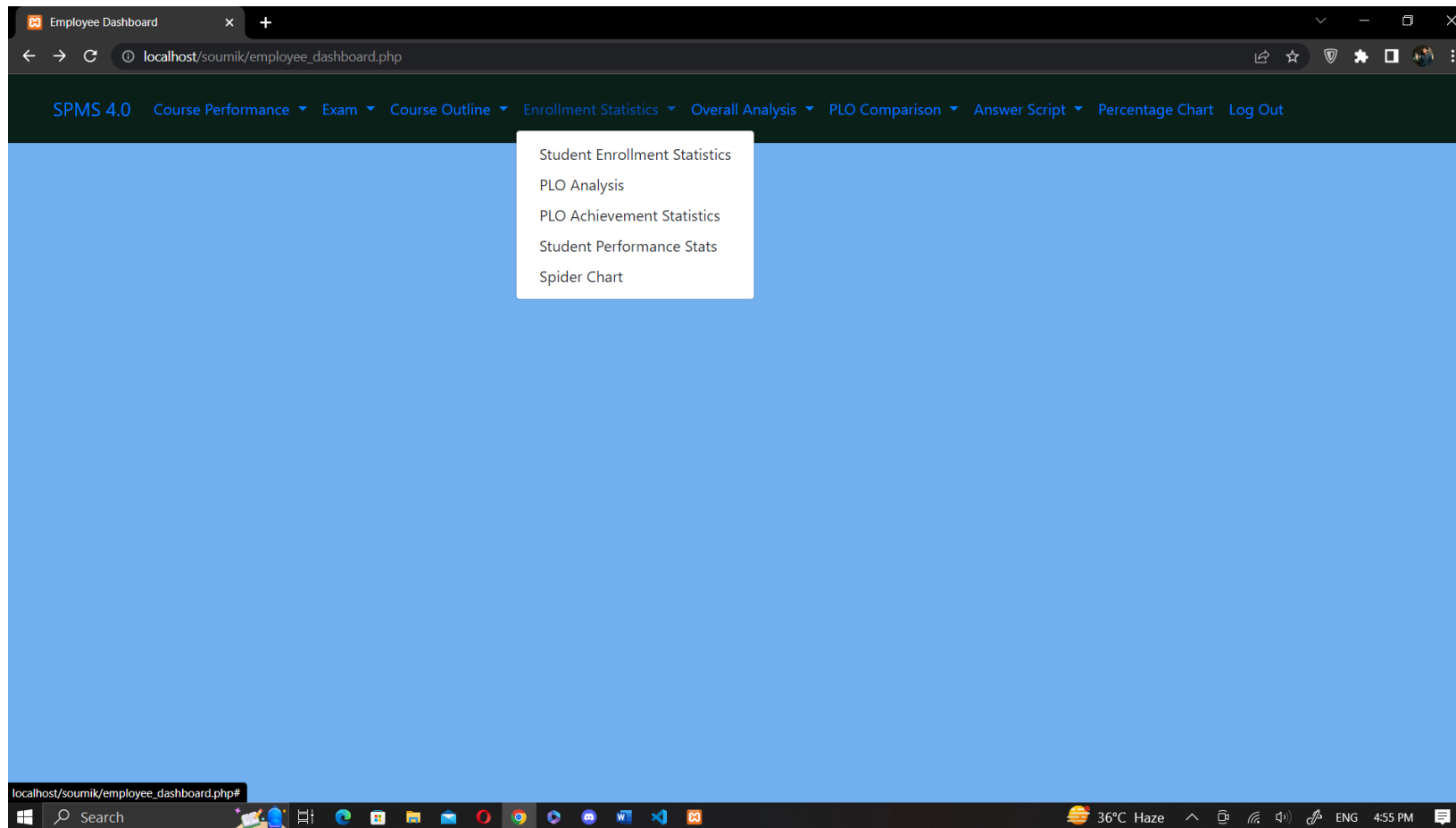
Search

36°C Haze 4:45 PM

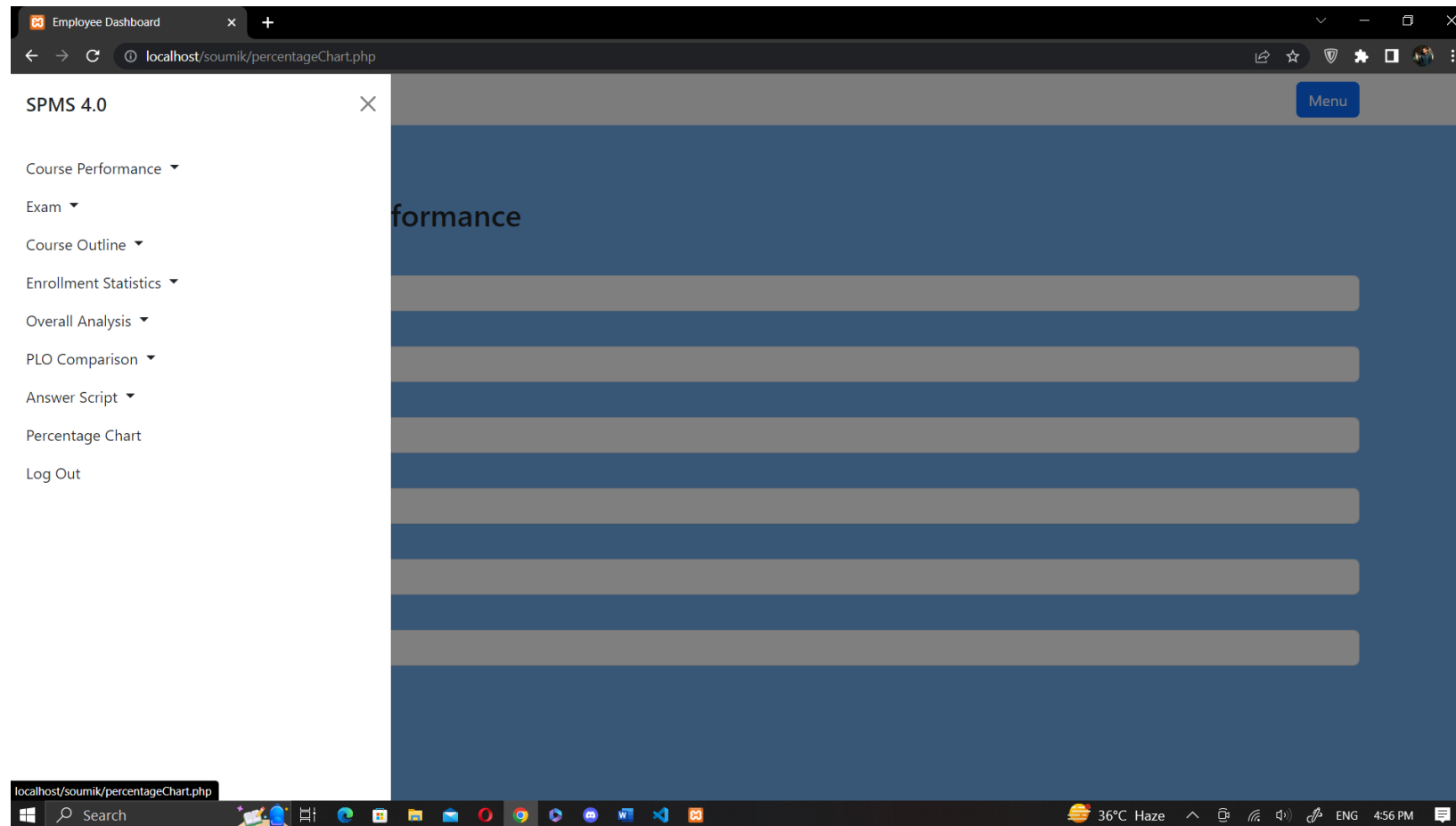
DASHBOARD OF STUDENT PERFORMANCE MONITORING SYSTEM:



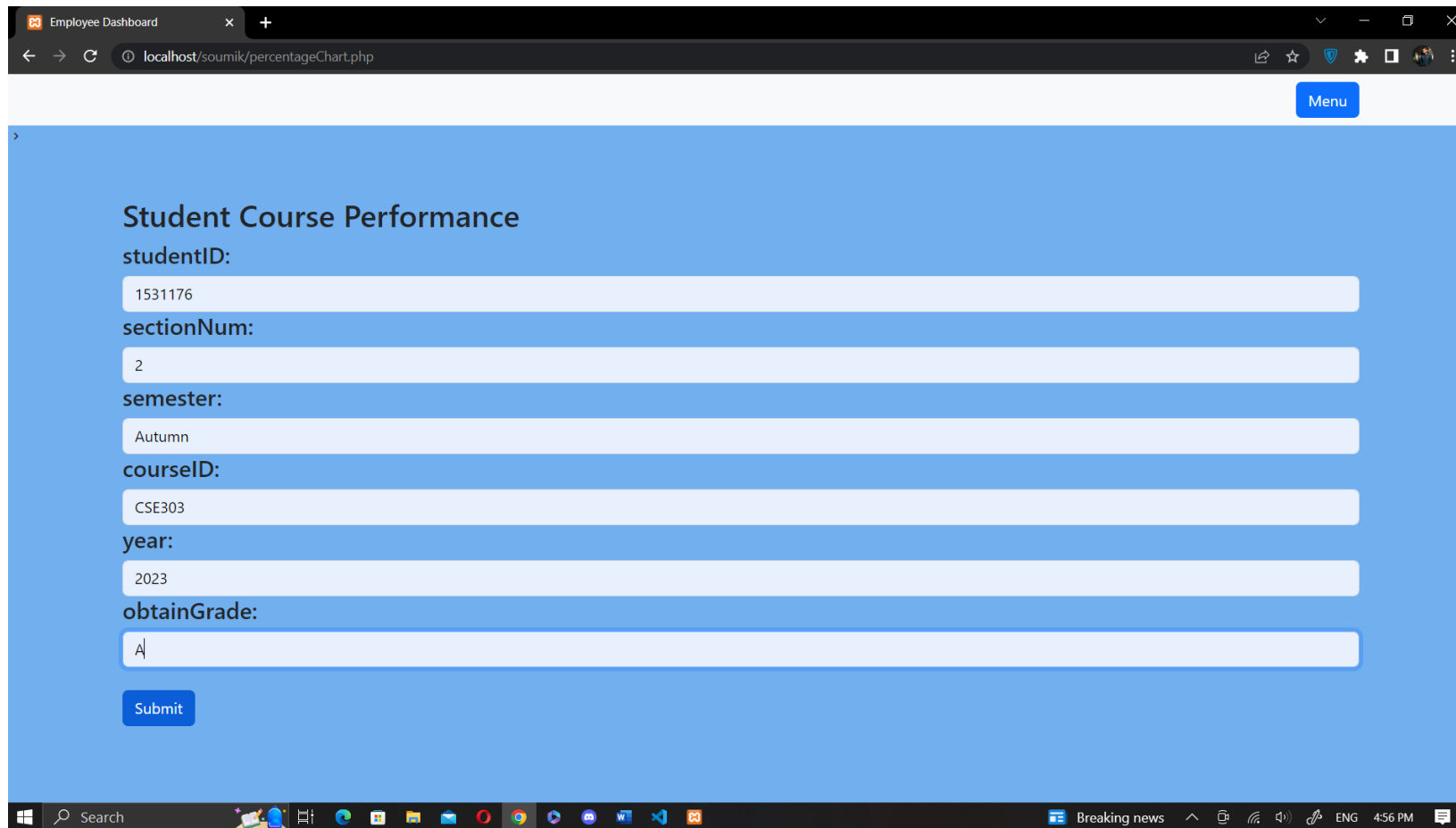
DASHBOARD OF STUDENT PERFORMANCE MONITORING SYSTEM:



DASHBOARD OF STUDENT PERFORMANCE MONITORING SYSTEM:



COURSE PER. PAGE OF STUDENT PERFORMANCE MONITORING SYSTEM:



Employee Dashboard

Menu

Student Course Performance

studentID:

sectionNum:

semester:

courseID:

year:

obtainGrade:

Submit

COURSE PER. RESULT OF STUDENT PERFORMANCE MONITORING SYSTEM:

Employee Dashboard

localhost/soumik/percentageForm.php

New section added successfully.New registration added successfully.New student_course_performance added successfully.New question added successfully.New answer added successfully.

[Dashboard](#)

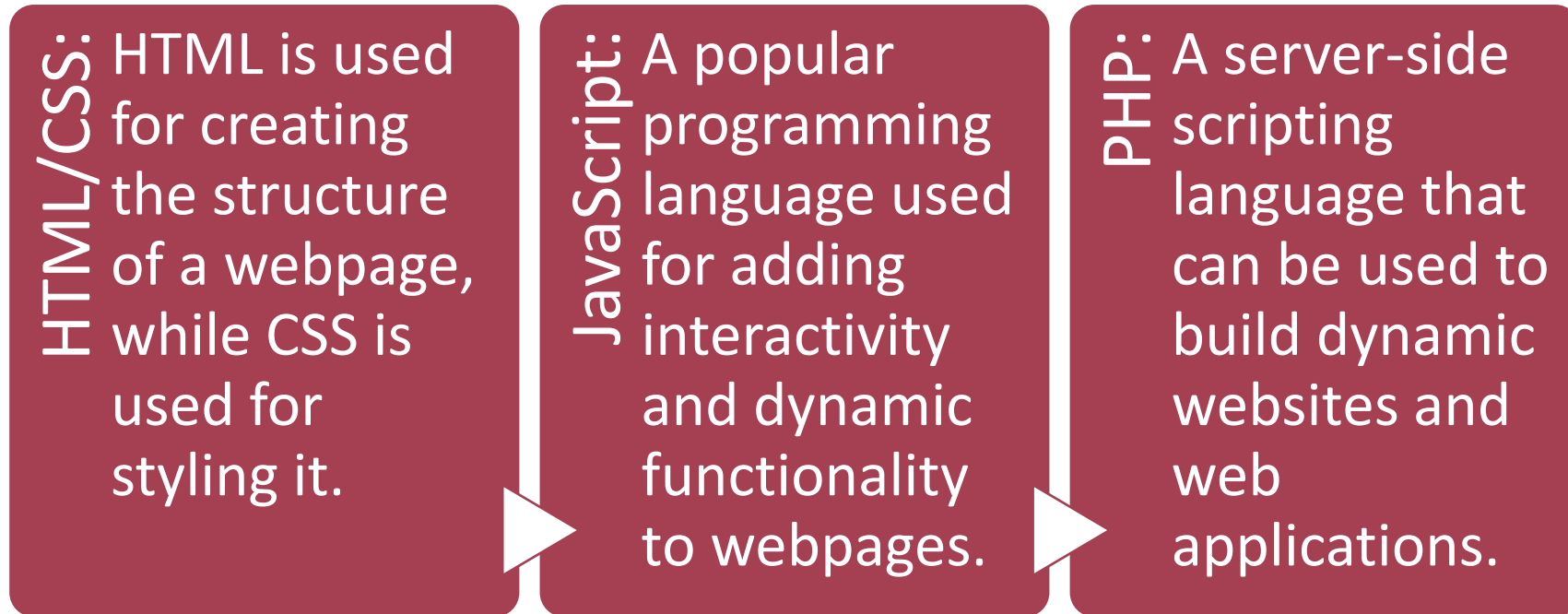
Student Course Performance

Student ID	Section Number	Semester	Course ID	Year	Obtain Grade	Co	Co1	Co2	Co3	Co4
2030479	2	Autumn	CSE303	2023	A	90%	90%	90%	90%	90%
2030479	2	Autumn	CSE303	2023	A	90%	90%	90%	90%	90%
2030479	5	Spring	CSE303	2023	B+	80%	80%	80%	80%	80%
2030479	9	Spring	CSE303	2023	C	60%	60%	60%	60%	60%
2030479	9	Spring	CSE303	2023	D+	50%	50%	50%	50%	50%
2030479	9	Spring	CSE303	2023	B-	70%	70%	70%	70%	70%

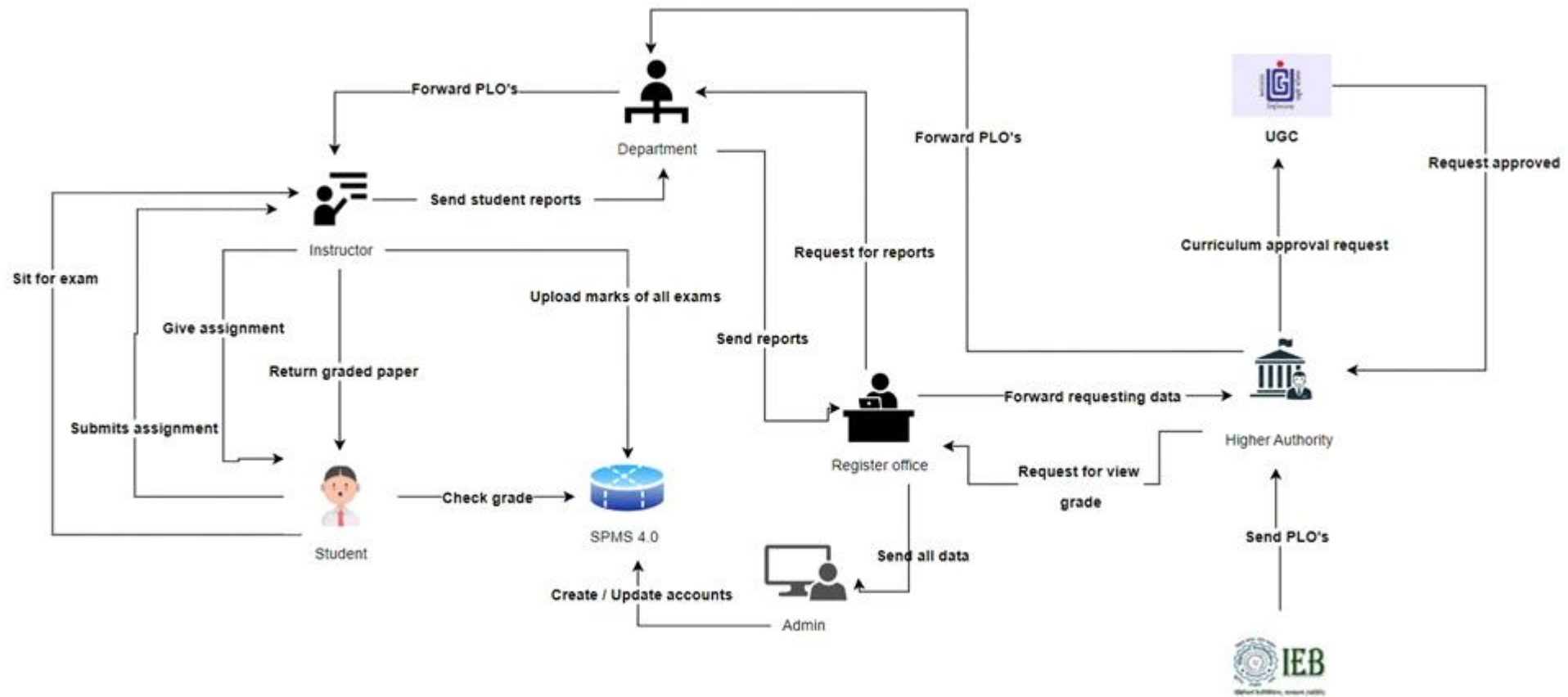
Earnings upcoming

ENG 4:58 PM

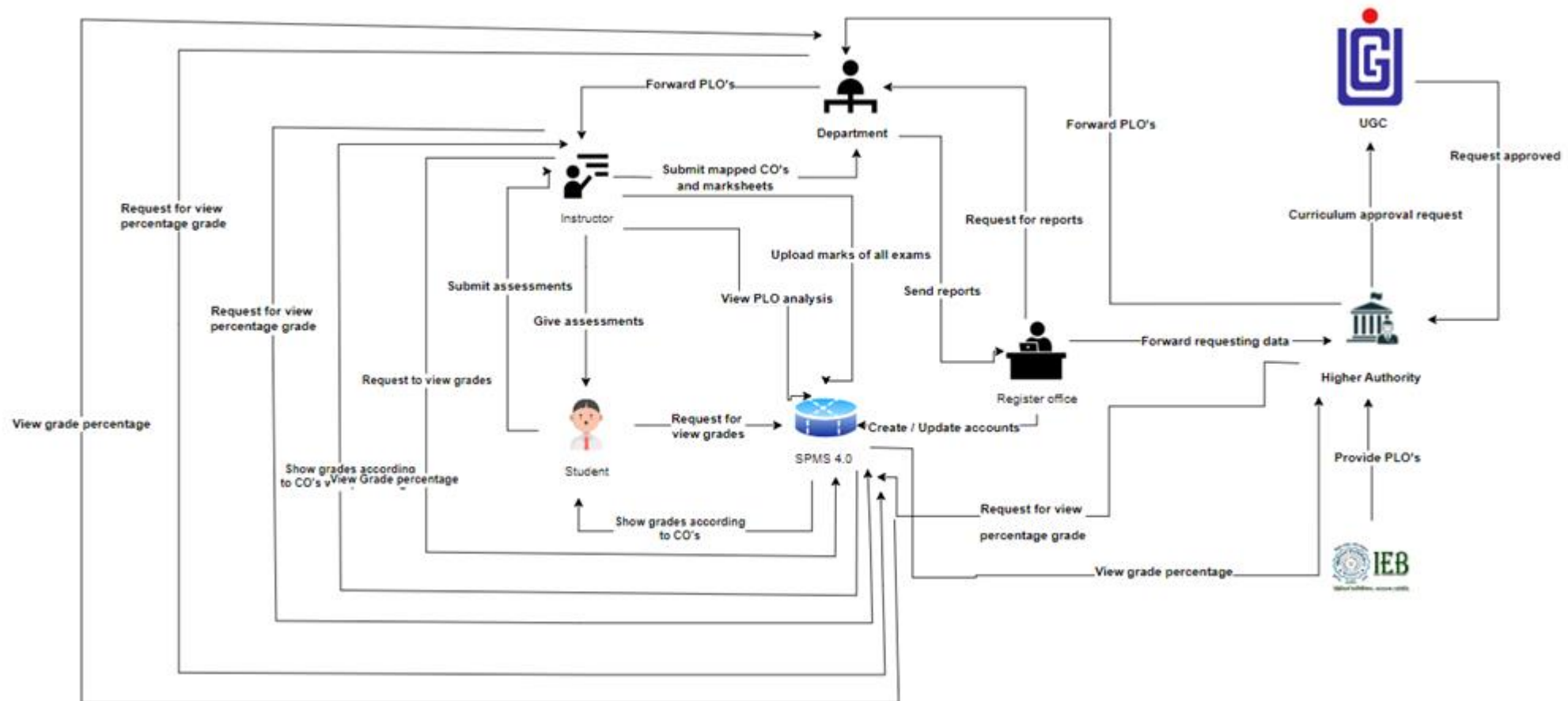
PROGRAM WE USED TO BUILD THE SYSTEM:



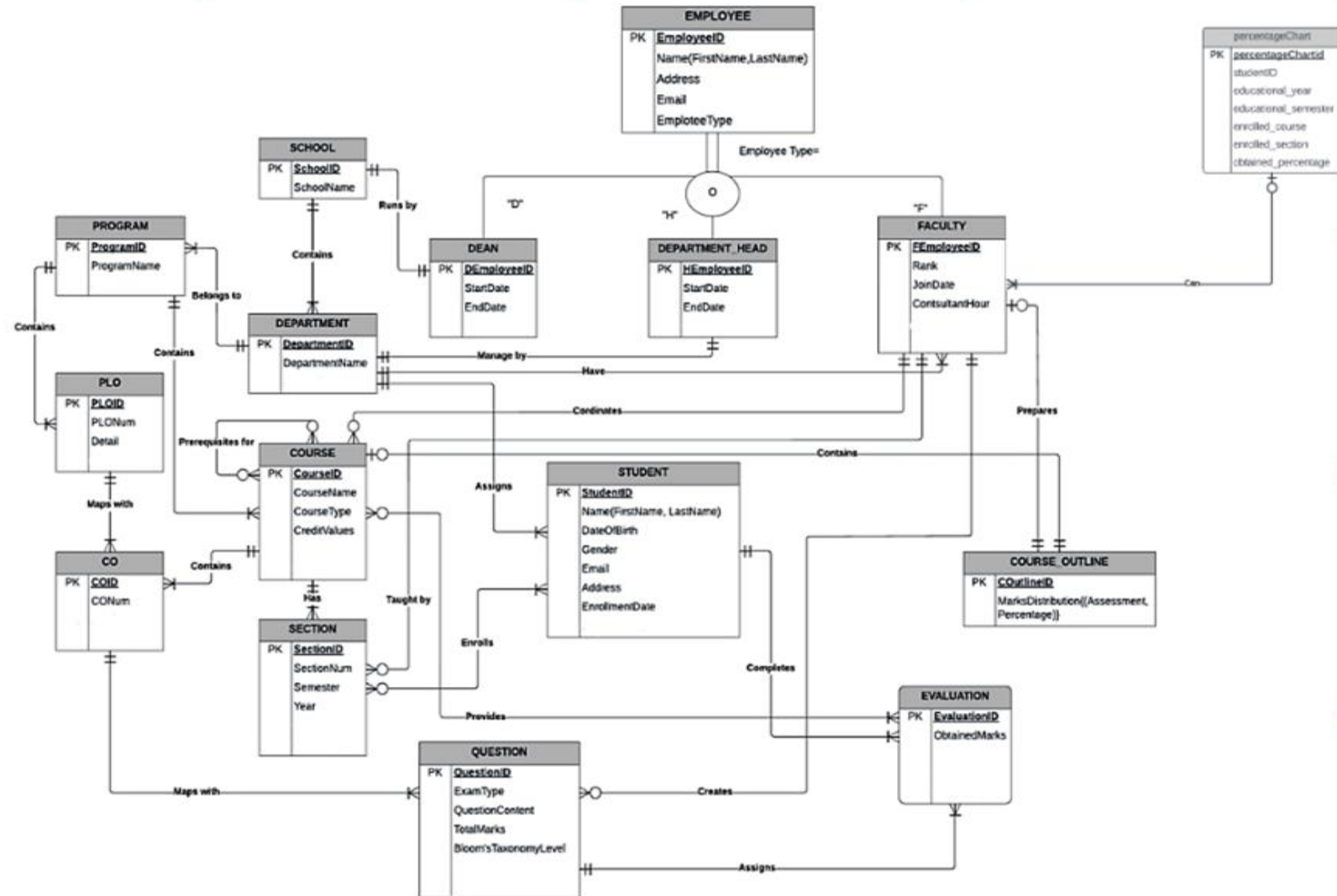
RICH-PICTURE(AS-IS) FOR THE SYSTEM:



RICH-PICTURE(TO-BE) FOR THE SYSTEM:



ERD FOR THE SYSTEM:



DATA DICTIONARY FOR THE SYSTEM:

E. DATA DICTIONARY:

School T:

Name	Data Type	Size	Remarks
<u>SchoolID</u>	VARCHAR	5	This is the primary key of School. E.g: "SETS" or "SLASS"
<u>SchoolName</u>	VARCHAR	45	This is the name of the School. E.g: "School of Engineering, Technology & Science".

Program T:

Name	Data Type	Size	Remarks
<u>ProgramID</u>	INTEGER		This is the primary key for a program. E.g: "1"
<u>ProgramName</u>	VARCHAR	30	This is the name of the program. E.g: "Bachelor of Science"
<u>DepartmentID</u>	VARCHAR	4	This is the foreign key from the Page 48 Department table. E.g: "CSE" or "BBA"

Student T

Name	Data Type	Size	Remarks
<u>StudentID</u>	INTEGER		This is the primary key for the Student table. E.g: "2030479".
<u>FirstName</u>	VARCHAR	20	This is the first name of the student. E.g: "Soumik".
<u>LastName</u>	VARCHAR	20	This is the last name of the student. E.g: "Alam".
<u>DateOfBirth</u>	DATE DD-MM-YYYY		This is the birth date of the student. E.g: "31-

Department T

Name	Data Type	Size	Remarks
<u>DepartmentID</u>	VARCHAR	5	This is the primary key for the Department table. E.g: "CSE"
<u>DepartmentName</u>	VARCHAR	45	This is the name of the department. E.g: "Computer Science and Engineering".
<u>SchoolID</u>	VARCHAR	5	This is a foreign key from the School table. E.g: "SETS" or "SLASS".

DATA DICTIONARY FOR THE SYSTEM:

			12-2001".
Gender	VARCHAR	6	This is the gender of the student. E.g: "Male".
Email	VARCHAR	30	This is the email of the student. E.g: "2030479@iub.edu.bd"
Phone	NUMERIC	11	This is the phone of the student. E.g: "01XXXXXXXXXX".
Address	VARCHAR	50	This is the address of the student. E.g: "House 238,Road 8,Tejgaon,Dhaka
<u>DepartmentID</u>	VARCHAR	5	This is the foreign key from the Department table. E.g: "CSE"
<u>ProgramID</u>	INTEGER		This is the foreign key from the Program table. E.g: "1"
<u>EnrollmentDate</u>	DATE (dd-mm-yyyy)		This is the enrollment date of the student. Page 50 E.g.: "1-1-2020"

CO_T

Name	Data Type	Size	Remarks
COID	VARCHAR	5	This is the primary key for the CO table. E.g: "CO1".
<u>CONum</u>	INTEGER		This is the CO number. E.g: 1,2 etc.
<u>CourseID</u>	VARCHAR	8	This is the foreign key from the Course table. E.g: "CSE303"
PLOID	VARCHAR	5	This is the foreign key from the PLO table. E.g: "PLO1"

PLOID	VARCHAR	5	This is the primary key for Program Learning Outcome. E.g: "PLO1"
<u>PLONum</u>	INTEGER		This is the PLO number. E.g: "1"
Details	VARCHAR	50	This is the details for Program Learning Page 51 Outcome. E.g: "An ability to select and apply the knowledge, technique, skills and modern tools of the computer science and engineering discipline"
<u>ProgramID</u>	INTEGER		This is a foreign key from the Program table. E.g: "1"

Employee_T

Name	Date Type	Size	Remarks
<u>EmployeeID</u>	INTEGER		This is the primary key for Employee table. E.g: "1001"
<u>FirstName</u>	VARCHAR	20	This is the first name of the faculty. E.g: "Sadita"
<u>LastName</u>	VARCHAR	20	This is the last name of the faculty. E.g: "Ahmed"
Email	VARCHAR	30	This is the email address of the Student. E.g: "1675231@iub.edu.bd"
Address	VARCHAR	30	This is the address of the Faculty. E.g: "House 14, Road 21, Section 2, Mirpur,Dhaka, Bangladesh"
<u>EmployeeType</u>	CHAR	1	This is the type of the

DATA DICTIONARY FOR THE SYSTEM:

Course_T

Name	Data Type	Size	Remarks
<u>CourseID</u>	VARCHAR	8	This is the Primary Key for the Course. E.g: "CSE203"
<u>CourseName</u>	VARCHAR	40	This is the name of the Course. E.g: "Database Management System"
<u>CreditValues</u>	INTEGER		This is the number of credits for the Course. E.g: "3"
<u>CourseType</u>	VARCHAR	10	This is the type of the Course. E.g: "Core"
<u>ProgramID</u>	INTEGER		This is the foreign key from the program table. E.g: "1"
<u>COutlinID</u>	INTEGER		This is the Foreign Key from Course table.

Section_T

Name	Data Type	Size	Remarks
<u>SectionID</u>	INTEGER		This is the Primary Key for Section. E.g: "1"
<u>SectionNum</u>	INTEGER		This is the section number. E.g: "1"
<u>CourseID</u>	VARCHAR	8	This is the foreign key from the Course table. E.g: "CSE101"
<u>FEmployeeID</u>	NUMERIC	4	This is the foreign key from the Faculty table. E.g: "1001"
<u>Semester</u>	VARCHAR	6	This is the semester of the section. E.g: "Spring"

Question_T

Name	Data Type	Size	Remarks
<u>QuestionID</u>	INTEGER		This is the Primary Key for Question.
<u>ExamType</u>	VARCHAR	10	This is the name of the question. E.g: "Midterm"
<u>TotalMarks</u>	NUMBER		This is the total marks of the question. E.g: "30"
<u>Cate gory</u>	VARCHAR	10	This is the category of the question. E.g: "Creating"
<u>Level</u>	VARCHAR	10	This is the difficulty of the question. E.g: "Medium"
<u>COID</u>	INTEGER		This is the Foreign Key from the Course Outcome table.
<u>QuestionContent</u>	INTEGER		This is the question number for question. E.g: "1,2,3...."
<u>SectionID</u>	INTEGER		This is the Foreign Key from Section table.
<u>FEmployeeID</u>			This is the Foreign Key from Faculty table

Evaluation_T

Name	Data Type	Size	Remarks
<u>EvaluationID</u>	INTEGER		This is the Primary Key for Enrollment.
<u>ObtainedMarks</u>	DECIMAL	5,2	This is the obtained marks of the student. E.g: "24.5"
<u>QuestionID</u>	INTEGER		This is the foreign key Page 55 from the Question table.
<u>CourseID</u>	VARCHAR	8	This is the foreign

DATA DICTIONARY FOR THE SYSTEM:

			key from the Course table. E.g: "CSE101"
<u>StudentID</u>	INTEGER		This is the foreign key from the Student table.

Dean_T

Name	Data Type	Size	Remarks
<u>DEmployeeID</u>	INTEGER		This is the foreign key from the Employee table. E.g: "4250"
<u>SchoolID</u>	VARCHAR	5	This is the SchoolID of the school DEAN manages. E.g: "SETS"
<u>StartDate</u>	DATE (dd-mm-yyyy)		This is the starting date. E.g: "01-03-2020"
<u>EndDate</u>	DATE (dd-mm-yyyy)		This is the date DEAN retire from his post. E.g: "01-03-2024"

DepartmentHead_T

Name	Data Type	Size	Remarks
<u>HEmployeeID</u>	INTEGER		This is the foreign key Page 56 from the Employee table. E.g: "4250"
<u>DepartmentID</u>	VARCHAR	5	This is the DepartmentID of the department HEAD manages. E.g: "CSE"
<u>StartDate</u>	DATE (dd-mm-yyyy)		This is the starting date. E.g: "01-03-2020"
<u>EndDate</u>	DATE (dd-mm-yyyy)		This is the date HEAD retire from his post. E.g: "01-03-2024"

PreReqCourse_T

Name	Data Type	Size	Remarks
<u>CourseID</u>	VARCHAR	8	This is the foreign key from the Course table. E.g: "CSE303"
<u>PreReqCourseID</u>	VARCHAR	8	This is the foreign key from the Course table. E.g: CSE203

CourseOutline_T

Name	Data Type	Size	Remarks
<u>COOutlineID</u>	INTEGER		This is the primary key from the Course Outline table. E.g: "1233"
<u>MarkDistribution</u>	VARCHAR	15	This is the percentage range

SPMS4.0

Group – 17

			for assessment. E.g: "Project- 50%, Assessment-50%".
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NORMALIZATION FOR THE SYSTEM:

T1

<u>G1</u>	S1	S2	D1	D2	P1	P2	L2	L3	C2	G3	G4	A1
A2	A3	A4	F1	<u>N1</u>	N2	H1	H2	H3	H4	H5	H6	H7
H8	Q1	Q2	Q3	Q4	Q5	Q6	Q7	F2	F3	F4	O1	O2
O3	<u>J1</u>	J2	J3	<u>K1</u>	K2	K3	Z1	Z2	Z3	Z4	Z5	Z6

T2

<u>C1</u>	C2	L1	<u>E1</u>	E2	E3	E4	E5
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1NF: T11

<u>G1</u>	G2	G3	G4	A1	A2	A3	A4	F1	F2	F3	F4
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T12

<u>N1</u>	N2	H1	H2	H3	H4	H5	H6	H7	H8	Q1	Q2	Q3	Q4
Q5	Q6	Q7	O1	O2	O3	P1	P2	L1	L2	L3	Z1	Z2	Z3
Z4	Z5	Z6											

T13

<u>K1</u>	K2	K3	D1	D2
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T14

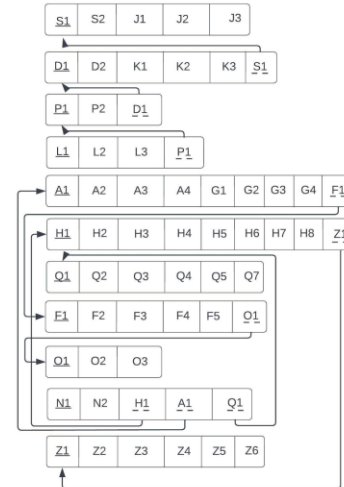
<u>J1</u>	J2	J3	S1	S2
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T2 already exists

2NF:

Partial dependency has been removed

3NF:



T2 already exists

BCNF:

Already in BCNF Form as there is no determinant that is not a unique identifier



THANK YOU