Project Name: FIND YOUR DOCTOR(FYD)

**Team member:**

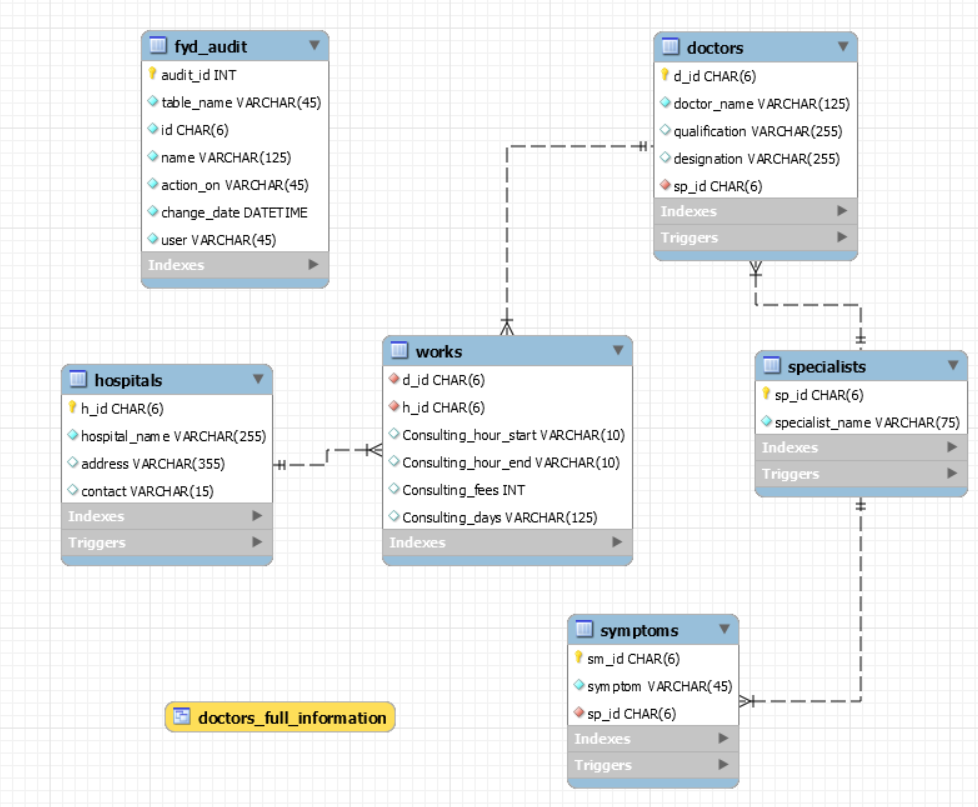
1. Sabbir Hosen (ID: 18201076)
2. Shahriar Shafin (ID: 18201070)

**Project objectives:**

1. This a web based virtual assistant
2. Find right doctor on the basis of your problems, symptoms and specialist.
3. Get doctor full information like name, designation, specialist, hospitals, Consulting time, fees, and days.
4. collect all problems and symptoms, after analysing the data it will suggest you the best doctor in specific sector.

**Query for the project**

**E-R Diagram:**



**Views for the project:**

|  |
| --- |
| **doctors\_full\_information** |
| d\_id  doctor\_name  qualification  designation  specialist\_name  hospital\_name  address  contact  Consulting\_hour\_start  Consulting\_hour\_end  Consulting\_fees  Consulting\_days |

Query for create view:

CREATE VIEW doctors\_full\_information AS

SELECT

d.d\_id,

d.doctor\_name,

d.qualification,

d.designation,

s.specialist\_name,

h.hospital\_name,

h.address,

h.contact,

w.Consulting\_hour\_start,

w.Consulting\_hour\_end,

w.Consulting\_fees,

w.Consulting\_days

FROM

doctors d

JOIN

works w USING (d\_id)

JOIN

hospitals h USING (h\_id)

JOIN

specialists s USING (sp\_id);



**Store procedures:**

CREATE DEFINER=`root`@`localhost` PROCEDURE `fyd\_audit\_table`(

table\_name varchar(45),

id char(6),

name varchar(125),

action\_on varchar(45),

change\_date date,

user varchar(45)

)

BEGIN

insert into fyd\_audit

set

audit\_id = default,

fyd\_audit.table\_name = table\_name,

fyd\_audit.id = id,

fyd\_audit.name = name,

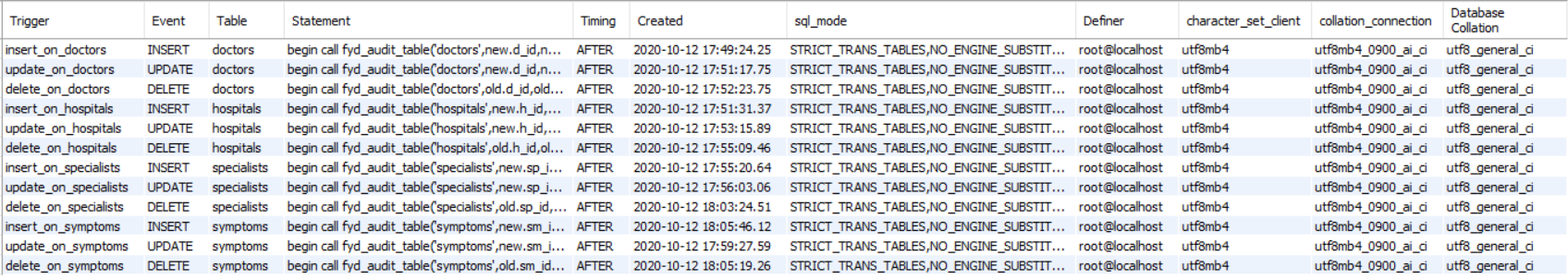
fyd\_audit.action\_on = action\_on,

fyd\_audit.change\_date = change\_date,

fyd\_audit.user = user;

END

**Triggers on doctors, hospitals, symptoms and specialist tables on insert update and delete actions.**



**Query**

\*I’ll attached a “Query.sql” at attachment that contains all the query.

**1. Find doctors using a specialist name.**

Specialist names are-

* Cardiology
* Dental
* Dermatology
* Eye
* ENT
* Gynaecology and Obstetrics
* Gastroenterology
* Hepatologists
* Haematology
* Medicine
* Nephrologists
* Neuromedicine
* Orthopaedics
* Psychologist
* Endocrinologists
* Pediatric
* Urology

Find doctors specialist is ENT:

**SELECT**

d.doctor\_name, d.qualification, d.designation

**FROM**

doctors d

**WHERE**

sp\_id = (**SELECT**

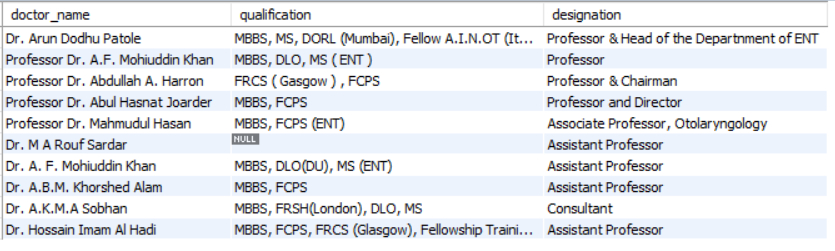
sp\_id

**FROM**

specialists

**WHERE**

specialist\_name **REGEXP** '^ENT');



**2. Find doctors all information specialist is ENT:**

**SELECT**

**\***

**FROM**

doctors\_full\_information

**WHERE**

d\_id IN (**SELECT**

d\_id

**FROM**

doctors

**WHERE**

sp\_id = (**SELECT**

sp\_id

**FROM**

specialists

**WHERE**

specialist\_name **REGEXP** '^ENT'));



**3. Find doctor by hospital name.**

**EX: Hospital name = LabAid Ltd**

**SELECT**

**\***

**FROM**

**doctors**

**WHERE**

**d\_id IN (SELECT**

**d\_id**

**FROM**

**works**

**WHERE**

**h\_id IN (SELECT**

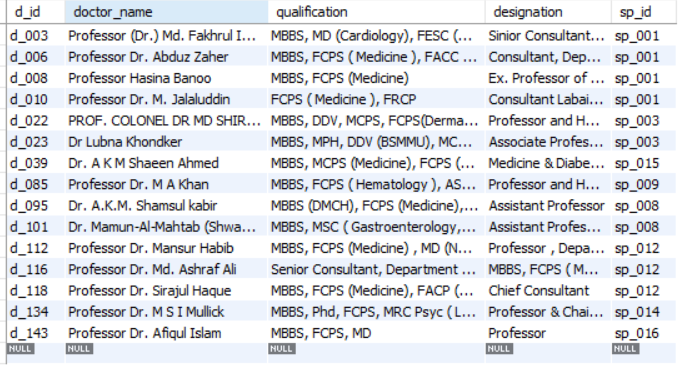
**h\_id**

**FROM**

**hospitals**

**WHERE**

**hospital\_name REGEXP 'LabAid'));**



**4. Find doctor using location and specific specialist name:**

**EX: Dhanmondi and Dermatology, Dhanmondi and Medicine, Gulshan and Neuromedicine**

SELECT

doctor\_name,

qualification,

specialist\_name,

hospital\_name,

address,

contact,

Consulting\_hour\_start,

Consulting\_hour\_end,

Consulting\_fees,

Consulting\_days

FROM

doctors\_full\_information

WHERE

specialist\_name REGEXP '^Dermatology'

AND d\_id IN (SELECT

d\_id

FROM

doctors

JOIN

works USING (d\_id)

JOIN

hospitals USING (h\_id)

WHERE

h\_id IN (SELECT

h\_id

FROM

hospitals

WHERE

hospital\_name REGEXP 'Dhanmondi'));



**5. Search doctor by hospital and Specialist. Like Cardiology (Heart) specialist from popular hospital**.

SELECT

d.doctor\_name,

d.qualification,

d.designation,

w.Consulting\_hour\_start,

w.Consulting\_hour\_end,

w.Consulting\_fees,

w.Consulting\_days

FROM

doctors d

JOIN

works w USING (d\_id)

WHERE

sp\_id = (SELECT

sp\_id

FROM

specialists s

WHERE

specialist\_name REGEXP '^Cardiology')

AND h\_id IN (SELECT

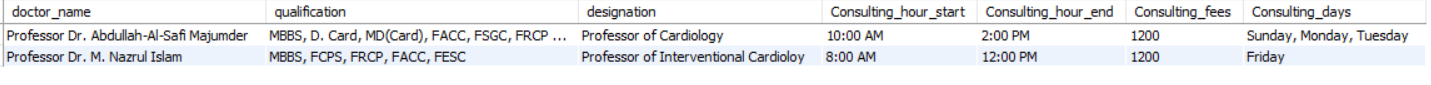
h\_id

FROM

hospitals h

WHERE

hospital\_name REGEXP 'popular');



**6. Find symptoms of specific specialist sector. Like cardiologist, ENT**

SELECT

symptom

FROM

symptoms

WHERE

sp\_id IN (SELECT

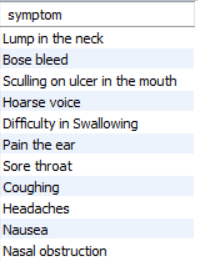
sp\_id

FROM

specialists

WHERE

specialist\_name REGEXP '^Cardiology');



**7. Search doctors by name and specialist. Ex. Details of “Dr. A.K.M. Nazmus Saquib” and specialist “Eye”**

SELECT

\*

FROM

doctors\_full\_information

WHERE

d\_id IN (SELECT

d\_id

FROM

doctors

WHERE

doctor\_name REGEXP 'Dr. A.K.M. Nazmus Saquib'

AND sp\_id = (SELECT

sp\_id

FROM

specialists

WHERE

specialist\_name REGEXP '^Eye'));



**8. Is a doctor available or not available on the specific days in hospital search by doctor name and hospital name.**

**Ex: “Professor Dr. M. Nazrul Islam” in “Popular Diagnostic Centre” Hospital is available today.**

SELECT

IF((SELECT

d\_id

FROM

doctors\_full\_information

WHERE

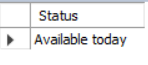
doctor\_name REGEXP 'Professor Dr. M. Nazrul Islam'

AND hospital\_name REGEXP 'Popular Diagnostic Centre'

AND Consulting\_days REGEXP (SELECT DAYNAME(CURDATE()))) IS NULL,

'Not Available today',

'Available today') AS Status;



**9. Get doctors information on specific specialist and consulting fees low to high.**

**Ex: Specialist “Medicine”**

SELECT

\*

FROM

doctors\_full\_information

WHERE

d\_id IN (SELECT

d\_id

FROM

doctors

WHERE

sp\_id = (SELECT

sp\_id

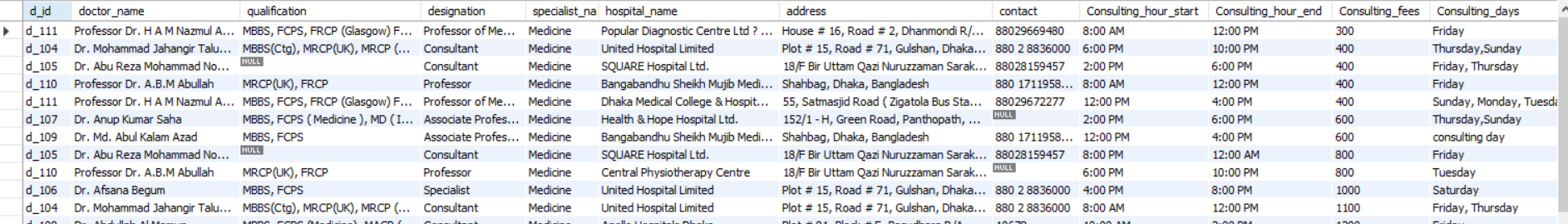
FROM

specialists

WHERE

specialist\_name REGEXP '^Medicine'))

ORDER BY Consulting\_fees;



**10. Search Which doctors don't work in any hospital.**

**Subquery:**

select \*

from doctors

where d\_id not in(select d\_id from works);

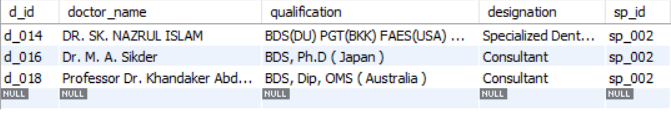
**Join:**

select \*

from doctors

right join works using(d\_id)

where h\_id is null;



**11. Number of doctor’s work in each hospital.**

SELECT

h.hospital\_name, COUNT(w.d\_id) AS 'Number Of Doctors'

FROM

hospitals h

JOIN

works w USING (h\_id)

GROUP BY h\_id;



**12. Find doctors information using “specialist name”, “week days name” and “location”.**

**EX: specialist name = Cardiology**

**Location = Dhanmondi**

**Day = Friday**

SELECT

\*

FROM

doctors

WHERE

sp\_id = (SELECT

sp\_id

FROM

specialists

WHERE

specialist\_name REGEXP '^Cardiology')

AND d\_id IN (SELECT

d\_id

FROM

hospitals

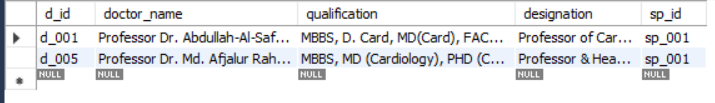
JOIN

works USING (h\_id)

WHERE

address REGEXP 'Dhanmondi'

AND Consulting\_days REGEXP 'Sunday');



**13. Find doctors whose consulting fees low in a specific specialist.**

**EX: specialist name = Cardiology**

SELECT

\*

FROM

doctors\_full\_information

WHERE

specialist\_name REGEXP '^Cardiology'

AND Consulting\_fees = (SELECT

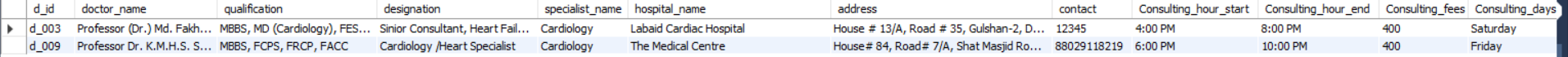
MIN(consulting\_fees)

FROM

doctors\_full\_information

WHERE

specialist\_name REGEXP '^Cardiology');



**14. Find top 5 hospital where maximum number of doctor’s work in hospital. Show row number.**

SELECT

row\_number() over(ORDER BY t.Number\_of\_Doctors DESC) as 'Row Number',

t.hospital\_name,

t.Number\_of\_Doctors

from (

SELECT

hospital\_name, COUNT(d\_id) AS Number\_of\_Doctors

FROM

hospitals h

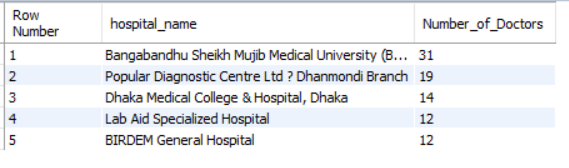
JOIN

works w USING (h\_id)

GROUP BY h\_id

ORDER BY Number\_of\_Doctors DESC

LIMIT 5) as t;



**\*\*15. Find doctors on basis of given symptoms. If symptoms are not match with any specialist name then show medicine specialist doctors**.

**EX: symptoms: Bose bleed**

**Sculling on ulcer in the mouth**

**Coughing**

**Headaches**

**Irregular periods**

**A fast heart beat**

SELECT

\*

FROM

doctors

WHERE

sp\_id = (SELECT

IFNULL((SELECT

x.sp\_id

FROM

(SELECT

sp\_id, COUNT(sp\_id) AS c

FROM

symptoms

WHERE

symptom REGEXP 'Bose bleed|Sculling on ulcer in the mouth|Coughing|Headaches|Irregular periods|A fast heart beat'

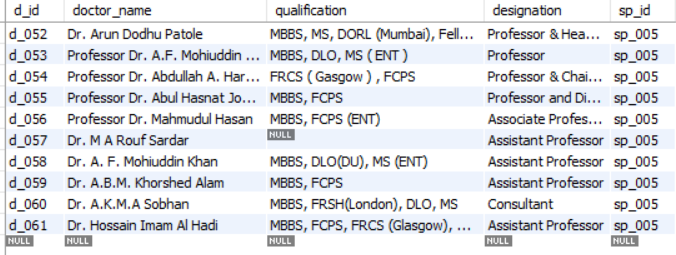
GROUP BY sp\_id

ORDER BY c DESC

LIMIT 1) AS x),

'sp\_010')

);



**Conclusion**

This is a project on the health sector. We are trying to get all the information that need to show or represent doctor information. And we are also trying to make relation between symptoms and doctor. If someone give symptoms, we are suggesting the right doctors on the specific sector on the basis of symptoms in the query (15). In future, we will apply “Machine Learning” on this project.