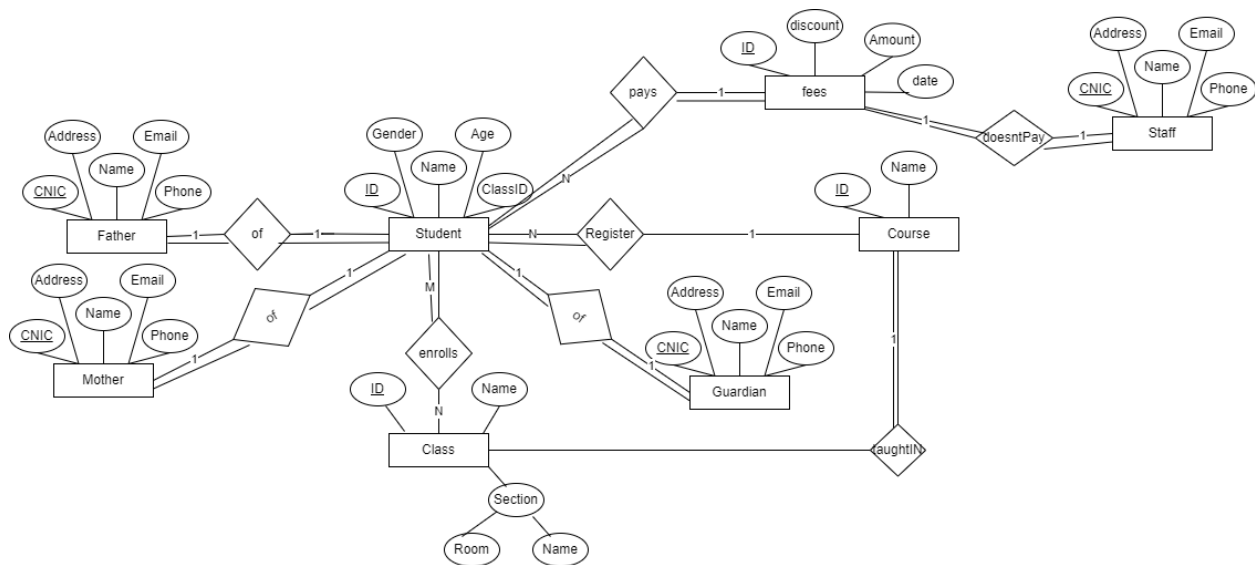


Database Project Report

Group Members:

1. Jiyad Khan (19I-1771)
2. Waleed Mukhtar (19I-0485)
3. Abdullah Faisal (19-1911)

Project ERD:



Project Relational Schemas/Mapping:

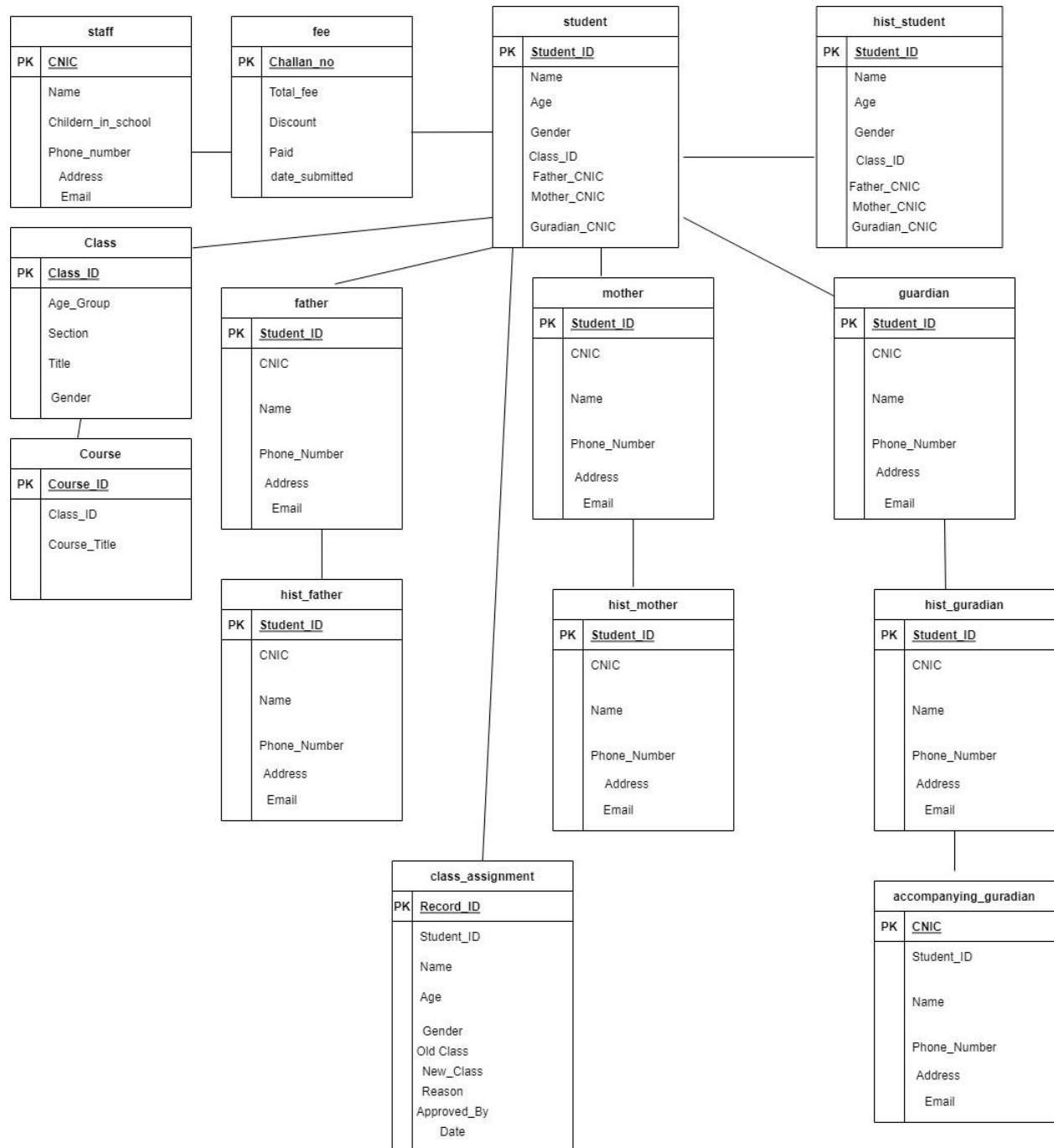


Table Details:

The screenshot shows the phpMyAdmin interface for a MySQL database named 'db-project'. The 'Structure' tab is selected, displaying a list of 13 tables. The tables are: accompanying_guardian, class, class_assignment, course, father, fee, guardian, hist_guardian, hist_parent, hist_student, mother, staff, and student. Each table entry includes icons for Browse, Structure, Search, Insert, Empty, and Drop, along with details on Rows, Type, Collation, Size, and Overhead. A summary row at the bottom indicates there are 13 tables in total, with a combined size of 32.6 KiB.

Table	Action	Rows	Type	Collation	Size	Overhead
accompanying_guardian	Browse Structure Search Insert Empty Drop	0	MyISAM	latin1_swedish_ci	1.0 KiB	-
class	Browse Structure Search Insert Empty Drop	5	MyISAM	latin1_swedish_ci	2.2 KiB	-
class_assignment	Browse Structure Search Insert Empty Drop	5	MyISAM	latin1_swedish_ci	2.2 KiB	-
course	Browse Structure Search Insert Empty Drop	5	MyISAM	latin1_swedish_ci	3.2 KiB	-
father	Browse Structure Search Insert Empty Drop	6	MyISAM	latin1_swedish_ci	2.6 KiB	-
fee	Browse Structure Search Insert Empty Drop	6	MyISAM	latin1_swedish_ci	2.2 KiB	-
guardian	Browse Structure Search Insert Empty Drop	5	MyISAM	latin1_swedish_ci	2.6 KiB	-
hist_guardian	Browse Structure Search Insert Empty Drop	5	MyISAM	latin1_swedish_ci	2.6 KiB	-
hist_parent	Browse Structure Search Insert Empty Drop	5	MyISAM	latin1_swedish_ci	2.5 KiB	-
hist_student	Browse Structure Search Insert Empty Drop	0	MyISAM	latin1_swedish_ci	1.0 KiB	-
mother	Browse Structure Search Insert Empty Drop	6	MyISAM	latin1_swedish_ci	2.6 KiB	-
staff	Browse Structure Search Insert Empty Drop	5	MyISAM	latin1_swedish_ci	2.5 KiB	-
student	Browse Structure Search Insert Empty Drop	5	MyISAM	latin1_swedish_ci	5.4 KiB	-
13 tables	Sum	58	MyISAM	latin1_swedish_ci	32.6 KiB	0 B

We made 13 tables in total for this project.

1)

The screenshot shows the phpMyAdmin interface for the 'student' table within the 'db-project' database. The 'Structure' tab is selected, displaying the table's columns and their properties. The columns are: Student_ID (primary key, auto-increment), Name, Age, Gender, Class_ID, MCNIC, FCNIC, and GCNIC. The table is using the MyISAM engine with the latin1_swedish_ci collation. Below the column list, the 'Indexes' section shows the primary key and other indexes.

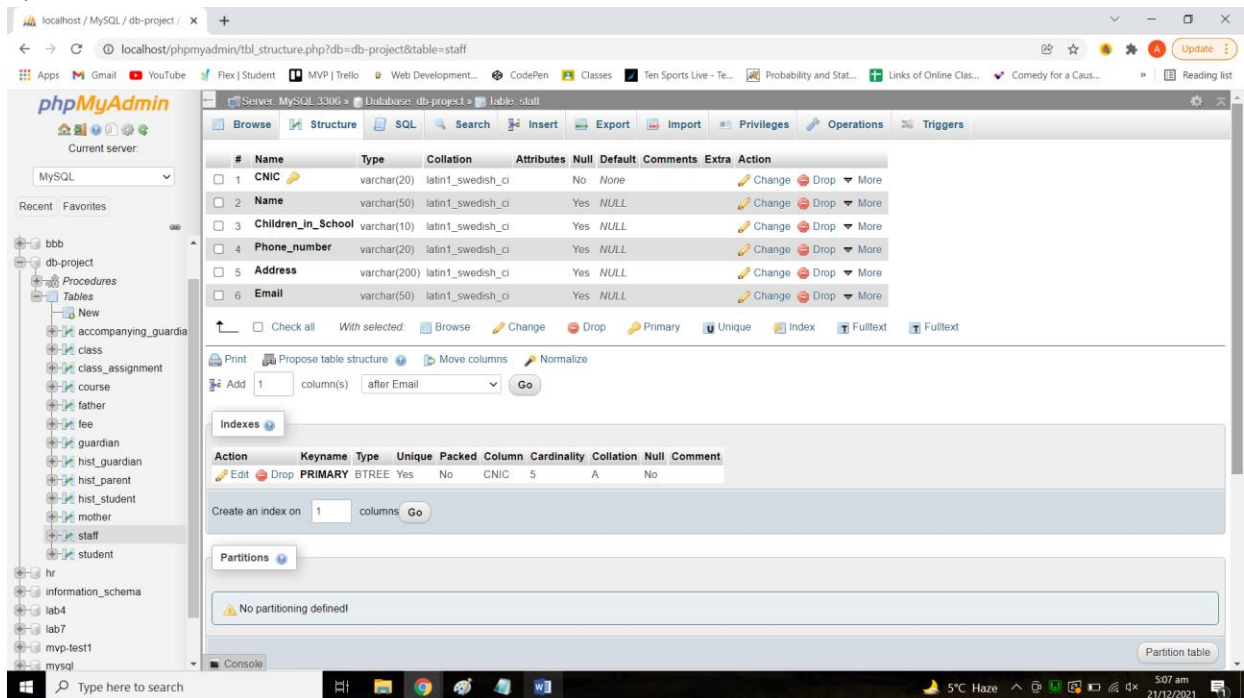
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Student_ID	int(10)			No			AUTO_INCREMENT	Change Drop More
2	Name	varchar(50)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	Age	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	Gender	varchar(30)	latin1_swedish_ci		Yes	NULL			Change Drop More
5	Class_ID	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	MCNIC	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
7	FCNIC	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
8	GCNIC	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	Student_ID	5	A	No	
Edit Drop	MCNIC	BTREE	No	No	MCNIC	A	A	Yes	
Edit Drop	FCNIC	BTREE	No	No	FCNIC	A	A	Yes	
Edit Drop	Class_ID	BTREE	No	No	Class_ID	A	A	Yes	

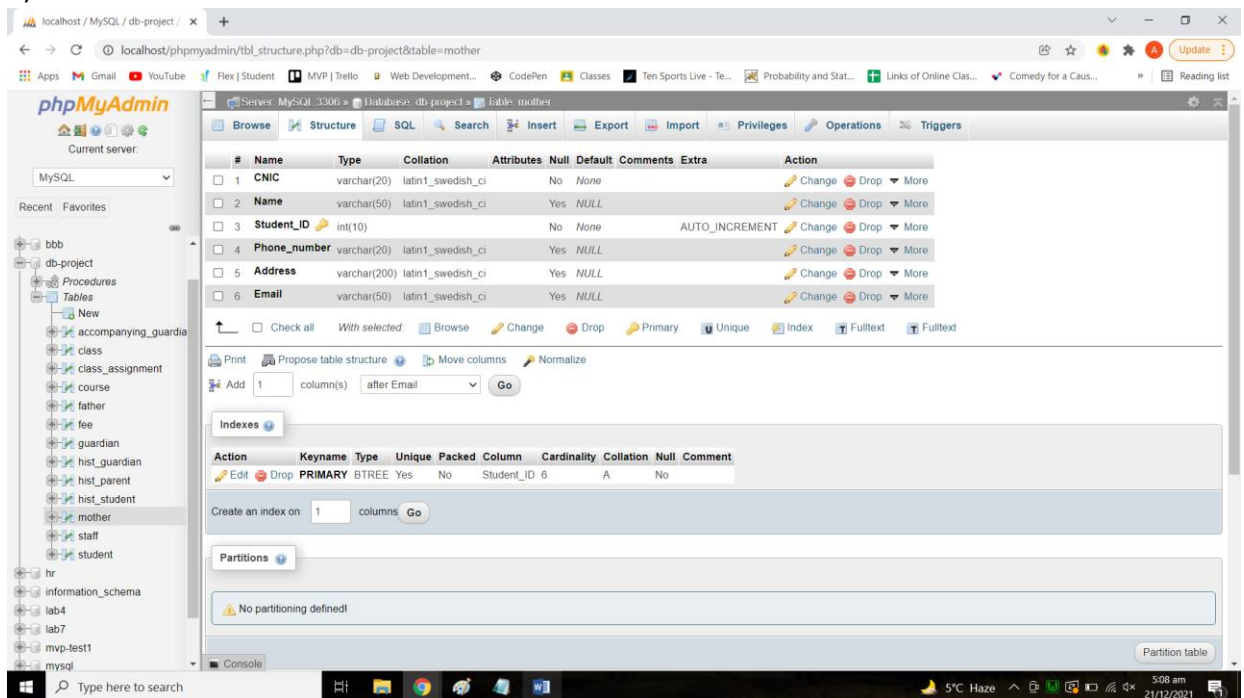
The student table to keep the basic student records.

2)



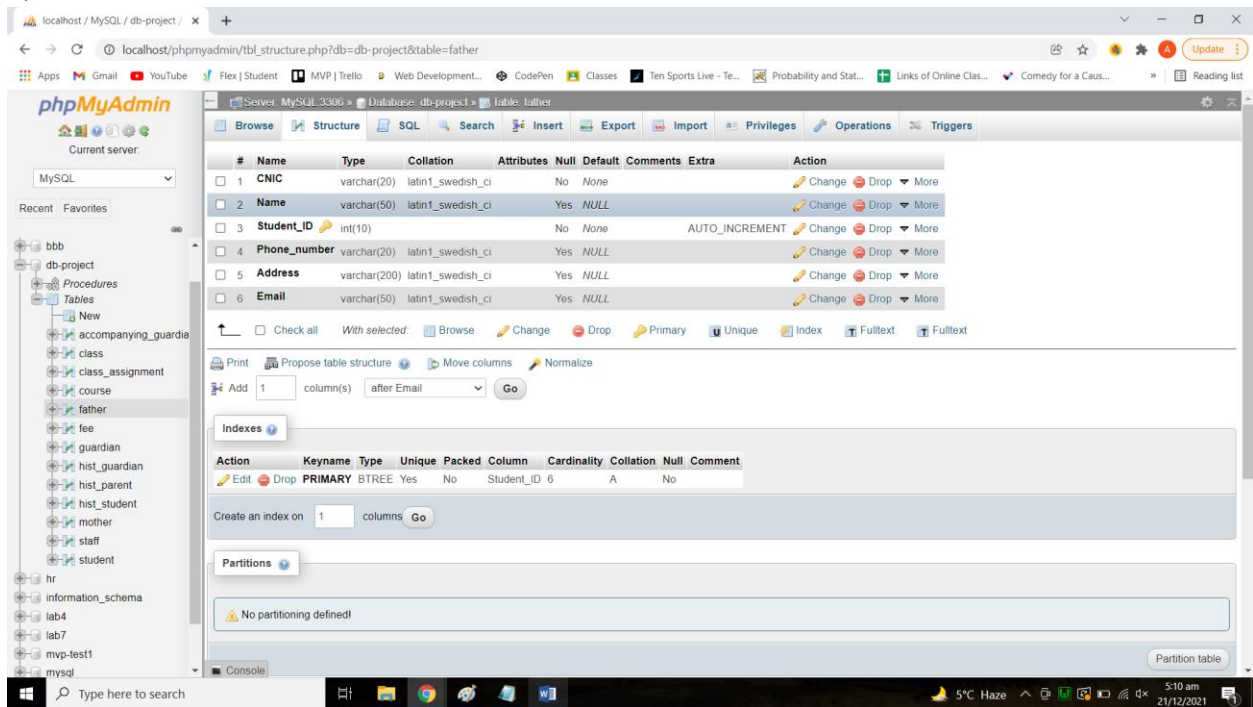
The staff table to keep record of the staff of the school, and more importantly their children.

3)



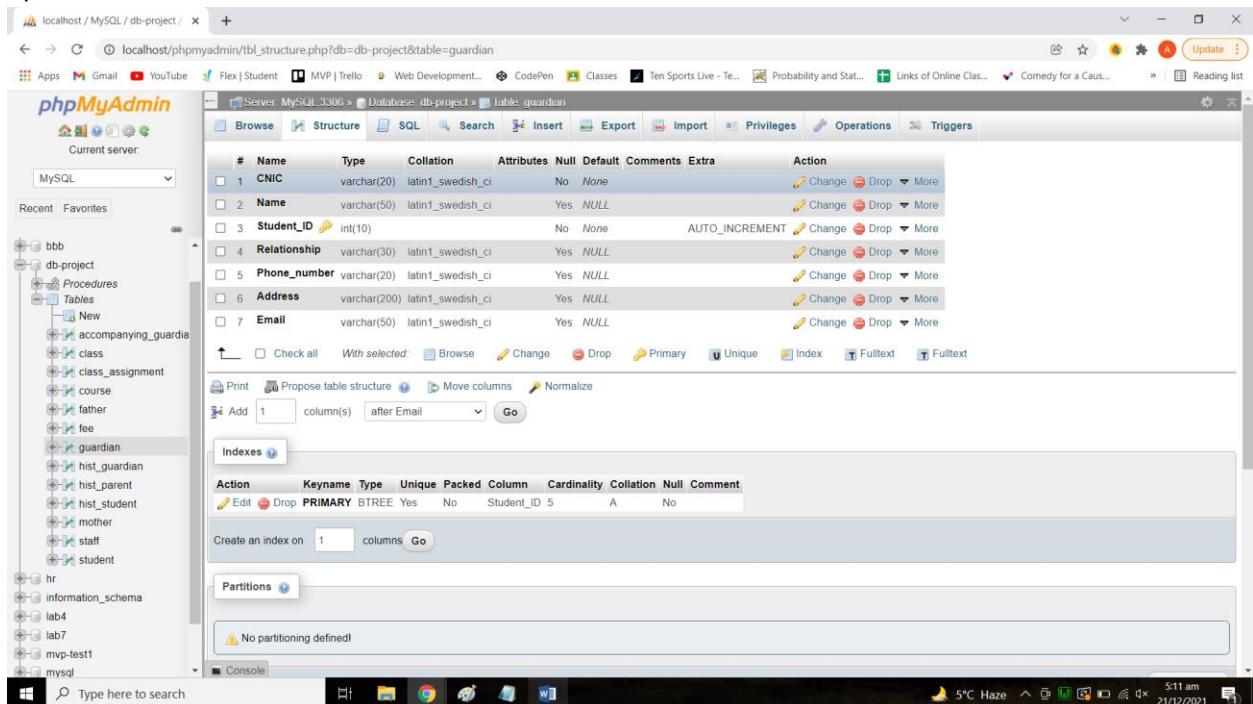
A table to record the data of the mothers of enrolled students

4)



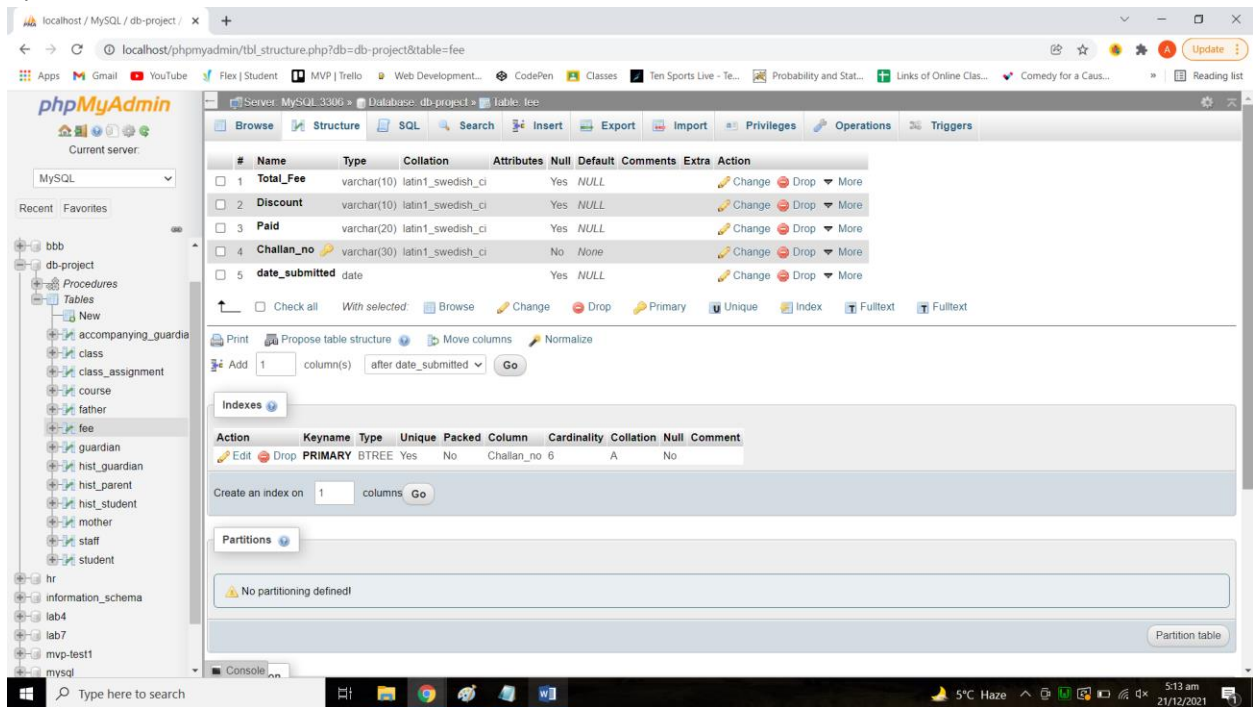
A table to record the data of the fathers of enrolled students

5)



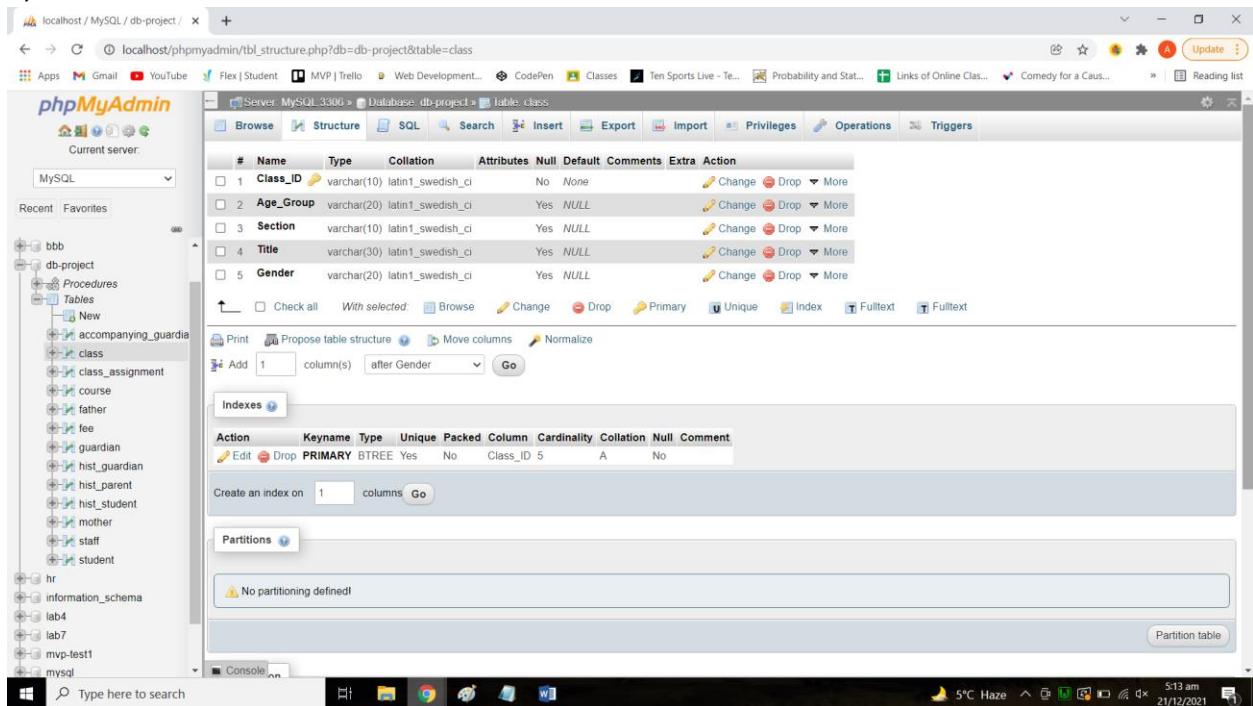
A table to record the data of the registered guardians of enrolled students

6)



A table to record the fee process

7)



A table to record the appropriate class information in the school

8)

The screenshot shows the phpMyAdmin interface for a MySQL database named 'db-project'. The 'course' table is selected, and its structure is displayed. The table has three columns: 'Course_ID' (varchar(10), latin1_swedish_ci, No, None), 'Class_ID' (varchar(20), latin1_swedish_ci, No, None), and 'Course_Title' (varchar(30), latin1_swedish_ci, Yes, NULL). The 'Course_ID' column is the primary key. The 'Indexes' section shows a PRIMARY index on 'Course_ID'.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Course_ID	varchar(10)	latin1_swedish_ci		No	None			Change Drop More
2	Class_ID	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
3	Course_Title	varchar(30)	latin1_swedish_ci		Yes	NULL			Change Drop More

A table to keep track of all the courses being taught at the school.

9)

The screenshot shows the phpMyAdmin interface for a MySQL database named 'db-project'. The 'accompanying_guardian' table is selected, and its structure is displayed. The table has ten columns: 'CNIC' (varchar(20), latin1_swedish_ci, No, None), 'Name' (varchar(50), latin1_swedish_ci, Yes, NULL), 'Student_ID' (varchar(10), latin1_swedish_ci, Yes, NULL), 'Relationship' (varchar(30), latin1_swedish_ci, Yes, NULL), 'Phone_number' (varchar(20), latin1_swedish_ci, Yes, NULL), 'Address' (varchar(200), latin1_swedish_ci, Yes, NULL), 'Email' (varchar(50), latin1_swedish_ci, Yes, NULL), 'Assistance' (varchar(150), latin1_swedish_ci, Yes, NULL), 'Student_Name' (varchar(50), latin1_swedish_ci, Yes, NULL), and 'Absence_Reason' (varchar(500), latin1_swedish_ci, Yes, NULL). The 'CNIC' column is the primary key. The 'Indexes' section shows a PRIMARY index on 'CNIC'.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	CNIC	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
2	Name	varchar(50)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	Student_ID	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	Relationship	varchar(30)	latin1_swedish_ci		Yes	NULL			Change Drop More
5	Phone_number	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	Address	varchar(200)	latin1_swedish_ci		Yes	NULL			Change Drop More
7	Email	varchar(50)	latin1_swedish_ci		Yes	NULL			Change Drop More
8	Assistance	varchar(150)	latin1_swedish_ci		Yes	NULL			Change Drop More
9	Student_Name	varchar(50)	latin1_swedish_ci		Yes	NULL			Change Drop More
10	Absence_Reason	varchar(500)	latin1_swedish_ci		Yes	NULL			Change Drop More

A special table to record in case a guardian needs to accompany a child

10)

The screenshot shows the phpMyAdmin interface for a MySQL database named 'db-project'. The 'class_assignment' table is selected. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Student_ID	int(20)			No	None			Change Drop More
2	Old_Class	varchar(30)	latin1_swedish_ci		No	None			Change Drop More
3	New_Class	varchar(30)	latin1_swedish_ci		No	None			Change Drop More
4	Reason	varchar(500)	latin1_swedish_ci		No	None			Change Drop More
5	Approved_By	varchar(50)	latin1_swedish_ci		No	None			Change Drop More
6	Date	date			No	None			Change Drop More
7	RECORD_ID	int(10)			No	None		AUTO_INCREMENT	Change Drop More

The 'Indexes' section shows a PRIMARY index on the 'RECORD_ID' column.

A special table to keep track of change of class and class assignment to students

11)

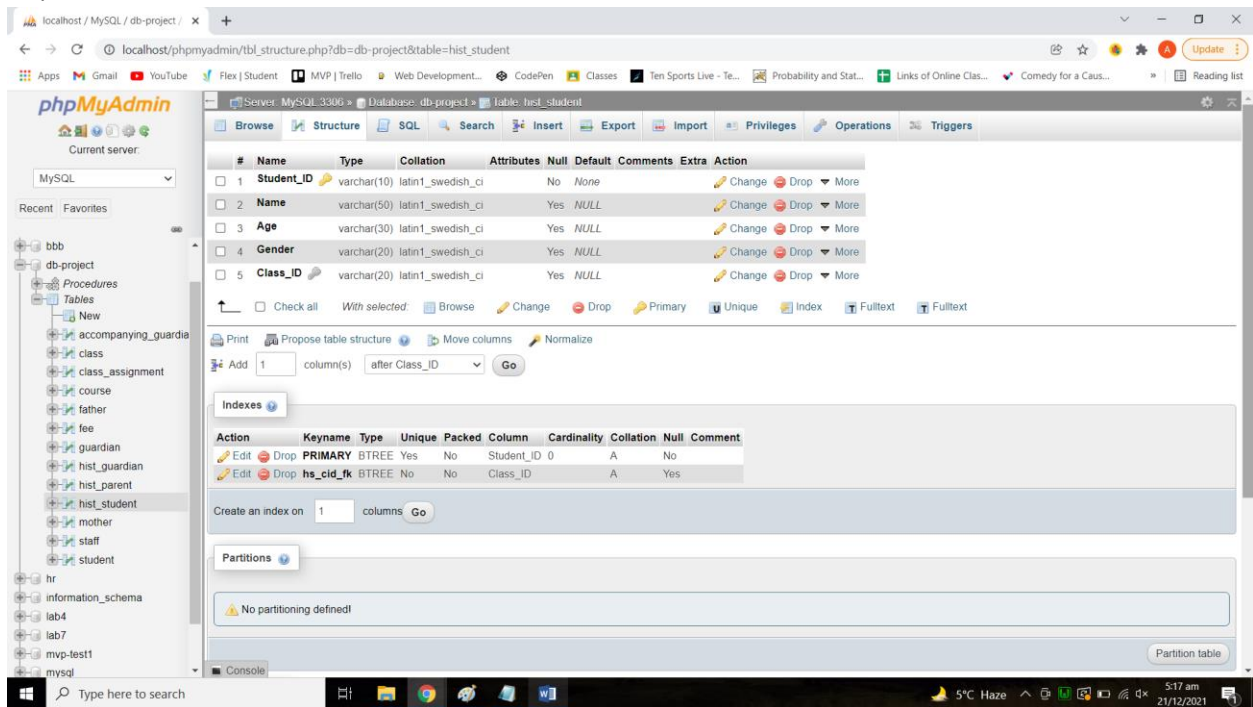
The screenshot shows the phpMyAdmin interface for a MySQL database named 'db-project'. The 'hist_parent' table is selected. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	CNIC	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
2	Name	varchar(50)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	Student_ID	int(30)			No	None		AUTO_INCREMENT	Change Drop More
4	Phone_number	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
5	Address	varchar(150)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	Email	varchar(50)	latin1_swedish_ci		Yes	NULL			Change Drop More

The 'Indexes' section shows a PRIMARY index on the 'Student_ID' column.

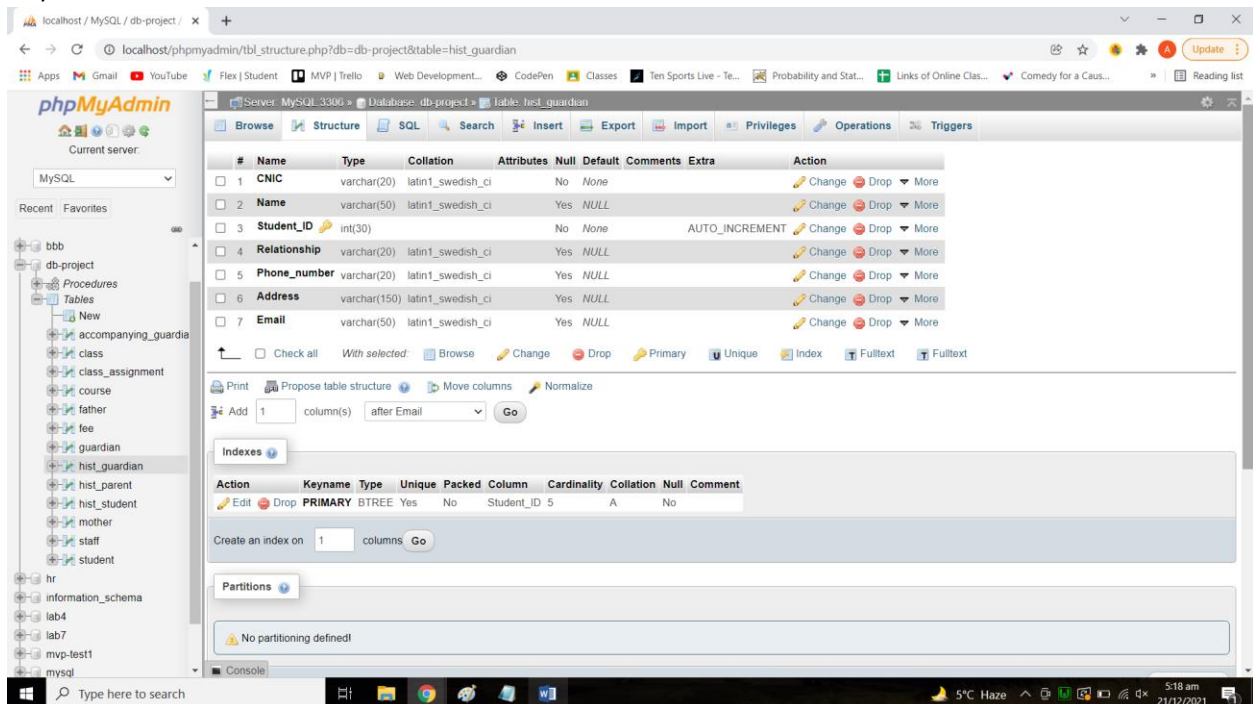
A table to track changes to the parent records as required

12)



A table to track changes to the student records as required

13)



A table to track changes to the guardian records as required