STUDENT PERFORMANCE MONITORING SYSTEM

CSE303: DATABASE MANAGEMENT SYSTEM

GROUP 3

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CONTENT

Chapter 1: Introduction

BACKGROUND OF THE PROJECT

Our goal is to deliver a project that will design and build to help universities to promote a productive way for student performance monitoring system. We intend to provide a wholesome experience for students, faculties, head of departments and all the higher authorities. This application is a one-stop place for students to track their progress, for faculties to track course curriculum and all the higher authorities to monitor quality of education provided. We have added features to track students CGPA trend and sleeker way of workflow. This application gives the power to generate new student accounts much faster

OBJECTIVE OF THE PROJECT

This project will be helpful for all user such as student vc dean head of department UGC spm admin and so on. This project will help student in future life and we can also learn how to implement a technology into our education

SCOPE OF THE PROJECT

- Track school-wise, department-wise and program-wise student enrolment comparison

- School-wise, department-wise and program-wise student performance trends

- Course-wise student performance trends

- Instructor-wise student performance trends

- Track PLO achievements

- Problem analysis

- Data-collection and data sharing

- Monitor project

- Team working
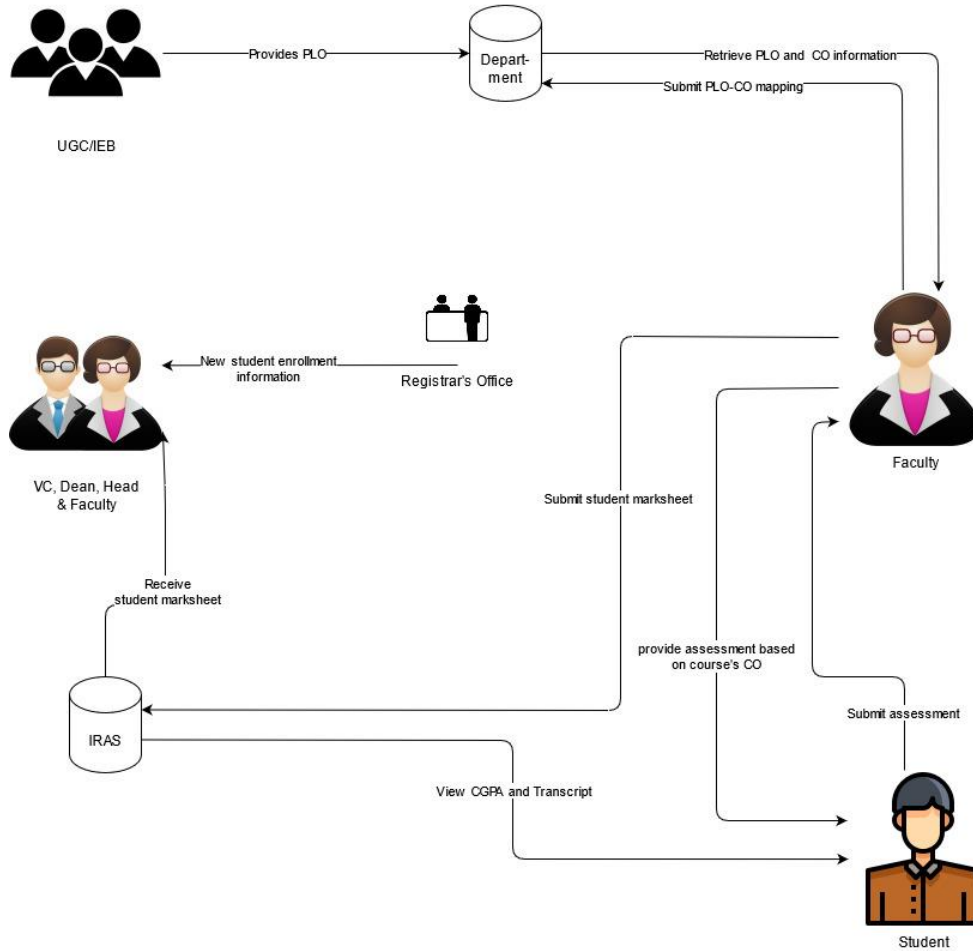
Chapter 2: Requirement Analysis

RICH PICTURE (AS-IS)

Figure: Rich Picture As-Is

SIX ELEMENTS (AS-IS)

Process	System Roles					
	Human	Non-Comp Hardware	Computing Hardware	Software	Database	Network & Communication
RECEIVE NEW STUDENT ENROLLMENT INFORMATION	**Registrar office:** 1)log in to computer 2) Receive request for enrolment information from VC, head of department, faculty, and dean. 3) Retrieve enrollment information from registrar office's DB 4) Provide requested enrolment information to faculty, dean, head of department, VC as soft copy or printed copy. **Faculty, dean, head of department, VC:** 1) log in to computer 2) Sends request for student enrollment information	**Paper and Stationary:** Send student enrollment information as printed copy to VC, head of department, faculty, and dean. **Folders** Store student enrolment information as printed copies.	**Computer:** 1) Used by registrar office employees to send and/or receive new enrolment information to VC, head of department, faculty, and dean. 2) Used by VC, head of department, faculty, and dean to request and receive new student enrollment information. **Registrar's Office DB server :** Used registrar's office store student enrollment information **Printer:** To print new student enrollment information.	**Operating System:** Used in Registrar's office, VC, head of department, faculty and dean's computer. **Email client:** Used by Registrar's office, VC, head of department, faculty and dean to send and receive new student information. **Office suite:** Used by VC, head of department, faculty and dean to generate enrollment trend.	**RDBMS:** Used by Registrar's office database to store new student enrollment information. **Excel Files:** Used to store new student enrollment information in local computer.	**Internet:** Used to send or receive student enrollment information between Registrar's office and VC, head of department, faculty, dean **Telephone:** Used for verbal communication between Registrar's office and VC, head of department, faculty and dean.

		Paper and Stationary:	Computer:	Operating system:	RDBMS:	Internet:
	to registrar's office. 3) Receive enrollment student information from registrar's office.		**Networking Device:** Used for internet access, internal database access or communicational use.			
Receive student mark-sheet	**VC, head of department, faculty, dean :** 1) Log in to their corresponding IRAS account. 2) Search for course wise, semester wise department wise student mark-sheet. 3) Download the mark-sheet.	**Paper and Stationary:** Used to print the downloaded mark-sheet. **Folder :** Store the printed mark-sheet.	**Computer:** Used by VC, head of department, faculty, and dean to retrieve and download student mark-sheet from their IRAS account. **printer:** Used by VC, head of department, faculty, and dean to print downloaded mark-sheet. **IRAS DB server:** Used by IRAS to store student mark-sheet. **Networking device:** Used for internet access, internal database	**Operating system:** Used in VC, head of department, faculty and dean's computer. **IRAS:** To retrieve mark-sheet. **Office suite:** Used by VC, head of department, faculty and dean to generate student performance trend.	**RDBMS:** Used by IRAS to store student mark sheet. **Excel Files:** Used to store student mark-sheet local computer.	**Internet:** Used by VC, head of department, faculty, dean to retrieve student mark sheet from their corresponding IRAS account.

|						
				access		
View CGPA and Transcript	**Student:** 1) Students have to login to their IRAS account at first 2) They can view their CGPA from their IRAS dashboard 3)In order to view their transcript, they have enter year and semester from their dashboard and click on "Transcript" button to download the transcript of that particular semester	**Paper:** May be used by students to print their transcript **Folder:** To store the printed transcript	**Computer:** Used by students to visit the IRAS website and view CGPA and transcript **Printer:** Used by students to print the transcripts **IRAS DB server:** Used by IRAS to store student CGPA and transcripts **Networking device:** Used for internet access, internal database access	**Operating system:** Used in students' computer. **IRAS:** To retrieve student CGPA and mark-sheet. **PDF Viewer:** Used to students view the downloaded transcripts	**RDBMS:** Used by IRAS to store student CGPA and transcripts	**Internet:** Used by students to login to their IRAS account and access their CGPA and transcripts.
Record student assessments and submit mark-sheet	**Faculty:** 1)Take classes, record student attendance and student class participation 2) Request department for PLO and CO	**Pen and paper:** 1) Usedby department to send PLO and CO as printed form to faculty. 2) Used by teacher to make	**Computer:** 1) Used by faculty to create assignment and exam paper. 2) Used by department to store PLO and CO	**Operating system:** Used in faculty, department and student's computer. **Office suite:** Used by	**RDBMS:** Used by faculty to store student mark sheets in IRAS DB.	**Internet:** 1) Used by faculty and department to receive and send PLO and CO information. 2) Used by student, faculty and department

	information of a particular course 3) Receive and download PLO and CO from department 4) Set assignment and exam paper based the CO. 5) Organize schedule and room for exam and notify students. 6) Collect exam paper and assignment from students. 7) Checks the assignment and exam paper and records marks on mark-sheet 8) Log in to IRAS and Submits mark-sheet to IRAS. **Department:** 1) Receive request for PLO and CO for a particular course from faculties	exam paper and assignment. 3) Used by student to take exam and assignment. **Folder:** Used by department student and faculty to store paper.	information. 3) Used by student to view exam paper or assignment. **IRAS DB server:** Used by faculty to store student mark sheets. **Printer:** 1) Used by department to print PLO and CO information. 2) used by faculty to print assignment and exam paper **Networking device:** Used for internet access, internal database access	faculty to create assignment and exam paper.		to communicate. **Telephone:** Used for verbal communication between faculty and student.

|						
	2) Send PLO and CO to faculties **Student:** 1) Attend classes and participates in class discussion 2) Receives assignment and exam notifications from faculties 3) Attempts assignment problems and submits them to faculties 4) Takes exam on designated schedule and classroom and submits exam paper to faculties					
PLO CO mapping	**Faculty:** 1) Request department for PLO and CO information. 2)receive PLO and CO information from department 3) Download the PLO co information. 4) Discuss with	**Pen and paper:** Used by faculty to view PLO and CO information as printed form.	**Computer:** Used by faculty and department to receive and send PLO and CO information. **Printer:** Used by faculty to print the PLO and co information.	**Operating system:** Used in department and faculty's computer. **PDF viewer:** To see the PLO and co information.		**Internet:** Used by faculty and department to receive and send PLO and CO information and communicate with each other. **Telephone:** Used for verbal communication between

|					
	otherfaculty member to create PLO and CO map.					faculty and department.
	5)sends PLO CO map to department					
	Department:					
	1) Receive request from faculty for PLO and CO information.					
	2) Send PLO and CO information to faculty.					
	3) Receive PLO and CO mapping from faculty.					
	4) Store PLO co map.					
	5) Download the PLO co map.					

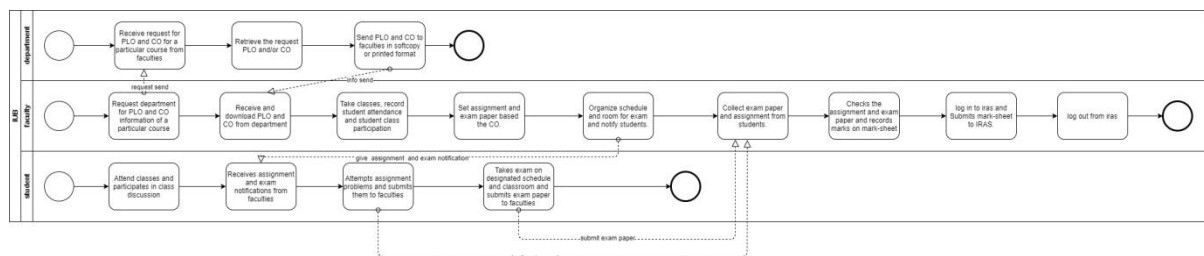# BUSINESS PROCESS DIAGRAM (AS-IS)
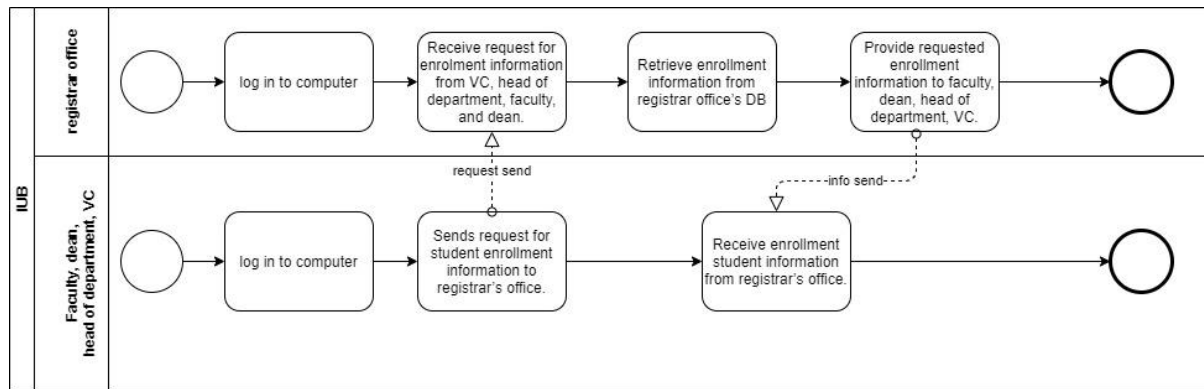
BPMN (AS-IS) FIGURE 1: View new enrollment data
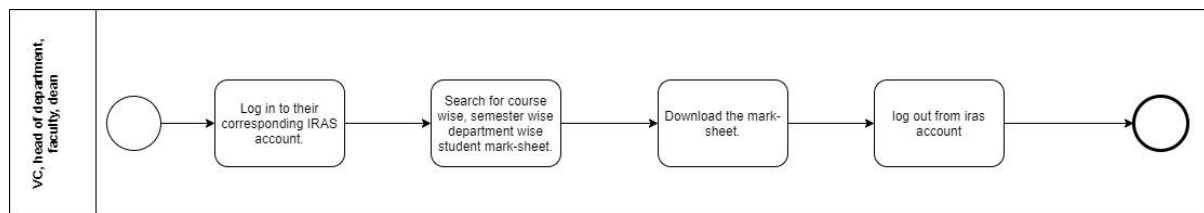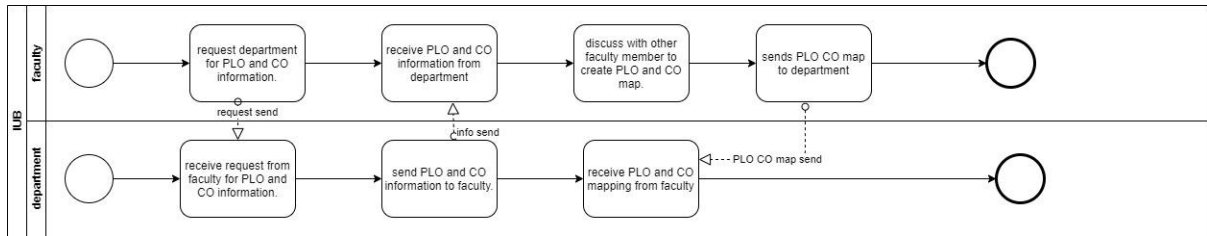

BPMN (AS-IS) FIGURE 2: View Student Mark-sheet by VC, Dean, Head, and Faculty
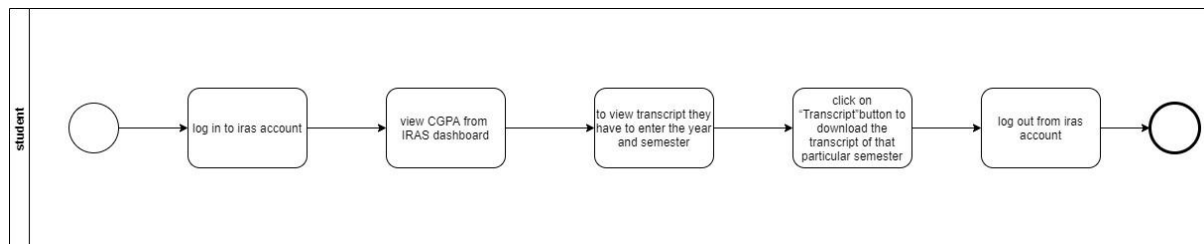
BPMN (AS-IS) FIGURE 3: View Transcript by Students

BPMN (AS-IS) FIGURE 4: Record Student Assessment

BPMN (AS-IS) FIGURE 5: Map PLO to CO

PROBLEM ANALYSIS

Process Name(s)	Stakeholders	Concerns	Analysis	Proposed Solution
"Record Student Assessment and submit marksheet", and "Map PLO CO"	Faculty Department	Faculties have request the department to send PLO and CO details and the Department has to respond to the request	This process is time consuming as the request from the faculties has to received by the department and retrieve necessary documents to be sent. Also, this process is resource consuming as well, as the faculty may have to send request using paper form or use any third party software for the task.	Rather than keeping the PLO and CO documents to themselves they will upload the documents to the SPM DB and faculties can easily access the files without needing to request the department
View new enrollment information	VC, Dean, Head, Faculty Registrar's Office SPM Admin	In order to view the enrollment data, VC, Dean, Head and Faculty have send request to registrar's office and in response the registrar's office will send the data	This process can be time consuming and hard to manage over time, as the registrar's office may have find manually for the request data. Also, the data sent may be just raw data and no overall trends will be shown. Users may have to use third party software to achieve that and if the data is hard copy version then	Instead of requesting the registrar's office, VC, Dean, Head and/or Faculties can view enrollment data from the enroll record on the SPM DB. Also, SPM software can show them a nice graphical analysis of enrollment

			generating trends will be even more difficult	
View Student CGPA Trend	VC, Dean, Head, Faculty	In order to see PLO achievement and CGPA trends of students, VC, Dean, Head and Faculty has to get the raw mark-sheet data from IRAS	The mark-sheet that they download from IRAS contains raw course-wise marks for each student. It is hard the produce overall trend from the mark-sheet as they contains raw marks for specific courses. In order to generate the trends, they might require scripts to calculate the CGPA from the mark-sheet and keep track of all the entities. It becomes even complicated when they want to see trends for range of semester or for a particular department or program. Most of the users might not be skilled enough to write scripts themselves.	In order to solve this problem, the marksheets can stored to SPM DB and generate the desired trends whenever the users need them.

RICH PICTURE (TO-BE)

UGC/IEB —Provides PLO→ **Department**

Department —Update PLO→ **SPM DB**

Faculty —Submits PLO-CO mapping→

Faculty —Submits course-wise student marksheet→ **SPM DB**

Faculty —Records student Assessment→ **Student**

SPM Admin —Creates new student account→ **SPM DB**

Registrar's Office DB —Receives new student info→ **SPM Admin**

SPM DB —View PLO Achievement→ **Student**

SPM DB —View CGPA and Transcript→ **Student**

SPM DB —Receive New Student Enrollment Report→ **VC, Dean, Head & Faculty**

SPM DB —Receives Student CPGA and PLO Trends→ **VC, Dean, Head & Faculty**

Figure: Rich Picture TO-BE

SIX ELEMENT ANALYSIS (TO-BE)

Process	System Report					
	Human	Non-computing Hardware	Computing Hardware	Software	Database	Internet & Communication
Create new students account	**SPM Admin:** 1)Receives new Students info from Registrar's office database 2) Log in to SPM DB. 3) Generate new student accounts from provided information. 4) Log out from SPM DB.	**Pen, Paper and Stationeries :** 1) May be used by SPM admin note-down any corrupted information sent from registrar's office	**Computer:** 1)Used by SPM Admin to receives data from registrar's office database & generate new Students accounts **Database Server:** 1)Registrar's office DB from which new students information will be sent 2)SPM DB in which new students account will be stored	**Operating System:** Used by SPM Admin to operate their computer **Office Suite:** May be used to store information locally in Excel format	**RDBMS:** 1) Used by both SPM DB & Registrar's office DB to stored information **Excel Software:** May be used to store information locally in Excel format	**Internet:** 1) Used to access and modify SPM database 2)Communicate between SPM Admin & Registrar's office **Telephone:** Used for verbal communicate between SPM Admin & Registrar's office

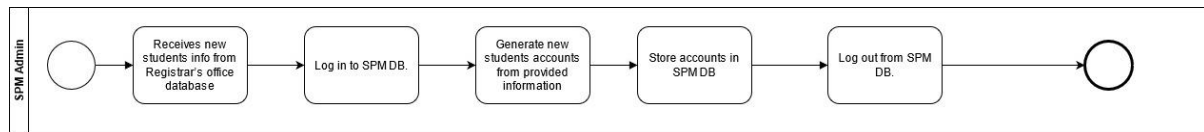|						
Update PLO on SPM DB	**Department:** 1) Gets PLO from UGC/IEB 2) Log in to SPM DB. 3) Stores PLO in SPM DB 4) Log out from SPM DB. **UGC/IEB:** Send PLO to department	**Pen, Paper and Stationeries:** 1) May be UGC/IEB Send printed version of PLO.	**Computer:** 1) Used by UGC/IEB to send PLO 2) Used by department to store PLO **Database Server:** Store PLO information for SPM	**Operating System:** Used by both department and UGC/IEB to operate their computer **Office Suite:** Used by UGC/IEB to create or modify PLO	**RDBMS:** Used for SPM DB to stored PLO information	**Internet:** 1) Used by UGC/IEB to provide PLO to department 2) Used by department to stored PLO in SPM DB 3) Used to communicate between department and UGC/IEB **Telephone:** Used for verbal communication between department and UGC/IEB
Record student assessment and submit mark-sheet	**Faculty:** 1)Take classes, record student attendance and student class participation 2)Log in to SPM DB. 3) Fetch PLO and CO information of a particular course from SPM 4) Set assignment and exam paper based the CO. 5) Organize schedule and room	**Pen, Paper and Stationeries:** 1) May be used by students to take lecture, write assignments, reports or take exam. 2) May be used by faculty to write lecture outline or print exam questions **Folder:** May be used by teacher to store students' assignments, exam	**Computer:** 1) May be used by student to send assignments, reports or take online exams 2) May be used by faculties to view and mark the given reports, assignments or exams **Database Server:** Used by SPM DB store student mark sheets	**Operating System:** 1) Used by both faculties and students to operate their computers **Office suite:** 1) Used by students to write assignments and reports 2) Used by faculty to write lecture outline or print exam questions	**RDBMS:** Used to store students' course wise mark sheet to SPM DB **Excel Sheet:** Used by faculties to store student mark sheets locally	**Internet:** 1) Used by students to submit the reports, assignments or take online exams 2) Used by faculty to receive student assessment 3) Used by teacher to store students course wise mark sheet to SPM DB 4) Communicate between student and teacher

	for exam and notify students. 6) Collect exam paper and assignment from students. 7) Checks the assignment and exam paper and records marks on mark-sheet 8) Log in to SPM and Submits mark-sheet. 9) Log out. **Student:** 1) Attend classes and participates in class discussion 2) Receives assignment and exam notifications from faculties 3) Attempts assignment problems and submits them to faculties 4) Takes exam on designated schedule and classroom and submits exam paper to faculties	papers or mark sheet		**Google Classroom and Google Form:** May be used for online classes and online examination		

Update PLO-CO mapping to SPM DB	**Faculty:** 1) Login to SPM and retrieve PLO and CO information for a certain course from SPM 2) Discuss PLO-CO among several faculties 3) Map PLO-CO 2) Submit PLO-CO mapping in SPM DB	**Pen, Paper and Stationeries:** 1) May be used by faculty to print the PLO-CO mapping	**Computer:** 1) Used by faculty to view PLO chart and submit PLO-CO mappings **Printer:** May be used by faculty to print the PLO-CO mapping **Database Server:** Used by SPM to store PLO info and PLO-CO mappings	**Operating System:** Used by faculty to operate their computer **Printing software:** May be used by faculty to print the PLO-CO mapping	**RDBMS:** Used by SPM DB to store PLO-CO mapping	**Internet:** 1) Used by faculty to store the PLO-CO mapping 2) Used to communicate with faculties and higher authorities **Telephone:** Used for verbal communication between faculties and higher authorities
View student CGPA, transcript and PLO achievements	**Student:** 1) Login to SPM and move the "achievements". 2) CGPA will be displayed by default 3) To view transcript, they have to enter semester and year. 4) PLO achievements will be displayed on the dashboard	**Paper:** May be used to print transcript **Folder:** May be used by store printed transcripts	**Computer:** Used to view or download, PLO achievements, CGPA and transcripts **Database Server:** Used by SPM to store student mark sheets	**Operating System:** Used by students to operate their computer **Printing software:** May be used to print transcript **PDF Viewer:** Used to view transcripts in printable format	**RDBMS:** Used by SPM DB to store student mark sheets **Excel Sheet:** May be used by students to store CGPA locally	**Internet:** Used by students to access SPM and view their CGPA and transcripts

Receive student CGPA and PLO trends	VC, Dean of School, Head of Department and Faculties:	Pen and paper:	Computer:	Operating System:	RDBMS:	Internet:
	1) Login to their SPM account	Used by the users to note down any particular trends in CGPA and PLO	Used to view CGPA and PLO trends	Used by the users to operate their computer	Used by SPM DB to store student CGPA and PLO trends	Used by the users to access SPM and view their CGPA and PLO trends
	2) They have to enter semester range to view the CGPA and PLO achievements trends.	**Folder:**	**Database Server:**			
	3) They can optionally enter particular school, department or program to view overall CGPA and PLO achievements	Used to store the papers	Used by SPM to store student CGPA and PLO trends			
	4) Leadership team can also view faculty-wise student CGPA and PLO achievements					
	5) Faculties can view overall CGPA and PLO achievements for students instructed by them.					

BUSINESS PROCESS DIAGRAM (TO-BE)

BPMN (TO-BE) FIGURE 6: Create new studentaccount
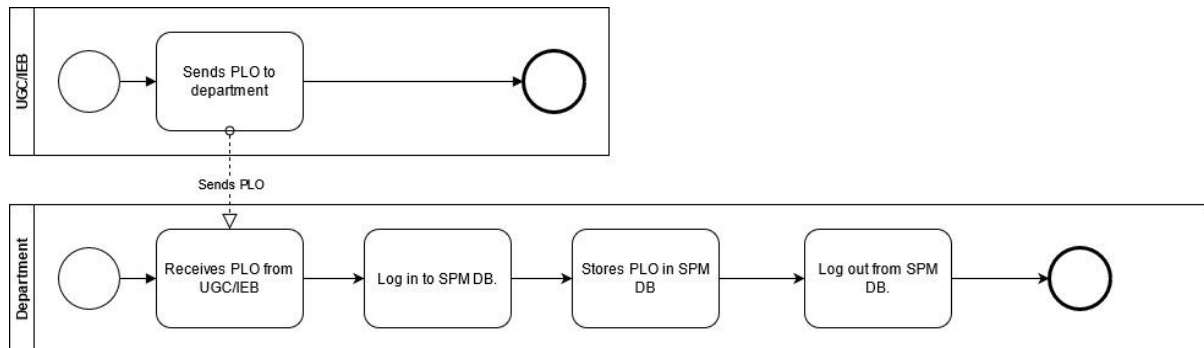
BPMN (TO-BE) FIGURE 2: Update PLO on SPM DB
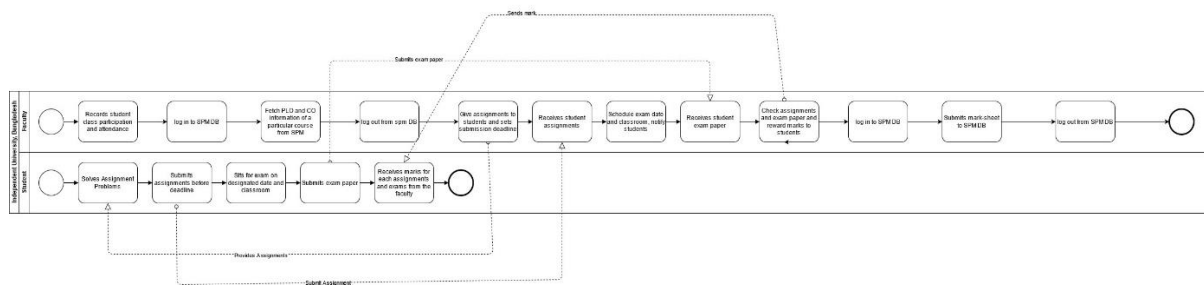
BPMN (TO-BE) FIGURE 3: Record student assessment and submit mark-sheet
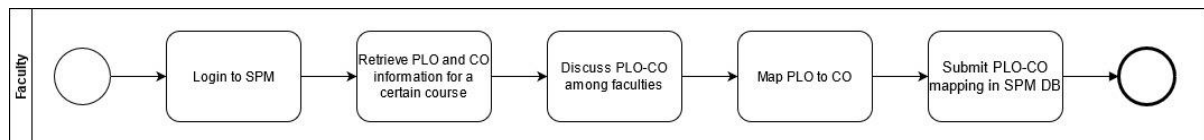
BPMN (TO-BE) FIGURE 4: Update PLO-CO mapping to SPM DB
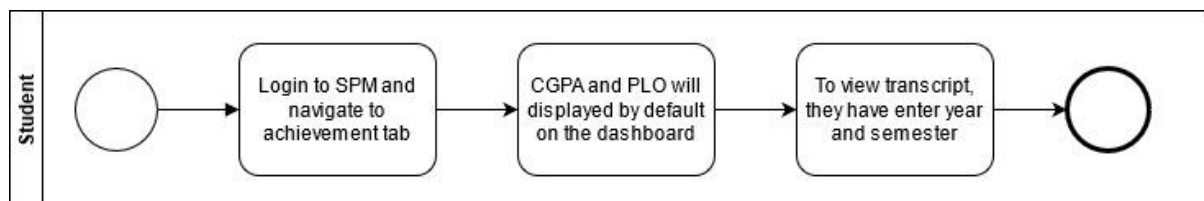
BPMN (TO-BE) FIGURE 5: View student CGPA, transcript and PLO achievements
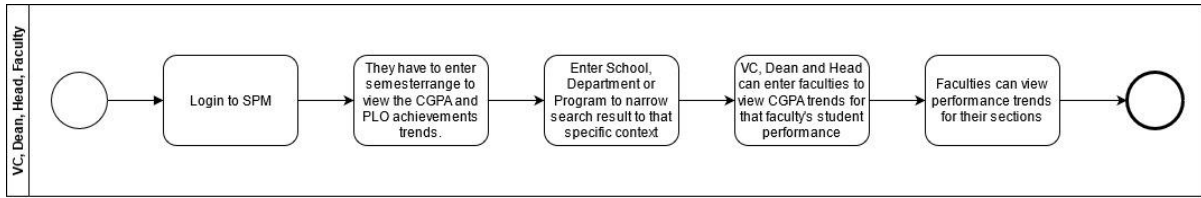
BPMN (TO-BE) FIGURE 6: Receive student CGPA and PLO trends

Business Rule

A department is enrolls multiple students. Each student is enrolled by exactly one department. A department must belongs to exactly one school. A school is consist of many department. A department must have exactly one head of department. A head of department is belongs to exactly one department. A department must employee many faculty. A faculty is employed by exactly one department.

A student is enrolls to exactly one section. Each section must have many students. A faculty is assign to many section. A section must have exactly one faculty. A course is assign to many section. A section must contains exactly one course. A section may assign many assessment. Each assessment is assign by exactly one section.

An assessment is assign to many student. Each student must receive many assessment. An assessment must have multiple Cos. A CO is belongs to exactly one assessment.

A CO is belongs to exactly one course. A course must have many Cos. A CO is belongs to exactly one PLO. A PLO must have many COs.

A PLO is stored by exactly one department. A department must store many PLOs. A PLO is contain by exactly one program. A program must consist of many PLOs.

A program is enrolls many student. Each student is enrolled by exactly one program. A program must belongs to exactly one department. A department is consist of many program.

A school must have exactly one dean of school. A dean of school is belongs to exactly one school. A school must belongs to exactly one university. A university is consist of many school.

A university must have exactly one VC. A VC is belongs to exactly one university.

A student may submit many assessment answer. An assessment answer must submitted by exactly one student. A student must receive grade from exactly one mark sheet. A mark sheet must send grade to many students.

ERD

SCHOOL
PK	SchoolID
	SchoolName
FK	UniversityName

DEPARTMENT
PK	DepartmentID
	DepartmentName
FK	SchoolID

STUDENT
PK	StudentID
	Name (FirstName, LastName)
	(EmailID)
	(ContactNo.)
	Address
	Gender
	DateOfBirth(Date, Month, Year)
	EnrollmentDate(Semester, Year)
FK	DepartmentID
FK	ProgramID

PROGRAM
PK	ProgramID
	ProgramName
FK	DepartmentID

MARKSHEET
PK	marksheetID
FK	{submissionID}
FK	{studentID}
	[gradeObtained]

DepartmentHead
FK	DepartmentID

DeanOfSchool
FK	SchoolID

VC
FK	UniversityName

Faculty
PK	FacultyID
	Name (FirstName, LastName)
	(EmailID)
	(ContactNo.)
	Address
	Gender
	DateOfBirth(Date, Month, Year)
	EmploymentYear
	AuthorityType
FK	DepartmentID

Course
PK	CourseID
	CourseName
	TotalCredits
	CourseCode

SECTION
PK	SectionId
FK	CourseID
FK	FacultyId
	SemesterName
	SectionCapacity

ASSESSMENT_SUBMISSION
PK	SubmissionID
	MarkObtained
FK	AssessmentID

ASSESSMENT
PK	AssessmentID
	Type
	TotalMark
FK	CoID

PLO
PK	PloID
FK	ProgramID
	Details

CO
PK	CoID
FK	CourseID
FK	PloID

University
PK	UniversityName
	EstablishmentYear
	Address
	VcName

Relationships: has, Consists of, Belongs to, Store, Enrols to, Employees, receive grade, send grade, belongs to, "HOD", "DOS", "VC", AuthorityType=, Assign to, Consists of, Enrolled by, Enroled by, Submits, Must, receive mark, Submitted by, send mark, assigns, Employed by, Contain By, Stored By, assigned by, Consists of, d

RELATIONAL SCHEMA

STUDENT

Student ID	FirstName	LastName	{EmailId}	{ContactNumber}	Address	Gender	BirthDate	BirthMonth	BirthYear	EnrollmentSemester	EnrollmentYear	DepartmentId	ProgramId

SCHOOL

School ID	School name	UniversityName

DEPARTMENT

Department ID	Department name	SchoolId

PROGRAM

Program ID	ProgramName	DepartmentId

FACULTY

Faculty ID	FirstName	LastName	{EmailId}	{ContactNumber}	Address	Gender	BirthDate	BirthMonth	BirthYear	EmploymentYear	DepartmentId	AuthorityType

COURSE

Course ID	CourseName	TotalCredit

SECTION

SectionID	CourseID	FacultyID	SemesterName	SectionCapacity

ASSESSMENTS

Assestment ID	type	totalMark	{COid}

DEPARTMENTHEAD

HOD	FacultyID	DepartmentID

DEANOFSCHOOL

DOS	FacultyID	SchoolID

VC

VC	FacultyID	UniversityName

ASSESSMENTS SUBMISSION

Submission ID	MarkObtained	assesmentId

UNIVERSITY

University Name	Establishment Year	Address	VCName

PLO

PLO ID	ProgramId	Details

CO

CO ID	CourseID	PLOId

MARKSHEET

MARKSHEET ID	Submission ID	grade obtain	student id

NORMALIZATION

1NF: In the schema we need to remove all the multivalued attributes.

2NF: In this schema there will be no partial dependencies.

3NF: In this schema we have to remove transitive dependencies.

BCNF: Remove remaining anomalies resulting from multiple candidate keys.

DATA DICTONARY:

tblcourse

Name	Data type	Size	remark
ccourseID	Text		This is the primary key of the course. Example:cse303
ccourseName	Text		This is the name of the course. example: database management
ntotalCredit	Number		This is the credit of the course. Example:4

tbluniversity

Name	Data type	Size	Remark
cuniversityName	Text		This is the primary key and name of the university. Example: Independent University, Bangladesh
dEstablishmentYear	Datetime	yyyy	This is the year of Establish the university. Example:1993
caddress	Text		This is the address of the university. Example: Plot 16 Block B, Aftabuddin Ahmed Road Bashundhara R/A, Dhaka, Bangladesh
cVCName	Text		This is the name of the vice chancellor of the university. Example: Tanweer Hasan

tblschool

Name	Data type	Size	Remark
cschoolID	Text		This is the primary key of the school. Example:SETS
cschoolName	Text		This is the name of the school. Example: School of Engineering, Technology & Sciences
cuniversityName	Text		This is the foreign key from the university table. Example: Independent University, Bangladesh

tbldepartment

Name	Data type	Size	remark
cdepartmentID	Text		This s the primary key of the department. example: CSE
cdepartmentName	Text		This is the name of the department. example: computer science and engineering.
cschoolID	Text		This is the foreign key from the school table. Example:SETS

tblprogram

Name	Data type	Size	Remark
cprogramID	Text		This is the primary key of the program.
cprogramName	Text		This is the name of the program.
cdepartmentID	Text		This is the foreign key from the department

			table. Example:CSE

tblstudent

Name	Data type	Size	Remark
cstudentID	Text	7	This is the primary key of the student. Example: 1234567
cstudentName	Text		This is the name of the student. Example: MR.Abdul Korim
cemailID	Text		This is the email of student. Example: abdul@gmail.com
ncontractNo	Number	11	This is the contract number of the student. Example:01911111111
caddress	Text		This is the address of the student. Example: sector6, house 6, road 6 uttara,Dhaka
cgender	Text		This is the gender of the student. Example:male
ddateOfBirth	Date time	dd/mm/yy	This is the birth date of the student. Example:06/06/96
denrollmentYear	Date time	yyyy	This is the enrollment year when the student got admitted in the university. Example:2016
cdepartmentID	Text		This is the foreign key from department table. Example:CSE
cprogramID	Text		This is the foreign key from the program table.

tblfaculty

Name	Data type	Size	Remark
cfacultyID	Text	5	This is the primary key of the faculty. Example:11111
cname	Text		This is the name of the faculty. Example: MR.gousul azom
cemailId	Text		This is the email address of the faculty. Example:gousul@gmail.com
ncontractNo	Number	11	This is the contract number of the faculty. Example:7654321
caddress	Text		This is the address of the faculty. example:sector5,read5, house 5 uttara, dhaka
cgender	Text		This is the gender of the faculty. Example:male
ddateOfBirth	Date time	dd/mm/yy	This is birth time of the faculty. Example: 11/12/66
demploymentYear	Date time	Yyyy	This is the employment year when the faculty joined as employee in the university. Example:2009
cdepartmentID	Text		This is the foreign key from the department table. Example: CSE

tblsection

NAME	DATA TYPE	SIZE	REMARKS
csectionID	Text		This is the primary key of the section. Exmaple: CSE 303 SEC 01
ccousrseID	Text		This is the foreign key from the course table. Example: cse301
cfacultyID	Text		This is the foreign key from the faculty table.

			Exmaple:11554
csemesterName	Text		This is the name of the semester. Example: Spring 2016.
nsectioncapacity	Number		This is the total capacity of a section. Example: 30.

tblplo

NAME	DATA TYPE	SIZE	REMARK
cploID	Text		This is the primary key of the PLO(Program Learning Outcome). Example:"PLO1"
cprogramID	text		This is the foreign key from the program table. Example: M.sc.
cdetails	Text		This is the details of the PLO.

tblco

NAME	DATA TYPE	SIZE	REMARKS
ccoID	Text		This is the primary key of the CO. Example "CO1"
ccourseID	Text		This is the foreign key from the course table. Example:"CSE303"
cploID	Text		This is the foreign key from the PLO table. Example: "PLO2"

tblassessmentID

NAME	DATA TYPE	SIZE	REMARKS
cassesmentID	Text		This is the primary of the assessment.
ctype	Text		This is the type of the assessment. Example:assignment
ntotalMarks	Number		This is the mark for the assessment. Example:25
ccoID	Text		This is foreign key from the CO table.example:CO1

tblassessment submission

NAME	DATA TYPE	SIZE	REMARKS
csubmissionID	Text		This is the primary key of the assessment submission.
nmarkObtained	Number		this is the mark obtained by a student. Example:7
cassessmentID	Text		This is foreign key of the assessment ID.

tblmarksheet

NAME	DATA TYPE	SIZE	REMARKS
cmarksheetID	Text		This is the primary key of the marksheet ID.
submissionID	Text		This is the foreign key of the submission ID.
cstudentID	Text		This is the foreign key of the student ID.
ngradeObtained	Number		This is the game obtained by a student. Example: 2.15