



STUDENT DATABASE MANAGEMENT SYSTEM

PROBLEM STATEMENT



- Information plays a vital role in the development and growth of every organization.
- Currently, the various departments manage student information independently in their own ways. There are no common, standardized process and program for capturing, processing and storing student's information.
- This has kept student information disintegrated in different departments and information provided to the various departments by the students is characterized with discrepancies.

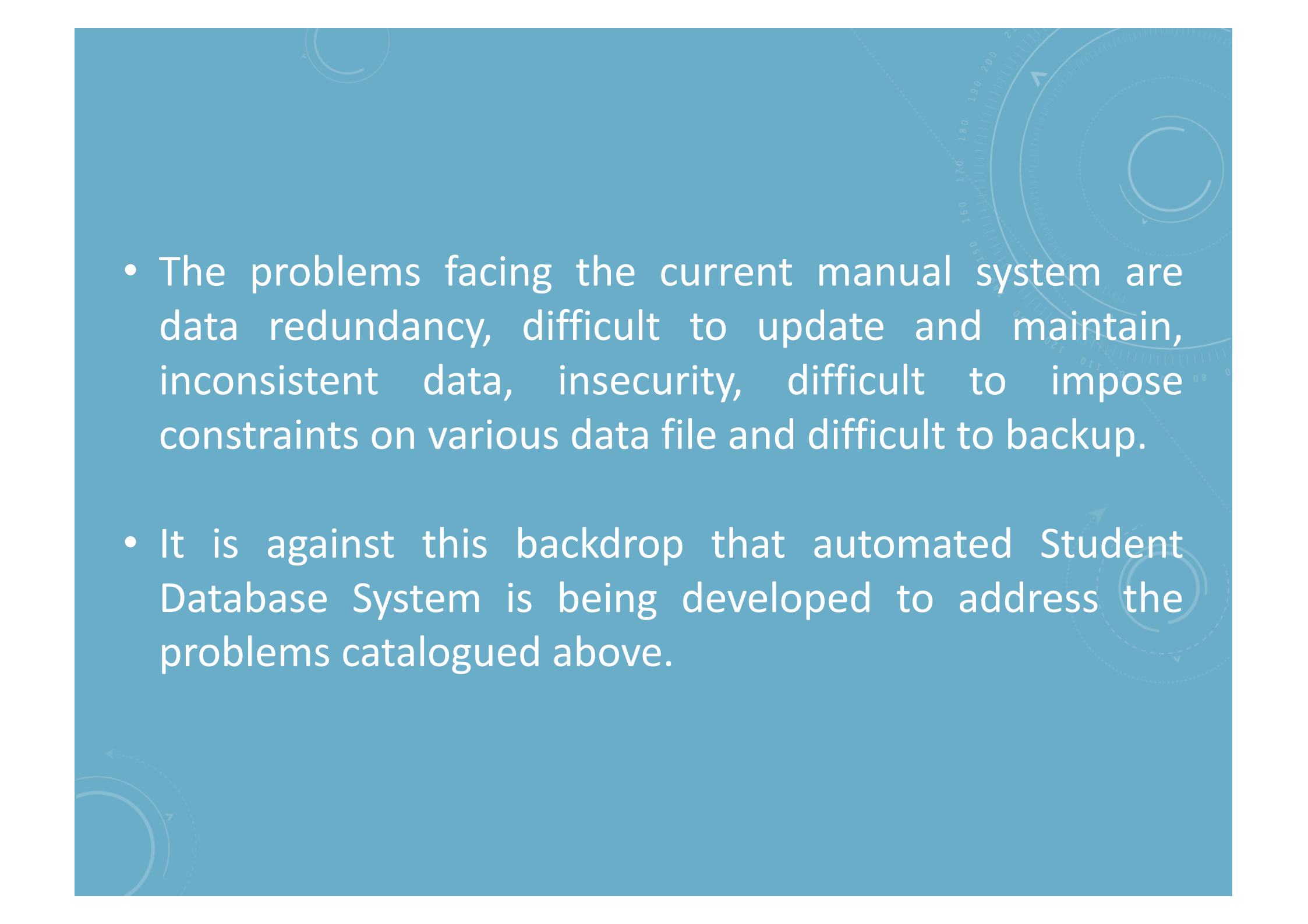
The background is a solid blue color with faint, light blue technical diagrams. In the top right, there is a large circular gauge with a scale from 0 to 200 and a needle pointing towards 180. Below it is a smaller circular diagram with concentric circles and arrows. In the bottom left, there is another circular diagram with concentric circles and arrows. The text "MANUAL SYSTEM DETAILS" is centered in a pink, hand-drawn font.

MANUAL SYSTEM DETAILS

- The various departments have systems in place to store and process student data but the systems are not able to talk to each other. This makes it difficult for the registrar to collate information of students across departments.
- For instance, if the registrar wants information about students with respect to their academic performance urgently, he must go to all the departments and collect the required data.

- On occasions where the department is not able to produce the needed information immediately, the business or activity at that particular time would come to a standstill.
- On the other hand, time is being wasted going round the various departments to solicit data. This situation is very frustrating and impedes smooth operations and decision making process.

- One of the policies of The Mayo College, is the fact that students must not fail in three or more courses. Referrals in three or more courses will warrant expulsion from the school.
- The current information system is incapable of providing students with exams result before courses are registered for the next semester.
- A past student who needs a transcript will have to travel all the way to the college before he could access it because the current system is so weak to the extent that it is unable to provide this document online.

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- The background is a solid blue color. It features several faint, light-blue circular graphics. In the top right, there is a large circular scale with numbers ranging from 0 to 200, and a smaller concentric circle with an arrow. In the bottom left, there are two overlapping circles with arrows indicating a clockwise direction.
- The problems facing the current manual system are data redundancy, difficult to update and maintain, inconsistent data, insecurity, difficult to impose constraints on various data file and difficult to backup.
 - It is against this backdrop that automated Student Database System is being developed to address the problems catalogued above.

IMPLEMENTATION DETAILS

The background is a solid blue color. It features several faint, white, circular patterns. In the top right corner, there is a large circular gauge with a scale from 0 to 200 and a needle pointing towards 180. Below it, there is a smaller circular pattern with a dashed line and an arrow. In the bottom left corner, there is another circular pattern with a dashed line and an arrow. The text "IMPLEMENTATION DETAILS" is centered in a white, hand-drawn, sans-serif font.

- The main objective is to develop a robust Student Database Management System for 'The Mayo College'. The proposed system is intended to make life easy. The main purpose of the project is to build an integrated student database system to facilitate easy access of records of students across departments.
- The Student Database System will allow the registrar of School of The Mayo College, to edit, update and list personal and academic details of students. It will also enhance efficient management of student's information.

- This project when completed will provide comprehensive Student Database System for The Mayo College. The system should be able to capture, validate, sort, classify, calculate, summarize, store, retrieve, reproduce and communicate operational data.
- Student Database System will store semester details, course details, department details and all the details of students including their background information, educational qualifications and personal details etc.

- Implementation includes all the activities that take place to convert from the old system to the new. A proper implementation is required to provide a dependable system to meet the requirements.
- An improper installation may affect the success of the automated system. The most appropriate approach used was to run the old and new system in parallel. This offers high security, because even if there is a flaw in the automated system, the manual system can be depended on.

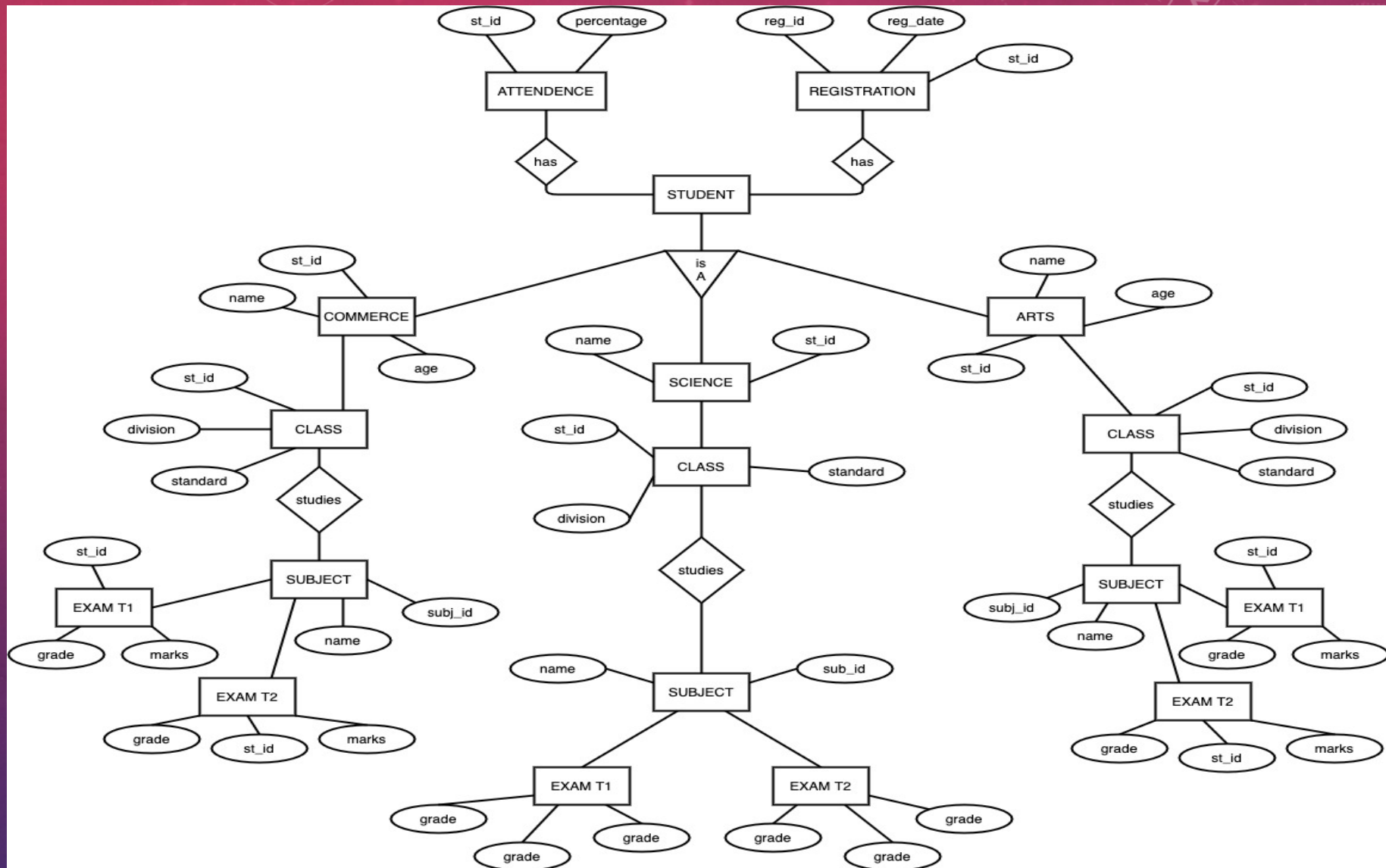
To develop a database system that allows the registrar to list and update students information

This model allows one to search for a particular student or group of students using search criteria such as name of student, Index number, course code etc

**FINAL
DELIVERABLES**

This module will help the student get registered from anywhere if internet is present .This module will really simplify the task of the manual registration

To develop the prototype of an integrated Student Database System that can be implemented.



ENHANCED ENTITY-RELATIONSHIP DIAGRAM

COMMERCE SCHEMA

COMMERCE






+ v

Query

Count Rows

Insert Row

Data

EDIT	STUDENT_ID	NAME	AGE
	C001	Rishabh	15
	C002	Vidhi	15
	C003	Akshay	16
	C004	Dharmi	15
	C005	Kopal	16

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SCIENCE SCHEMA

SCIENCE

Table

Data

Indexes

Model

Constraints

Grants

Statistics

UI Defaults

Triggers

Dependencies

SQL

REST

Sample Queries

Query

Count Rows

Insert Row

Data

EDIT	STUDENT_ID	NAME	AGE
	S001	Arushi	14
	S002	Dev	15
	S003	Raj	15
	S004	Ekarth	15
	S005	Nitin	16

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ARTS SCHEMA

ARTS

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Table	Data	Indexes	Model	Constraints	Grants	Statistics	UI Defaults	Triggers	Dependencies	SQL	REST	Sample Queries
Query	Count Rows	Insert Row										
Data												
EDIT		STUDENT_ID				NAME				AGE		
		A001				Sarang				15		
		A002				Niyomi				15		
		A003				Sohil				16		
		A004				Rashi				15		
		A005				Priyanka				16		
Download												


ATTENDANCE SCHEMA

ATTENDANCE			+ v
EDIT	STUDENT_ID	PERCENTAGE	
	A001	45.2	
	A002	68.13	
	A003	89.6	
	A004	79.91	
	A005	82	
	S001	93.12	
	S002	69.92	
	S003	76.98	
	S004	64.98	
	S005	90.78	

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REGISTRATION SCHEMA

REGISTRATION				+ v
EDIT	REG_ID	STUDENT_ID	REG_DATE	
	1001	A001	05/12/2012	
	1002	A002	05/16/2017	
	1003	A003	05/13/2014	
	1004	A004	05/12/2017	
	1005	A005	05/19/2019	
	1006	S001	05/12/2011	
	1007	S002	05/16/2012	
	1008	S003	05/19/2016	
	1009	S004	05/11/2014	
	1010	S005	05/11/2012	

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COMMERCE CLASS SCHEMA

CCLASS

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▼

Query

Count Rows






Insert Row

Data






EDIT	STUDENT_ID	STANDARD	DIVISION
	C001	9	E
	C002	10	F
	C003	9	F
	C004	10	E
	C005	10	E

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SCIENCE CLASS SCHEMA

SCCLASS			
Query Count Rows Insert Row			
Data			
EDIT	STUDENT_ID	STANDARD	DIVISION
	S001	9	A
	S002	10	B
	S003	9	B
	S004	9	B
	S005	10	A
Download			
row(s) 1 - 5 of 5			








ARTS CLASS SCHEMA

AClass			
Query Count Rows Insert Row			
Data			
EDIT	STUDENT_ID	STANDARD	DIVISION
	A001	9	D
	A002	10	C
	A003	9	C
	A004	9	D
	A005	10	C
Download			
row(s) 1 - 5 of 5			







COMMERCE SUBJECTS SCHEMA

CSUBJECT			+ v
Data			
EDIT	SUBJECT_ID	NAME	
	C1	Commercial Applications	
	C2	Economics	
	E	English	
	M	Mathematics	
	H	History	
	G	Geography	
Download			
			row(s) 1 - 6 of 6






SCIENCE SUBJECTS SCHEMA

SSUBJECT			+ v
EDIT	SUBJECT_ID	NAME	
	S1	Physics	
	S2	Chemistry	
	S3	Biology	
	E	English	
	M	Mathematics	
	H	History	
	G	Geography	
Download			

ARTS SUBJECT SCHEMA

ASUBJECT			+ v
Data			
EDIT	SUBJECT_ID	NAME	
	A1	Psychology	
	A2	Humanities	
	E	English	
	M	Mathematics	
	H	History	
	G	Geography	
Download			

COMMERCE CLASS TERM - 1 AND TERM - 2 SCHEMA

CTERM1									
<div>QueryCount RowsInsert Row</div>									
Data									
EDIT	STUDENT_ID	C1	C2	E	M	H	G	PERCENTAGE	GRADE
	C001	79	92	69	90	85	87	84	A
	C002	83	93	80	95	88	89	88	A
	C003	86	91	70	79	83	85	82	A
	C004	23	21	15	40	41	35	29	F
	C005	80	82	75	88	56	79	77	B

CTERM2

Query

Count Rows

Insert Row

Data

EDIT	STUDENT_ID	C1	C2	E	M	H	G	PERCENTAGE	GRADE
	C001	83	93	80	95	88	89	88	A
	C002	23	21	15	40	41	35	29	F
	C003	79	92	69	90	85	87	84	A
	C004	80	82	75	88	56	79	77	B
	C005	78	79	65	80	78	79	77	B

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SCIENCE CLASS TERM - 1 AND TERM - 2 SCHEMA






TERM1

Query

Count Rows

Insert Row

Data

EDIT	STUDENT_ID	S1	S2	S3	E	M	H	G	PERCENTAGE	GRADE
	S001	63	67	70	77	85	78	79	74	B
	S002	83	91	75	83	95	88	91	87	A
	S003	79	63	80	77	90	83	85	79	B
	S004	83	93	80	87	95	88	89	88	A
	S005	21	23	40	47	35	38	29	33	F

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STERM2

Query

Count Rows

Insert Row

Data

EDIT	STUDENT_ID	S1	S2	S3	E	M	H	G	PERCENTAGE	GRADE
	S001	83	93	80	87	95	88	89	88	A
	S002	79	63	80	77	90	83	85	79	B
	S003	21	23	40	47	35	38	29	33	F
	S004	83	91	75	83	95	88	91	87	A
	S005	63	67	70	77	85	78	79	74	B

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ARTS CLASS TERM - 1 AND TERM - 2 SCHEMA

ATERM1



Query

Count Rows

Insert Row

Data

EDIT	STUDENT_ID	A1	A2	E	M	H	G	PERCENTAGE	GRADE
	A001	65	68	70	75	85	89	75	B
	A002	73	81	65	75	89	90	79	B
	A003	79	63	80	90	83	85	80	A
	A004	93	93	89	90	88	89	90	A
	A005	21	23	40	35	38	29	31	F

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ATERM2



Query

Count Rows

Insert Row

Data

EDIT	STUDENT_ID	A1	A2	E	M	H	G	PERCENTAGE	GRADE
	A001	73	81	65	75	89	90	79	B
	A002	93	93	89	90	88	89	90	A
	A003	89	83	90	89	83	89	87	A
	A004	92	91	88	90	91	92	91	A
	A005	65	68	70	75	85	89	75	B

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CONCLUSION

- In Mayo College, the Student Database Management System is not there at all. They update or search for records manually which is laborer's work and is prone to data redundancy and inconsistency.
- Here in this Database, they can search for student records. They can view all the students who are performing well, who are not performing well, their student details, who all are running low on attendance and the like they can even update all the details of the student, or even update new student details into the system.
- Database systems are very easy to use and the data remains in one place.

FUTURE SCOPE

- This is a very small database. There are thousands of children in college, so future plan would be to make a database which can hold thousands of records and still work efficiently. Future scope is to also create Authorization access-
- for example one access for Student, another for Principal or Registrar, one for the Examination Department, one for the Faculties and the like. Also plan on to show all the details of a particular student by linking all the tables.



THANK YOU



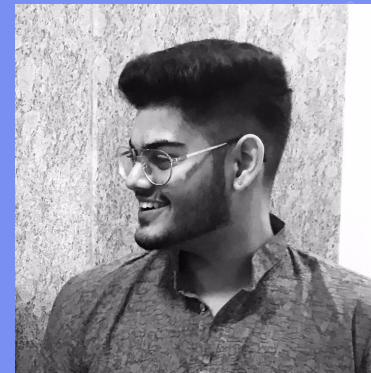
AYUSH HENDRE

J019



VIDHI KAPOOR

J021



KARTIKAY LADDHA

J025