

We connected index.html with four other pages. We call them information pages and they are train, staff, passengers and vendors. From the schema that we have created in the previous assignment, we mainly segregated all the schemas into four pages. All the information related to train, staff, passengers and vendors is stored on the database and the tables' status are shown on the corresponding information pages. Now, we properly cascaded on delete and update all the tables in the backend pages using foreign key constraints that we mentioned in the previous assignment.

From the information pages, we created a passage to some more pages where you can add information using HTML forms. Here are some measures you need to take care of while adding the information.

1. The date format should be yyyy-mm-dd.
2. Only those train ids, you can add in the transaction table which are already present in the trains table. Since those are the trains that are present in the Gandhinagar Railway station, a passenger can afford a ticket. This is enforced by the foreign key constraints.
3. Once you have deleted a row from any of the information pages, you can't get that row as the row is removed from the sql dump file. You need to again manually use HTML pages.
4. If you commit any error while inserting any values in the form Mysql_db exceptions error page will open. Go back and change the values that you wanted to add in the form.
5. Currently, we are assuming that the figures for all the workers in the staff information page are null. However, we can add that information using blob. But we need to reshape and resize the input image of every worker which is again a lot of process. Users also need to follow our size and shape ranges.
6. To update a value, the same form as the insert will open up. In that form, if we input an already existing id, then that id will be updated.
7. To enter multiple phone numbers, separate the phone numbers by a space.

Inserting a new value in Trains:

The screenshot shows the MySQL Workbench interface. On the left, the 'Train Details' table is displayed with columns: train_id, start_pt, dest_pt, arrival_time, dept_time, and Operations. The data rows are:

train_id	start_pt	dest_pt	arrival_time	dept_time	Operations
12344	Kol	Amd	22:00:00	22:10:00	Delete Update
12345	Kol	Amd	13:25:00	13:26:00	Delete Update
12346	Banglore	Jaipur	17:00:00	17:03:00	Delete Update
13000	ABC	DEF	1:00:00	2:00:00	Delete Update

Below it is the 'Schedule' table with columns: train_id, arrival_day, platform. The data rows are:

train_id	arrival_day	platform
12344	Tuesday	4
12345	Saturday	2
12346	Monday	1
13000	Monday	5

An 'Insert Train' button is located below the Schedule table. On the right, the Query Editor shows a query:

```
1 use assignment6;  
2  
3 select * from train;
```

The Results pane shows the output of the query:

#	train_id	start_pt	dest_pt	arrival_time	dept_time
1	12344	Kol	Amd	22:00:00	22:10:00
2	12345	Kol	Amd	13:25:00	13:26:00
3	12346	Banglore	Jaipur	17:00:00	17:03:00
4	13000	ABC	DEF	1:00:00	2:00:00

The Action Output pane shows the execution details:

#	Time	Action	Message	Duration / Fetch
1	23:07:10	use assignment6	0 row(s) affected	0.00068 sec
2	23:08:01	select * from train LIMIT 0, 50000	3 row(s) returned	0.0012 sec / 0.00
3	23:08:14	select * from train LIMIT 0, 50000	4 row(s) returned	0.0010 sec / 0.00

Updating value in Trains:

The screenshot shows the MySQL Workbench interface. On the left, the 'Train Details' table is displayed with columns: train_id, start_pt, dest_pt, arrival_time, dept_time, and Operations. The data rows are:

train_id	start_pt	dest_pt	arrival_time	dept_time	Operations
12344	Kol	Amd	22:00:00	22:10:00	Delete Update
12345	Kol	Amd	13:25:00	13:26:00	Delete Update
12346	Banglore	Jaipur	17:00:00	17:03:00	Delete Update
13000	ABC	GHJ	1:00:00	3:00:00	Delete Update

Below it is the 'Schedule' table with columns: train_id, arrival_day, platform. The data rows are:

train_id	arrival_day	platform
12344	Tuesday	4
12345	Saturday	2
12346	Monday	1
13000	Tuesday	1

An 'Insert Train' button is located below the Schedule table. On the right, the Query Editor shows a query:

```
1 use assignment6;  
2  
3 select * from train;
```

The Results pane shows the output of the query:

#	train_id	start_pt	dest_pt	arrival_time	dept_time
1	12344	Kol	Amd	22:00:00	22:10:00
2	12345	Kol	Amd	13:25:00	13:26:00
3	12346	Banglore	Jaipur	17:00:00	17:03:00
4	13000	ABC	GHJ	01:00:00	03:00:00

The Action Output pane shows the execution details:

#	Time	Action	Message	Duration / Fetch
1	23:07:10	use assignment6	0 row(s) affected	0.00068 sec
2	23:08:01	select * from train LIMIT 0, 50000	3 row(s) returned	0.0012 sec / 0.00
3	23:08:14	select * from train LIMIT 0, 50000	4 row(s) returned	0.0010 sec / 0.00
4	23:09:01	select * from train LIMIT 0, 50000	4 row(s) returned	0.00098 sec / 0.00

Deleting Value in Trains:-

The screenshot displays the MySQL Workbench interface. On the left, the 'Train Details' table is shown with columns: train_id, start_pt, dest_pt, arrival_time, dept_time, and Operations. The 'Schedule' table is also visible with columns: train_id, arrival_day, and platform. The main window shows the 'Query 1' editor with the following SQL code:

```
1 use assignment6;
2
3 select * from train;
```

The 'Action Output' window at the bottom shows the results of the query, listing the train details and the duration of the fetch operation.

#	Time	Action	Message	Duration / Fetch
1	23:07:10	use assignment6	0 row(s) affected	0.00000 sec / 0.00000
2	23:08:01	select * from train LIMIT 0, 50000	3 row(s) returned	0.0012 sec / 0.00000
3	23:08:14	select * from train LIMIT 0, 50000	4 row(s) returned	0.0010 sec / 0.00000
4	23:09:01	select * from train LIMIT 0, 50000	4 row(s) returned	0.00098 sec / 0.00000
5	23:09:10	select * from train LIMIT 0, 50000	3 row(s) returned	0.00084 sec / 0.00000

Inserting Value in Passengers:-

The screenshot displays the MySQL Workbench interface. On the left, the 'Passenger Details' table is shown with columns: aadhar_no, first_name, last_name, and dob. The 'Transactions' table is also visible with columns: transaction_id, mode of payment, amount, date of payment, and aadhar_no. The 'Ticket Details' table is shown with columns: aadhar_no, train_id, transaction_id, seat_no, coach_no, ticket status, and date of travel. The main window shows the 'Query 1' editor with the following SQL code:

```
1 use assignment6;
2
3 select * from passenger;
```

The 'Action Output' window at the bottom shows the results of the query, listing the passenger details and the duration of the fetch operation.

#	Time	Action	Message	Duration / Fetch
3	23:09:14	select * from train LIMIT 0, 50000	4 row(s) returned	0.00098 sec / 0.00000
4	23:09:01	select * from train LIMIT 0, 50000	4 row(s) returned	0.00084 sec / 0.00000
5	23:09:10	select * from train LIMIT 0, 50000	3 row(s) returned	0.00032 sec / 0.00000
6	23:13:46	select * from passenger LIMIT 0, 50000	3 row(s) returned	0.00032 sec / 0.00000
7	23:15:03	select * from passenger LIMIT 0, 50000	4 row(s) returned	0.00098 sec / 0.00000

Updating Value in Passengers:-

The screenshot displays the MySQL Workbench interface. On the left, three tables are shown: **Passenger Details**, **Transactions**, and **Ticket Details**. The **Passenger Details** table has columns: aadhar_no, first_name, last_name, dob, and a Delete/Update button. The **Transactions** table has columns: transaction_id, mode of payment, amount, Date of payment, and aadhar_no. The **Ticket Details** table has columns: aadhar_no, train_id, transaction_id, seat_no, coach_no, ticket status, and date of travel. Below the tables is an "Insert Passenger" button. On the right, the Query Editor shows a query: `use assignment6;` and `select * from passenger;`. The Action Output pane shows the results of the query, listing 8 rows of passenger data.

aadhar_no	first_name	last_name	dob	
123	Mihir	Chauhan	2007-02-01	Delete/Update
123456678	Rithik	Maligi	2001-03-07	Delete/Update
123456679	Divyanshu	Meena	2002-04-08	Delete/Update
123456680	Harsha	Vardhan	2002-05-10	Delete/Update

transaction_id	mode of payment	amount	Date of payment	aadhar_no
123	Online	1500	2022-02-01	123
1234	Online	120	2022-03-03	123456678
1235	Online	1330	2022-04-08	123456679
1236	Offline	250	2021-03-08	123456680

aadhar_no	train_id	transaction_id	seat_no	coach_no	ticket status	date of travel
123	12345	123	3	3AC	Confirmed	2022-03-01
123456678	12344	1234	5	6	Cancelled	2022-03-10
123456679	12345	1235	9	2	On-Time	2022-04-12
123456680	12346	1236	35	4	Delay	2021-04-12

Insert Passenger

```
use assignment6;
select * from passenger;
```

#	Time	Action	Message	Duration / Fetch
5	23:09:10	select * from train LIMIT 0, 50000	3 row(s) returned	0.00084 sec / 0...
6	23:13:46	select * from passenger LIMIT 0, 50000	3 row(s) returned	0.00032 sec / 0...
7	23:15:03	select * from passenger LIMIT 0, 50000	4 row(s) returned	0.00098 sec / 0...
8	23:15:56	select * from passenger LIMIT 0, 50000	4 row(s) returned	0.00028 sec / 0...

Deleting Value in Passengers:-

The screenshot displays the MySQL Workbench interface. On the left, three tables are shown: **Passenger Details**, **Transactions**, and **Ticket Details**. The **Passenger Details** table has columns: aadhar_no, first_name, last_name, dob, and a Delete/Update button. The **Transactions** table has columns: transaction_id, mode of payment, amount, Date of payment, and aadhar_no. The **Ticket Details** table has columns: aadhar_no, train_id, transaction_id, seat_no, coach_no, ticket status, and date of travel. Below the tables is an "Insert Passenger" button. On the right, the Query Editor shows a query: `use assignment6;` and `select * from passenger;`. The Action Output pane shows the results of the query, listing 9 rows of passenger data.

aadhar_no	first_name	last_name	dob	
123456678	Rithik	Maligi	2001-03-07	Delete/Update
123456679	Divyanshu	Meena	2002-04-08	Delete/Update
123456680	Harsha	Vardhan	2002-05-10	Delete/Update

transaction_id	mode of payment	amount	Date of payment	aadhar_no
1234	Online	120	2022-03-03	123456678
1235	Online	1330	2022-04-08	123456679
1236	Offline	250	2021-03-08	123456680

aadhar_no	train_id	transaction_id	seat_no	coach_no	ticket status	date of travel
123456678	12344	1234	5	6	Cancelled	2022-03-10
123456679	12345	1235	9	2	On-Time	2022-04-12
123456680	12346	1236	35	4	Delay	2021-04-12

Insert Passenger

```
use assignment6;
select * from passenger;
```

#	Time	Action	Message	Duration / Fetch
6	23:13:46	select * from passenger LIMIT 0, 50000	3 row(s) returned	0.00032 sec / 0...
7	23:15:03	select * from passenger LIMIT 0, 50000	4 row(s) returned	0.00098 sec / 0...
8	23:15:56	select * from passenger LIMIT 0, 50000	4 row(s) returned	0.00028 sec / 0...
9	23:16:25	select * from passenger LIMIT 0, 50000	3 row(s) returned	0.00034 sec / 0...

Inserting in Staff:

The screenshot shows the MySQL Workbench interface with a green background. On the left, there are three tables: Staff Details, Worker Details, and Worker Phone Details. The Worker Details table has columns: worker_id, first_name, last_name, age_at_joining, date_of_joining, and picture. The Worker Phone Details table has columns: phone_no and worker_id. The Worker Details table is being updated with a new phone number.

Staff Details

worker_id	salary	of no	class
101	100000	11000	A

Worker Details

worker_id	first_name	last_name	age_at_joining	date_of_joining	picture
101	Divyanshu	Meena	22	2010-05-11	b'None'

Worker Phone Details

phone_no	worker_id
06375921338	101
12345678910	101

MySQL Workbench Query Window

```
1 * use assignment6;  
2  
3 * select * from worker;  
4  
5 * select * from worker_phone;
```

Action Output

#	Time	Action	Message
1	00:22:00	use assignment6	0 row(s) affected
2	00:23:15	select * from workers LIMIT 0, 50000	Error Code: 1146. Tab
3	00:23:21	select * from worker LIMIT 0, 50000	0 row(s) returned
4	00:24:27	select * from worker LIMIT 0, 50000	1 row(s) returned
5	00:25:06	select * from worker_phone LIMIT 0, 50000	2 row(s) returned

Updating in Staff:

The screenshot shows the MySQL Workbench interface with a green background. On the left, there are three tables: Staff Details, Worker Details, and Worker Phone Details. The Worker Details table is being updated with a new last name.

Staff Details

worker_id	salary	of no	class
101	100000	11000	A

Worker Details

worker_id	first_name	last_name	age_at_joining	date_of_joining	picture
101	Divyanshu	Sharma	22	2010-05-11	b'None'

Worker Phone Details

phone_no	worker_id
06375921338	101

MySQL Workbench Query Window

```
1 * use assignment6;  
2  
3 * select * from worker;  
4  
5 * select * from worker_phone;
```

Action Output

#	Time	Action	Message
1	00:22:00	use assignment6	0 row(s) affected
2	00:23:15	select * from workers LIMIT 0, 50000	Error Code: 1146. Tab
3	00:23:21	select * from worker LIMIT 0, 50000	0 row(s) returned
4	00:24:27	select * from worker LIMIT 0, 50000	1 row(s) returned
5	00:25:06	select * from worker_phone LIMIT 0, 50000	2 row(s) returned
6	00:26:00	select * from worker_phone LIMIT 0, 50000	1 row(s) returned

Deleting in Staff:

The screenshot shows a MySQL Workbench interface. On the left, a web application displays 'Staff Details' with the message 'No staff members found. Add one below!'. Below this are sections for 'Worker Details' (message: 'There are no workers') and 'Worker Phone Details' (message: 'There are no worker phones'). An 'Insert Staff' button is visible. On the right, the MySQL Workbench query window shows a query with five statements:

```
1 use assignment6;
2
3 select * from worker;
4
5 select * from worker_phone;
```

The 'Schemas' pane on the left lists tables: passenger, staff, stall, stall_owner, ticket, train, train_employee, train_schedule, transact, travels, vendor, worker, and worker_phone. The 'Query Output' pane shows the results of the queries, with the last statement returning 0 rows.

Inserting In Vendors:

The screenshot shows a web application interface on the left and a terminal window on the right. The web application displays 'Vendor Details' with a table showing two vendors:

worker_id	job	num_employees
12345	Clerk	5
12346	Cleaner	3

Below this are sections for 'Worker', 'Worker_phone', 'Stalls', and 'Stall Owners', each with a table showing data. The terminal window on the right shows a series of SQL queries and their results:

```
mysql> select * from vendor;
+-----+-----+-----+
| worker_id | job      | num_employees |
+-----+-----+-----+
| 12345     | Clerk   | 5             |
| 12346     | Cleaner | 3             |
+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from worker;
+-----+-----+-----+-----+-----+-----+
| worker_id | first_name | last_name | age_at_joining | date_at_joining | picture |
+-----+-----+-----+-----+-----+-----+
| 12345     | Rithik    | Maligi    | 22             | 2022-03-03      | 0x4E41 |
| 12346     | Harsha    | Vardhan   | 25             | 2021-04-04      | 0x4E41 |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from worker_phone;
+-----+-----+
| phone_no | worker_id |
+-----+-----+
| 9246865568 | 12345     |
| 9390146165 | 12346     |
+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from stall;
+-----+-----+-----+-----+
| stall_id | stall_name | platform_no | worker_id |
+-----+-----+-----+-----+
| 788      | Amul      | 7           | 12346     |
| 987      | Krupa     | 2           | 12345     |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from stall_owner;
+-----+-----+
| worker_id | stall_id |
+-----+-----+
| 12346     | 788      |
| 12345     | 987      |
+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

Updating In Vendors:

The screenshot shows a web application interface on the left and a MySQL command prompt on the right. The web application has a purple background and displays several tables with data and update links.

Vendor Details

worker_id	job	num_employees
12345	TC	5
12346	Cleaner	3

Worker

worker_id	first_name	last_name	age_of_joining	date_of_joining	picture
12345	Varun	Barala	25	2019-04-04	b'NA'
12346	Harsha	Vardhan	25	2021-04-04	b'NA'

Worker_phone

phone_no	worker_id
8765436778	12345
924865568	12345
9786755678	12345
9390146165	12346

Stalls

stall_id	stall_name	platform_no
788	Amul	7
987	sainath	8

Stall Owners

worker_id	stall_id
12346	788
12345	987

MySQL Command Prompt

```
mysql> select * from vendor;
+-----+-----+-----+
| worker_id | job      | num_employees |
+-----+-----+-----+
| 12345     | TC       | 5             |
| 12346     | Cleaner  | 3             |
+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from worker;
+-----+-----+-----+-----+-----+-----+
| worker_id | first_name | last_name | age_at_joining | date_at_joining | picture |
+-----+-----+-----+-----+-----+-----+
| 12345     | Varun      | Barala    | 25             | 2019-04-04      | 0xAE41  |
| 12346     | Harsha     | Vardhan   | 25             | 2021-04-04      | 0xAE41  |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from worker_phone;
+-----+-----+
| phone_no | worker_id |
+-----+-----+
| 8765436778 | 12345     |
| 924865568  | 12345     |
| 9786755678 | 12345     |
| 9390146165 | 12346     |
+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from stall;
+-----+-----+-----+
| stall_id | stall_name | platform_no | worker_id |
+-----+-----+-----+
| 788      | Amul       | 7           | 12346     |
| 987      | sainath    | 8           | 12345     |
+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from stall_owner;
+-----+-----+
| worker_id | stall_id |
+-----+-----+
| 12346     | 788      |
| 12345     | 987      |
+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

Deleting In Vendors:

The screenshot shows the same web application interface on the left and a MySQL command prompt on the right. The web application now displays messages indicating that all data has been deleted.

Vendor Details

There are no Vendors. Add one below!

Worker

There are no workers

Worker_phone

There are no workers

Stalls

There are no stalls

Stall Owners

There are no stalls

MySQL Command Prompt

```
mysql> select * from vendor;
Empty set (0.00 sec)

mysql> select * from worker;
Empty set (0.00 sec)

mysql> select * from worker_phone;
Empty set (0.00 sec)

mysql> select * from stall;
Empty set (0.00 sec)

mysql> select * from stall_owner;
Empty set (0.00 sec)

mysql>
```

Contribution:

Note that all members contributed both in the front end and back end.

Varun Barala 19110105	Equal
Ayush Anand 19110074	Zero
Rithik Maligi 19110098	Equal
Divyanshu Meena 19110081	Equal
G B Harsha Vardhan 19110083	Equal
Gunuru Manoj Taraka Ramarao 19110085	Equal
Harshil Purohit 19110057	Equal
Mihir Chauhan 19110079	Equal