

# BLACKBOARD

**ARYAN SRIVASTAVA**

(201210010)

**AARYA JHA**

(201210002)



राष्ट्रीय प्रौद्योगिकी संस्थान दिल्ली  
**National Institute of Technology Delhi**  
(An autonomous Institute under the aegis of Ministry of HRD, Govt. of India)

CSB

—

**Dr. SHELLY SACHDEVA**

---

## ACKNOWLEDGEMENT

On this great occasion of accomplishment of our project on “BLACKBOARD”, we would like to sincerely express our gratitude to Dr. Shelly Sachdeva, who has been supportive through the completion of our project.

We would also be thankful to our Mr. Anil Kumar & Ms. Kanika Soni for providing all the required invaluable assistance in completion of this project.

This project has made us realise the potential we have as individuals and to put our theoretical knowledge into application. The exposure to reality has widened our extent of thinking.

We thank all our course coordinator, faculties and friends for providing all the required platform we required at stages of development of this project.

# CONTENT

1	CASE STUDY
2	INTRODUCTION
3	SYSTEM REQUIREMENTS
4	ER DIAGRAM (PREVIOUS)
5	ER DIAGRAM (UPDATED)
6	MAPPING FROM ER TO R MODEL
7	RELATIONAL SCHEME
8	DATA DICTIONARY
9	SQL QUERIES
10	POPULATED TABLES
11	DATABASE CONNECTIVITY
12	FUNCTIONALITIES
13	BIBLIOGRAPHY

## CASE STUDY

---

In the midst of the unforeseen pandemic, every single profession has suffered enormously due to the constraint being put forward in order to proceed further in respective fields.

Students have also been on the receiving end of this horrible situation. In order to overcome with the problems faced by students, “BLACKBOARD” will provide a platform for all students to organize their timetables, access all past year exam papers, a book barter system (intra-institution), social media (intra-institution) and add reminders.

Our aim is to create a portal which would combine and bring information and tasks related to the college on a single platform. This would substantially reduce time and effort, as the resources would no longer remain scattered across numerous websites and applications.

# INTRODUCTION

---

Blackboard is a student portal, which helps students stay organised with all their classes details, reminders, documents required for educational enlightenment and a book barter system. It provides a universal system for students which makes them enable to dwell onto their lives furthermore and explore themselves by being auto organised.

Over the graduation years, a student gets manifested with ample of assignments and to dos which is not always easy to recall in future, henceforth, we have created a reminder system, in which a student could personalize a reminder accordingly and which will be displayed on the dashboard.

In the midst of pandemic, the frustration of finding links for virtual classes can be a great hassle and sometimes could also lead to late arrival, in order to overcome this, we have also created a timetable of each branch year corresponding to the year which displays all the classes to be taken in the future along with designator course coordinator and class links.

The hassle of purchasing books every semester has also been addressed in this project of ours where a book barter system has been created for students to barter off their books over the semesters cutting down onto the costs of student.

Blackboard also contains a section for all the previous year question papers of mid and end semester examinations for students preparing.

Overall, Blackboard aims to be a mentor along with an auto organiser for students to aim higher than their potential by not wasting time on these minuscule but important bits and pieces of student lives.

# SYSTEM REQUIREMENTS

---

## SOFTWARE REQUIREMENTS

---

1. HyperText Markup Language (HTML), Cascading Style Sheets (CSS),
2. Java Script (JS) for frontend Development<sup>1</sup>
3. MySQL for back-end query language<sup>2</sup>
4. Django (based on PYTHON 3.9.7) for scripting, and framework<sup>3</sup>
5. Chrome for Web Browser

## HARDWARE REQUIREMENTS

---

- |                      |                          |
|----------------------|--------------------------|
| 1. Operating system: | Windows 7/8/8.1/10/11    |
| 2. Memory (RAM):     | 1 GB or above            |
| 3. Hard Disk Space:  | Greater than 250 MB      |
| 4. Processor:        | Intel Pentium 4 or later |

---

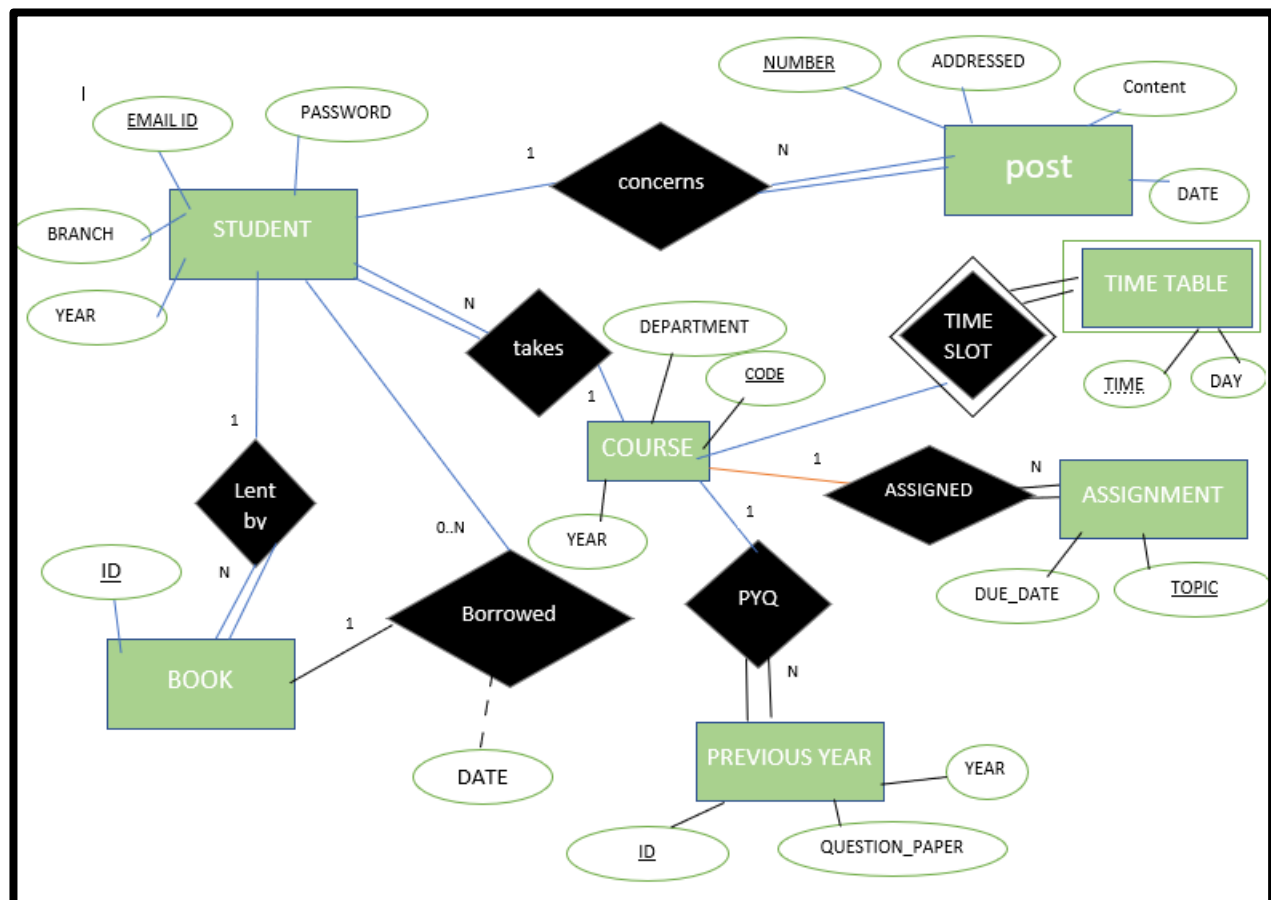
<sup>1</sup> <https://www.javascript.com/>

<sup>2</sup> <https://www.mysql.com/>

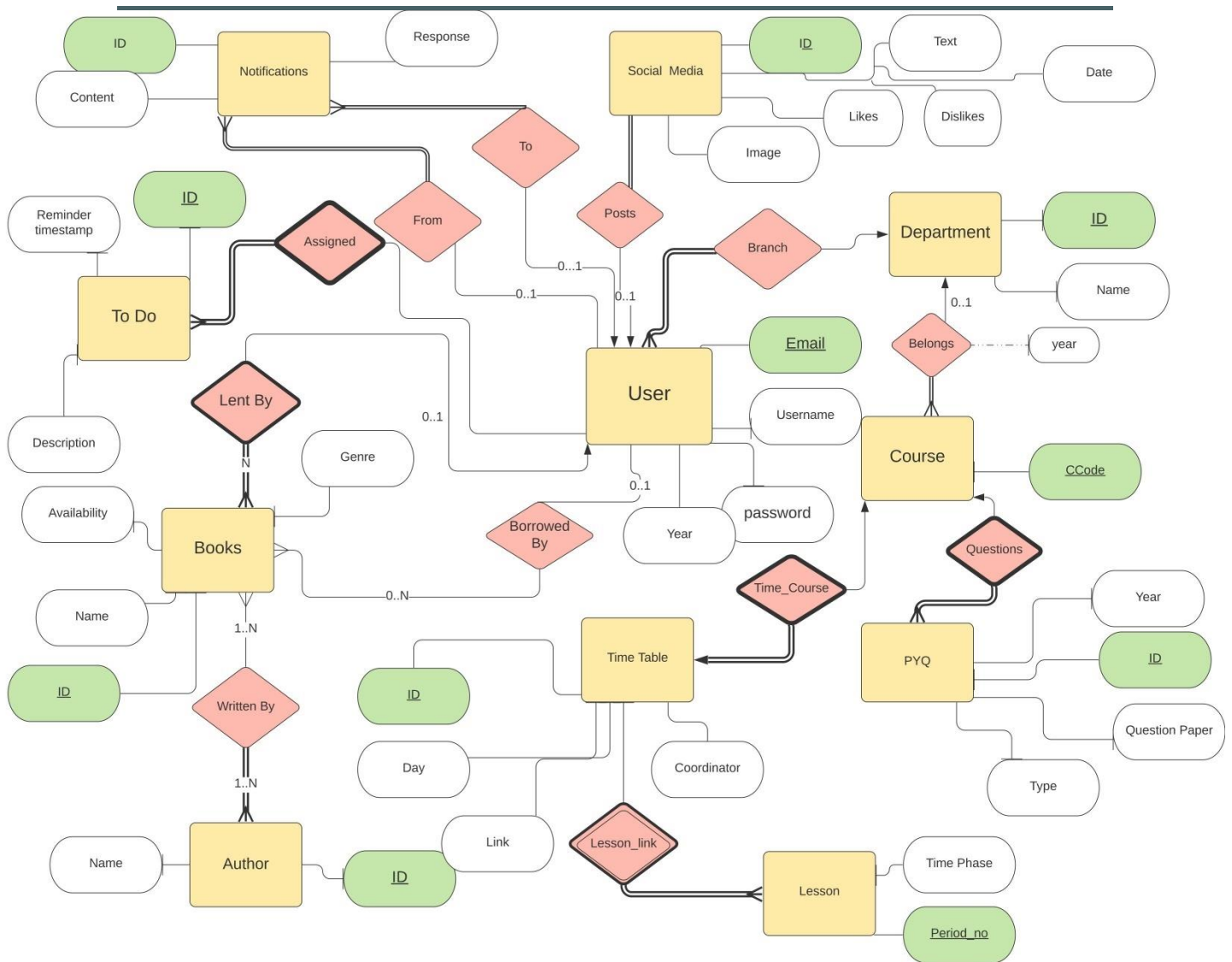
<sup>3</sup> <https://www.djangoproject.com/>



# ER DIAGRAM (PREVIOUS)

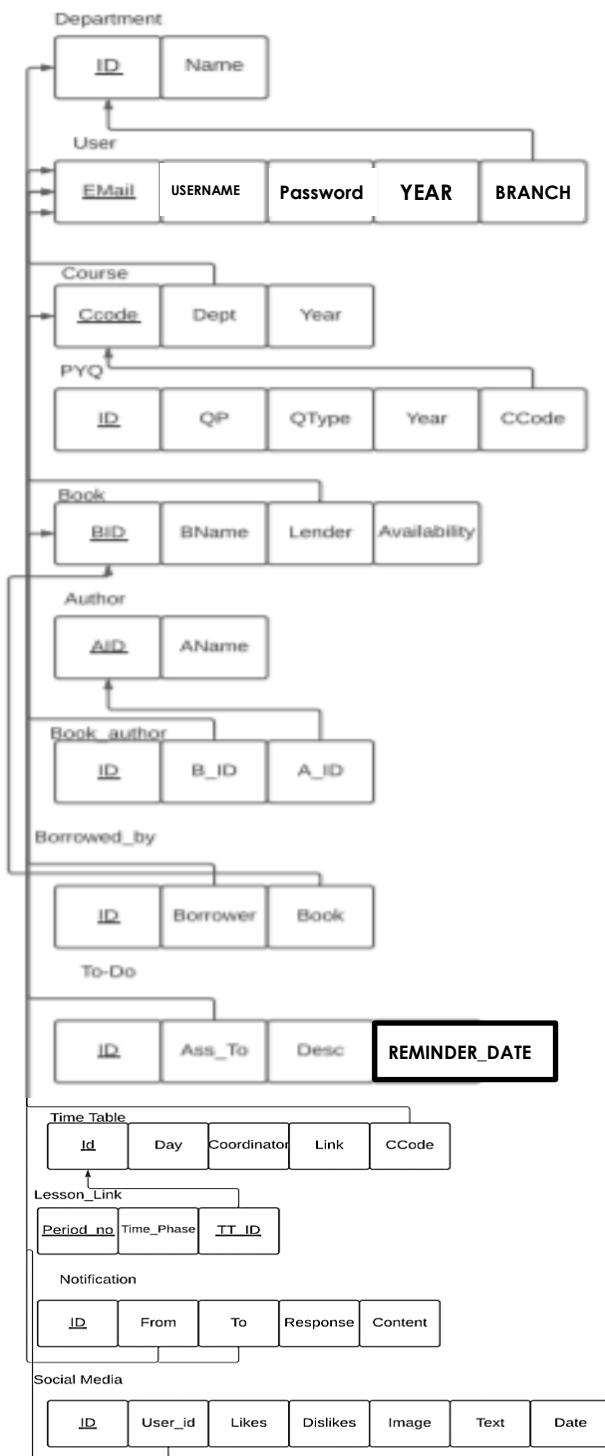


# ER DIAGRAM (UPDATED)

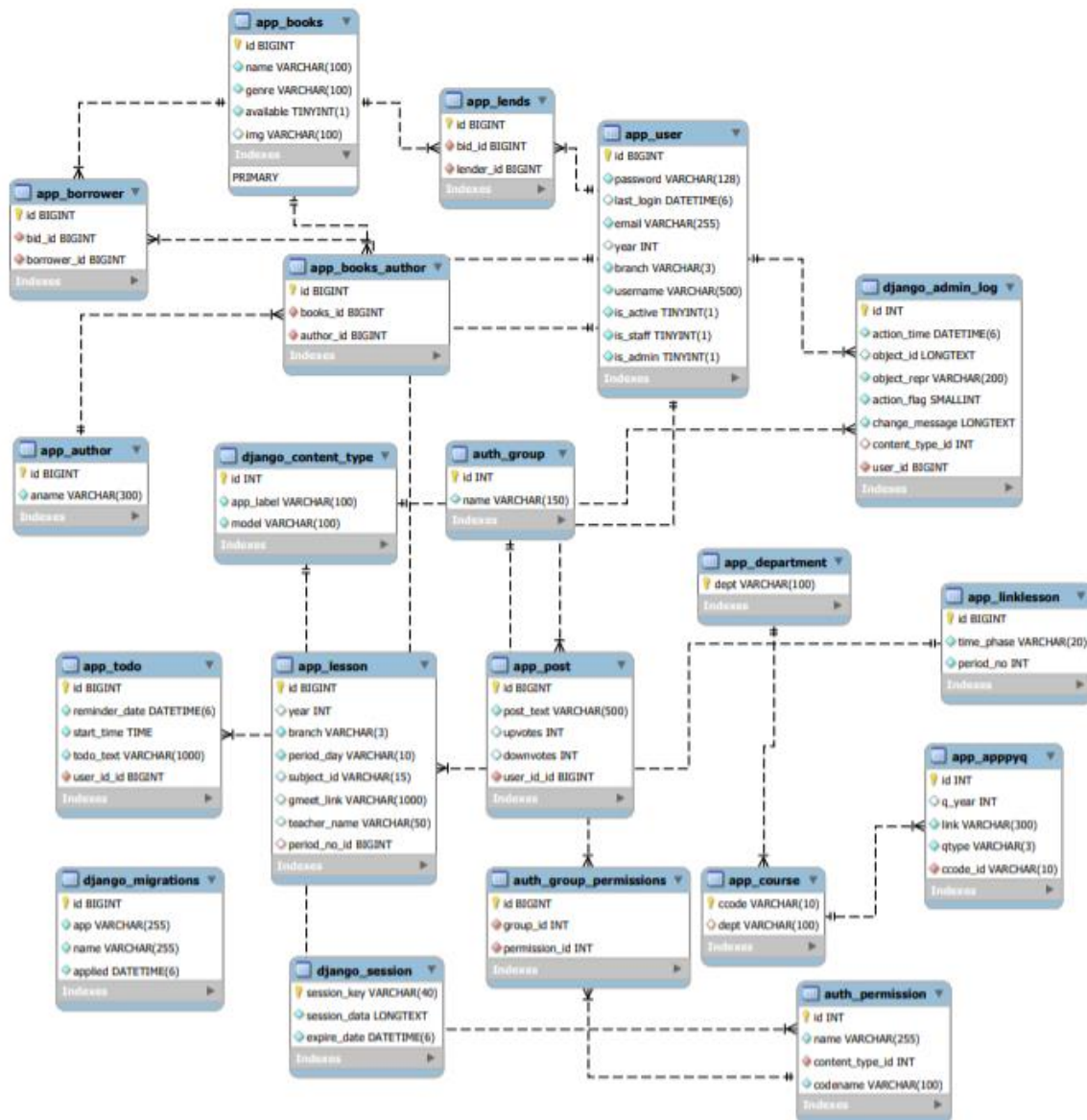




# MAPPING FROM ER TO R



# RELATIONAL SCHEME (Created through MySQL Workbench)



# DATA DICTIONARY

## ○ User

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
◇ id	bigint(20)		NO			select,insert,update,references	auto_increment	
◇ password	varchar(128)		NO	latin1	latin1_swedish_d	select,insert,update,references		
◇ last_login	datetime(6)		YES			select,insert,update,references		
◇ email	varchar(255)		NO	latin1	latin1_swedish_d	select,insert,update,references		
◇ branch	varchar(3)		NO	latin1	latin1_swedish_d	select,insert,update,references		
◇ username	varchar(500)		NO	latin1	latin1_swedish_d	select,insert,update,references		
◇ year	int(11)		NO			select,insert,update,references		
◇ is_active	tinyint(1)		NO			select,insert,update,references		
◇ is_admin	tinyint(1)		NO			select,insert,update,references		
◇ is_staff	tinyint(1)		NO			select,insert,update,references		

## ○ Custom Auth User

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
◇ id	int(11)		NO			select,insert,update,references	auto_increment	
◇ password	varchar(128)		NO	latin1	latin1_swedish_d	select,insert,update,references		
◇ last_login	datetime(6)		YES			select,insert,update,references		
◇ is_superuser	tinyint(1)		NO			select,insert,update,references		
◇ username	varchar(150)		NO	latin1	latin1_swedish_d	select,insert,update,references		
◇ first_name	varchar(150)		NO	latin1	latin1_swedish_d	select,insert,update,references		
◇ last_name	varchar(150)		NO	latin1	latin1_swedish_d	select,insert,update,references		
◇ email	varchar(254)		NO	latin1	latin1_swedish_d	select,insert,update,references		
◇ is_staff	tinyint(1)		NO			select,insert,update,references		
◇ is_active	tinyint(1)		NO			select,insert,update,references		
◇ date_joined	datetime(6)		NO			select,insert,update,references		

## ○ Course

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
◇ ccode	varchar(10)		NO	latin1	latin1_swedish_d	select,insert,update,references		
◇ dept	varchar(100)		YES	latin1	latin1_swedish_d	select,insert,update,references		

## ○ Department

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
◇ dept	varchar(100)		NO	latin1	latin1_swedish_d	select,insert,update,references		

## ○ Lends

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
◇ id	bigint(20)		NO			select,insert,update,references	auto_increment	
◇ bid_id	bigint(20)		NO			select,insert,update,references		
◇ lender_id	bigint(20)		NO			select,insert,update,references		

## ○ Lesson

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
id	bigint(20)		NO			select,insert,update,references	auto_increment	
period_day	varchar(10)		NO	latin1	latin1_swedish_d	select,insert,update,references		
subject_id	varchar(15)		YES	latin1	latin1_swedish_d	select,insert,update,references		
gmeet_link	varchar(1000)		YES	latin1	latin1_swedish_d	select,insert,update,references		
teacher_name	varchar(50)		YES	latin1	latin1_swedish_d	select,insert,update,references		
period_no_id	bigint(20)		YES			select,insert,update,references		
branch	varchar(3)		NO	latin1	latin1_swedish_d	select,insert,update,references		
year	int(11)		YES			select,insert,update,references		

## ○ Link Lesson

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
id	bigint(20)		NO			select,insert,update,references	auto_increment	
time_phase	varchar(20)		NO	latin1	latin1_swedish_d	select,insert,update,references		
period_no	int(11)		NO			select,insert,update,references		

## ○ Post

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
id	bigint(20)		NO			select,insert,update,references	auto_increment	
post_text	varchar(500)		NO	latin1	latin1_swedish_d	select,insert,update,references		
likes	int(11)		YES			select,insert,update,references		
dislikes	int(11)		YES			select,insert,update,references		
user_id_id	bigint(20)		NO			select,insert,update,references		
post_date	datetime(6)		NO			select,insert,update,references		
post_img	varchar(100)		YES	latin1	latin1_swedish_d	select,insert,update,references		

## ○ Todo

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
id	bigint(20)		NO			select,insert,update,references	auto_increment	
todo_text	varchar(1000)		NO	latin1	latin1_swedish_d	select,insert,update,references		
user_id_id	bigint(20)		NO			select,insert,update,references		
reminder_date	datetime(6)		NO			select,insert,update,references		

# SQL QUERIES

OPERATIONS	SAMPLE QUERY	SYNTAX
<b>CREATE TABLE</b>	<pre> &gt; CREATE TABLE 'app_user' ( &gt;   'id' bigint(20) NOT NULL &gt;     AUTO_INCREMENT, &gt;   'password' varchar(128) NOT &gt;     NULL, &gt;   'last_login' datetime(6) &gt;     DEFAULT NULL, &gt;   'email' varchar(255) NOT NULL, &gt;   'branch' varchar(3) NOT NULL, &gt;   'username' varchar(500) NOT &gt;     NULL, &gt;   'year' int(11) NOT NULL, &gt;   'is_active' tinyint(1) NOT NULL, &gt;   'is_admin' tinyint(1) NOT NULL, &gt;   'is_staff' tinyint(1) NOT NULL, &gt;   PRIMARY KEY ('id'), &gt;   UNIQUE KEY &gt;     'app_user_email_efde8896_uniq' &gt;     ('email') </pre>	<pre> CREATE TABLE 'table_name' ( 'Coloumn name' conditions); </pre>

```
> ) ENGINE=InnoDB  
    AUTO_INCREMENT=15 DEFAULT  
    CHARSET=latin1
```

```
> CREATE TABLE 'auth_user' (  
>   'id' int(11) NOT NULL  
    AUTO_INCREMENT,  
>   'password' varchar(128) NOT  
    NULL,  
>   'last_login' datetime(6)  
    DEFAULT NULL,  
>   'is_superuser' tinyint(1) NOT  
    NULL,  
>   'username' varchar(150) NOT  
    NULL,  
>   'first_name' varchar(150) NOT  
    NULL,  
>   'last_name' varchar(150) NOT  
    NULL,  
>   'email' varchar(254) NOT NULL,  
>   'is_staff' tinyint(1) NOT NULL,  
>   'is_active' tinyint(1) NOT NULL,
```



```

> 'date_joined' datetime(6) NOT
  NULL,
> PRIMARY KEY ('id'),
> UNIQUE KEY 'username'
  ('username')
> ) ENGINE=InnoDB
  AUTO_INCREMENT=3 DEFAULT
  CHARSET=latin1

```

```

> CREATE TABLE 'app_course' (
> 'ccode' varchar(10) NOT NULL,
> 'dept' varchar(100) DEFAULT
  NULL,
> PRIMARY KEY ('ccode'),
> KEY
  'app_course_dept_7b74bc89_fk_a
  pp_department_dept' ('dept'),
> CONSTRAINT
  'app_course_dept_7b74bc89_fk_a
  pp_department_dept' FOREIGN
  KEY ('dept') REFERENCES
  'app_department' ('dept')
> ) ENGINE=InnoDB DEFAULT
  CHARSET=latin1

```

```

> CREATE TABLE 'app_department' (
>   'dept' varchar(100) NOT NULL,
>   PRIMARY KEY ('dept')
> ) ENGINE=InnoDB DEFAULT
CHARSET=latin1

```

```

> CREATE TABLE 'app_lends' (
>   'id' bigint(20) NOT NULL
    AUTO_INCREMENT,
>   'bid_id' bigint(20) NOT NULL,
>   'lender_id' bigint(20) NOT NULL,
>   PRIMARY KEY ('id'),
>   KEY
    'app_lends_bid_id_46a5924f_fk_a
    pp_books_id' ('bid_id'),
>   KEY
    'app_lends_lender_id_98cfb9e6_fk
    _app_user_id' ('lender_id'),
>   CONSTRAINT
    'app_lends_bid_id_46a5924f_fk_a
    pp_books_id' FOREIGN KEY
    ('bid_id') REFERENCES 'app_books'
    ('id'),

```

```

> CONSTRAINT
'app_lends_lender_id_98cfb9e6_fk
_app_user_id' FOREIGN KEY
('lender_id') REFERENCES
'app_user' ('id')
> ) ENGINE=InnoDB DEFAULT
CHARSET=latin1

```

```

> CREATE TABLE 'app_linklesson' (
> 'id' bigint(20) NOT NULL
AUTO_INCREMENT,
> 'time_phase' varchar(20) NOT
NULL,
> 'period_no' int(11) NOT NULL,
> PRIMARY KEY ('id')
> ) ENGINE=InnoDB
AUTO_INCREMENT=10 DEFAULT
CHARSET=latin1
>

```

```

> CREATE TABLE 'app_lesson' (
>   'id' bigint(20) NOT NULL
    AUTO_INCREMENT,
>   'period_day' varchar(10) NOT
    NULL,
>   'subject_id' varchar(15)
    DEFAULT NULL,
>   'gmeet_link' varchar(1000)
    DEFAULT NULL,
>   'teacher_name' varchar(50)
    DEFAULT NULL,
>   'period_no_id' bigint(20)
    DEFAULT NULL,
>   'branch' varchar(3) NOT NULL,
>   'year' int(11) DEFAULT NULL,
>   PRIMARY KEY ('id'),
>   KEY
    'app_lesson_period_no_id_ec141c3
    e_fk_app_linklesson_id'
    ('period_no_id'),
>   CONSTRAINT
    'app_lesson_period_no_id_ec141c3
    e_fk_app_linklesson_id' FOREIGN
    KEY ('period_no_id') REFERENCES
    'app_linklesson' ('id')

```

```

> ) ENGINE=InnoDB
    AUTO_INCREMENT=46 DEFAULT
    CHARSET=latin1

```

```

> CREATE TABLE `app_post` (
>   `id` bigint(20) NOT NULL
    AUTO_INCREMENT,
>   `post_text` varchar(500) NOT
    NULL,
>   `likes` int(11) DEFAULT NULL,
>   `dislikes` int(11) DEFAULT
    NULL,
>   `user_id_id` bigint(20) NOT
    NULL,
>   `post_date` datetime(6) NOT NULL,
>   `post_img` varchar(100)
    DEFAULT NULL,
>   PRIMARY KEY (`id`),
>   KEY
    `app_post_user_id_id_c31f0352_fk
    _app_user_id` (`user_id_id`),

```

	<pre> &gt; CONSTRAINT 'app_post_user_id_id_c31f0352_fk _app_user_id' FOREIGN KEY ('user_id_id') REFERENCES 'app_user' ('id') &gt; ) ENGINE=InnoDB AUTO_INCREMENT=7 DEFAULT CHARSET=latin1 </pre>	
<b>INSERT</b>	<pre> &gt; INSERT INTO app_linklession(id, time_phase, period_no) &gt; VALUES &gt; (1,"8.30-9.30", 1), &gt; (2,"9.30-10.30",2), &gt; (3,"10.30-11.30",3); &gt; (4,"11.30-12.30",4), &gt; (5,"12.30-13.30",5), &gt; (6,"13.30-14.30",6), &gt; (7,"14.30-15.30",7), &gt; (8,"15.30-16.30",8), &gt; (9,"16.30-17.30",9); </pre>	<pre> INSERT INTO TABLE_NAME(ATT RIBUTES) VALUES () </pre>



```

> INSERT INTO app_lesson(id,
    period_day, subject_id,
    gmeet_link, teacher_name,
    period_no_id,branch, year)
> values
> (1,'MONDAY', null
    ,null,null,1,'CSE','2024'),
> (2, 'TUESDAY',
    'CSL201','https://meet.google.com/
    tvb-odii-kfu?authuser=0','Dr.
    SHRUTI GUPTA',1,'CSE','2024'),
> (3,'WEDNESDAY',
    'ECB204','https://meet.google.com
    /mch-zvkw-gcq?authuser=0','Dr.
    NS Singha',1,'CSE','2024'),
> (4,'THURSDAY',
    'ECB206','https://meet.google.com

```

	<pre> /nst-jygs-  kje?authuser=0&amp;hs=179','Dr.  Harikesh',1,'CSE','2024'),  &gt; (5,'FRIDAY', null, null,  null,1,'CSE','2024');  &gt; (6,  'MONDAY','ECB204','https://meet.go  ogle.com/mch-zvkw-  gcq?authuser=0','Dr NS Singha',  2,'CSE' , '2024'),  &gt; (7,'TUESDAY',  'MAL241','https://meet.google.com/  jqb-bomy-cqo?authuser=0','Dr. P.  Kumar',2,'CSE','2024'),  &gt; (8,'WEDNESDAY',NULL, null,  null,2,'CSE',2024),  &gt; (9,'THURSDAY',  null,null,null,2,'CSE','2024'), </pre>	
--	--	--

	› (10,'FRIDAY', NULL, NULL, NULL,2,'CSE','2024');  › (11, 'MONDAY','ECB204 G1+G2','https://meet.google.com/ mch-zvkw-gcq?authuser=0','Dr NS Singha', 3,'CSE' ,2024),  › (12,'TUESDAY','CSB202 G2','https://meet.google.com/tyh- qyfz-ekk?authuser=0','Dr S. Sachdeva',3,'CSE','2024'),  › (13,'WEDNESDAY','CSL201','https:// meet.google.com/tvb-odii- kfu?authuser=0','Dr. SHRUTI GUPTA',3,'CSE','2024'),  › (14,'THURSADAY',null, null, null,3,'CSE','2024'),  › (15,'FRIDAY','CSL203','https://meet. google.com/hiv-jjae-	
--	--	--

pvo?authuser=0&hs=179', 'Dr.  
Rohini Mahajan',3,'CSE','2024');

> (16, 'MONDAY','ECB204  
G1+G2','https://meet.google.com/  
mch-zvkw-gcq?authuser=0','Dr NS  
Singha', 4,'CSE' ,2024),

> (17,'TUESDAY','CSB202  
G2','https://meet.google.com/tyh-  
qyfz-ekk?authuser=0','Dr S.  
Sachdeva',4,'CSE','2024'),

> (18,'WEDNESDAY','CSL203','', 'Dr.  
Rohini Mahajan',4,'CSE','2024'),

> (19,'THURSDAY',  
'CSB202','https://meet.google.com  
/tyh-qyfz-ekk?authuser=0','Dr S.  
Sachdeva',4,'CSE','2024'),

> (20,'FRIDAY', 'CSB202  
G1','https://meet.google.com/tvb-

	<p>odii-kfu?authuser=0','Dr S.</p> <p>Sachdeva',4,'CSE','2024');</p> <p>&gt; (21,</p> <p>'MONDAY','CSL201','https://meet.google.com/tvb-odii-</p> <p>kfu?authuser=0','Dr. SHRUTI</p> <p>GUPTA',5,'CSE','2024'),</p> <p>&gt; (22,'TUESDAY','CSB202</p> <p>G1','https://meet.google.com/tvb-</p> <p>odii-kfu?authuser=0','Dr S.</p> <p>Sachdeva',5,'CSE','2024'),</p> <p>&gt; (23, 'WEDNESDAY',NULL, NULL,</p> <p>NULL, 5 , 'CSE','2024'),</p> <p>&gt; (24,'THURSDAY',NULL,NULL,NULL,5,'C</p> <p>SE','2024'),</p> <p>&gt; (25,'FRIDAY','CSB202</p> <p>G1','https://meet.google.com/tvb-</p>	
--	---	--

	<p>odii-kfu?authuser=0','Dr S.</p> <p>Sachdeva',5,'CSE','2024');</p> <p>&gt; (26,'MONDAY',NULL,NULL,NULL,6,'CSE'</p> <p>,2024),</p> <p>&gt; (27,'TUESDAY',NULL,NULL,NULL,6,'CS</p> <p>E',2024),</p> <p>&gt; (28,'WEDNESDAY',NULL,NULL,NULL,6,'</p> <p>CSE',2024),</p> <p>&gt; (29,'THURDAY','CSL201','https://me</p> <p>et.google.com/tvb-odii-</p> <p>kfu?authuser=0','Dr. SHRUTI</p> <p>GUPTA',6,'CSE','2024'),</p> <p>&gt; (30,'FRIDAY',</p> <p>'ECB204','https://meet.google.com</p> <p>/mch-zvkw-gcq?authuser=0','Dr.</p> <p>NS Singha',6,'CSE','2024'),</p> <p>&gt; (31,'MONDAY','CSB202</p> <p>',https://meet.google.com/tvb-</p>	
--	--	--



	<p>odii-kfu?authuser=0', 'Dr S.</p> <p>Sachdeva', 7, 'CSE', '2024'),</p> <p>&gt; (32, 'TUESDAY', 'MAL241', 'https: //me</p> <p>et.google.com/jqb-bomy-</p> <p>cqo?authuser=0', 'Dr. P.</p> <p>Kumar', 7, 'CSE', '2024'),</p> <p>&gt; (33, 'WEDNESDAY', 'ECB206', 'https: //</p> <p>meet.google.com/nst-jygs-</p> <p>kje?authuser=0&amp;hs=179', 'Dr.</p> <p>Harikesh', 7, 'CSE', '2024'),</p> <p>&gt; (34, 'THURSDAY', 'CSL203', 'https: //m</p> <p>eet.google.com/hiv-jjae-</p> <p>pvo?authuser=0&amp;hs=179', 'Dr.</p> <p>Rohini Mahajan', 7, 'CSE', '2024'),</p> <p>&gt; (35, 'FRIDAY',</p> <p>NULL, NULL, NULL, 7, 'CSE', 2024),</p> <p>&gt; (36, 'MONDAY',</p> <p>NULL, NULL, NULL, 8, 'CSE', 2024),</p>	
--	---	--

	<p>&gt; (37,'TUESDAY',</p> <p>'ECB206','https://meet.google.com</p> <p>/nst-jygs-</p> <p>kje?authuser=0&amp;hs=179','Dr.</p> <p>Harikesh',8,'CSE','2024'),</p> <p>&gt; (38,'WEDNESDAY','MAL241','https://</p> <p>meet.google.com/jqb-bomy-</p> <p>cqo?authuser=0','Dr. P.</p> <p>Kumar',8,'CSE','2024'),</p> <p>&gt; (39,'THURSDAY','MAL241','https://m</p> <p>eeet.google.com/jqb-bomy-</p> <p>cqo?authuser=0','Dr. P.</p> <p>Kumar',8,'CSE','2024'),</p> <p>&gt; (40,'FRIDAY','ECB206</p> <p>G1+G2','https://meet.google.com/n</p> <p>st-jygs-</p> <p>kje?authuser=0&amp;hs=179','Dr.</p> <p>BALJIT KAUR',8,'CSE','2024'),</p>	
--	--	--

	› (41,'MONDAY',  NULL,NULL,NULL,9,'CSE',2024),  › (42,'TUESDAY','CSL203','https://meet.google.com/hiv-jjae-pvo?authuser=0&hs=179', 'Dr. Rohini Mahajan',9,'CSE','2024'),  › (43,'WEDNESDAY',  NULL,NULL,NULL,9,'CSE',2024),  › (44,'THURSDAY',  NULL,NULL,NULL,9,'CSE',2024),  › (45,'FRIDAY', 'ECB206 G1+G2','https://meet.google.com/nst-jygs-kje?authuser=0&hs=179', 'Dr. BALJIT KAUR',9,'CSE','2024');	
--	---	--

	<pre> &gt; insert into app_department  &gt; values  &gt; ("CSE"),("ECE"),("EEE"),("HUM"),("AS C"); </pre>	
	<pre> &gt; insert into app_course  &gt; values  &gt; ("MAL241","ASC"),("ECB206","ECE"),(" CSL201","CSE"),("ECB204","ECE"),("C SL203","CSE"),("CSB202","CSE"),("EC B201","ECE"),("EEL201","EEE"),  &gt; ("ECB202","ECE"),("ECL203","ECE"); </pre>	
	<pre> &gt; insert into app_apppyq  &gt; values  &gt; (1,2019,"https://drive.google.com/f ile/d/1oj2lIKbvlKzf- </pre>	

	<p>88L4gqeYkvCcGL0s0v2/view?usp=sharing", "MAL241", "ES"),</p> <p>&gt; (2,2019,"https: //drive.google.com/file/d/1oj2lIKbvlKzf-88L4gqeYkvCcGL0s0v2/view?usp=sharing", "MAL241", "ES"),</p> <p>&gt; (3,2018,"https: //drive.google.com/file/d/1wOduct3a83F2d61vUPnxrGrTcx0HBIXZ/view?usp=sharing", "MAL241", "ES"),</p> <p>&gt; (4,2018,"https: //drive.google.com/file/d/1m_1TRSRcaQv7thFfqWy365ifncthFTM2/view?usp=sharing", "MAL241", "MS"),</p> <p>&gt; (5,2019,"https: //drive.google.com/file/d/1woaXQLez0BC5Sl8aDgQ5XVvIB80Z7EQI/view?usp=sharing", "ECB206", "ES"),</p>	
--	--	--

- > (6,2019,"https: //drive.google.com/f  
ile/d/18VMgsK3-  
EuZt1RU0h7k8w0leHmh9kuBZ/view  
?usp=sharing", "ECB206", "MS"),
- > (7,2018,"https: //drive.google.com/f  
ile/d/1lamW80fk6rdnoiawygxX1Hql2  
oR\_R10u/view?usp=sharing", "ECB2  
06", "ES"),
- > (8,2018,"https: //drive.google.com/f  
ile/d/1IX9MIDK3NJWGckYCxP29XiOw  
usH0blUS/view?usp=sharing", "ECB2  
06", "MS"),
- > (9,2019,"https: //drive.google.com/f  
ile/d/12EKb\_yDqraqj0xt5-  
WjldtBr5mQB-  
hKc/view?usp=sharing", "CSL201", "E  
S"),



- > (10,2019,"https: //drive.google.com  
/file/d/1IxIPfWH0NliaRq500GnrVX2  
h–  
lSump0K/view?usp=sharing", "CSL2  
01", "MS"),
- > (11,2018,"https: //drive.google.com/  
file/d/1PYk6–  
0dWiIZUk6vcN0Yf3YKLF–  
SH4Tvk/view?usp=sharing", "CSL201  
", "ES"),
- > (12,2018,"https: //drive.google.com  
/file/d/1Q0Kr65fAPmXzotOD8RYxcJ  
cBb–  
UC4sbL/view?usp=sharing", "CSL201  
", "MS"),
- > (13,2019,"https: //drive.google.com  
/file/d/16–  
2G5mXftykomRt7A4L26jq4P–

	<p>buGa0/view?usp=sharing", "CSB202", "ES"),</p> <p>&gt; (14, 2019, "https: //drive.google.com /file/d/1fvn10ra2QHJMLcpB2lG0xdAgCr6A2EMy/view?usp=sharing", "CSB202", "MS"),</p> <p>&gt; (15, 2018, "https: //drive.google.com /file/d/1UNlzULDbNBB9AV2E9I5QUImEmDDPrIcC/view?usp=sharing", "CSB202", "ES"),</p> <p>&gt; (16, 2018, "https: //drive.google.com /file/d/1tStGHFJgj6M2iC2ANKGqZVfRsPJYCM—d/view?usp=sharing", "CSB202", "MS"),</p> <p>&gt; (17, 2019, "https: //drive.google.com /file/d/1LjxjWjs48pg48qiZRO1W6MVr</p>	
--	--	--

	<p>tXnY1kdV/view?usp=sharing", "ECB204", "ES"),</p> <p>&gt; (18,2019,"https: //drive.google.com /file/d/1p4-wzEVTlMmu_By2ozr59f3SejkvIEV0/view?usp=sharing", "ECB204", "MS"),</p> <p>&gt; (19,2018,"https: //drive.google.com /file/d/1ERnGM7IpVPpUowlhF-L3v7crr_BywWtH/view?usp=sharing", "ECB204", "ES"),</p> <p>&gt; (20,2018,"https: //drive.google.com /file/d/13ALuxoTyawL_y633z3utDr bD5tNpjUu2/view?usp=sharing", "ECB204", "MS"),</p> <p>&gt; (21,2019,"https: //drive.google.com /file/d/1g hcZuFVriJTNnj6a7y0J5LR8otCdWdpR /view?usp=sharing", "CSL203", "ES"),</p>	
--	--	--

- > (22,2019,"https://drive.google.com/file/d/1s4kVL7Y01gNzCw8gBoEA-56pJkUWgssq/view?usp=sharing", "CSL203", "MS"),
- > (23,2018,"https://drive.google.com/file/d/1Zb\_3-jZzFsiyO6sbZDXllVuMyf2hMgM6/view?usp=sharing", "CSL203", "ES"),
- > (24,2018,"https://drive.google.com/file/d/1es4M7vCsVbpX23qg-JThxoS2uy2M\_c6A/view?usp=sharing", "CSL203", "MS"),
- > (25,2019,"https://drive.google.com/file/d/1qMuqmtgYAufx-0STmMeH40QKj9PUeH2n/view?usp=sharing", "ECB201", "ES"),
- > (26,2019,"https://drive.google.com/file/d/15LxuHvytrLiehN5v60COH18

	<p>t0xhZS8oy/view?usp=sharing", "ECB201", "MS"),</p> <p>&gt; (27, 2018, "https://drive.google.com/file/d/1VG4oAKUeKxFYYVk_IcOooY0l_II6icuz/view?usp=sharing", "ECB201", "ES"),</p> <p>&gt; (28, 2018, "https://drive.google.com/file/d/100_oZBQQ-Ps5_u9pa3YDMLgYNMietvee/view?usp=sharing", "ECB201", "MS"),</p> <p>&gt; (29, 2019, "https://drive.google.com/file/d/1NIidiM440YLyth-YcQTKVL2mzfbvaLRI/view?usp=sharing", "EEL201", "ES"),</p> <p>&gt; (30, 2019, "https://drive.google.com/file/d/1UZXiMDeQM8CQM9f7X9CJCDNOP9TlZesW/view?usp=sharing", "EEL201", "MS"),</p>	
--	--	--

- > (31,2018,"https: //drive.google.com /file/d/1QtZ6z89tNF8ThynCGv6uVr MZ6hUlhSsT/view?usp=sharing", "EEL201", "ES"),
- > (32,2018,"https: //drive.google.com /file/d/1JrP– VNzxeYTndXTI6Wt0hxtgscf7HGwL/view?usp=sharing", "EEL201", "MS"),
- > (33,2019,"https: //drive.google.com /file/d/1gJbyr9zbWGSvNARyx53T\_eJ F– 7ux23WV/view?usp=sharing", "ECB202", "ES"),
- > (34,2019,"https: //drive.google.com /file/d/1KqzNp5jvZW6I\_jDINlwA0ehc F66FmfVd/view?usp=sharing", "ECB202", "MS"),

- › (35,2018,"<https://drive.google.com/file/d/10lchpYEV0NX5fsR6aLLD20Z7FhYR00Pf/view?usp=sharing>","EC B202","ES"),
- › (36,2018,"[https://drive.google.com/file/d/1JXMPaEG\\_5jrb\\_RPMUrPSxC0lgpyu0RSy/view?usp=sharing](https://drive.google.com/file/d/1JXMPaEG_5jrb_RPMUrPSxC0lgpyu0RSy/view?usp=sharing)","EC B202","MS"),
- › (37,2019,"<https://drive.google.com/file/d/1tPu0tzol1KT4VmIh9PwnDTvx5y6mhGC2/view?usp=sharing>","EC L203","ES"),
- › (38,2019,"[https://drive.google.com/file/d/1LNpwVu6vFjH-BbH1TJa02fBEew3\\_Bkr1/view?usp=sharing](https://drive.google.com/file/d/1LNpwVu6vFjH-BbH1TJa02fBEew3_Bkr1/view?usp=sharing)","ECL203","MS"),
- › (39,2018,"[https://drive.google.com/file/d/12I\\_hpnurvlbx\\_htmnq63Ql](https://drive.google.com/file/d/12I_hpnurvlbx_htmnq63Ql)

	GgJMdpRzf8/view?usp=sharing", "EC L203", "ES"), > (40,2018,"https://drive.google.com /file/d/1BuYj_BLA6j4DmF6HKXvpVb a2B6MGL_c2/view?usp=sharing", "E CL203", "MS");	
<b>SELECT</b>	> SELECT YEAR, QUESTIONPAPER, TYPE, > FROM PYQ > WHERE PYQ.code = request.value	Select <i>coloumn_name</i> FROM <i>Table_name</i> Where <i>Desired conditions</i>
	Select * from app_notification where receiver_id=1	
	> Select reminder, timestamp, description > From todo > Where todo.user_id = request.user.id	



<b>Delete</b>	Delete from app_todo where id=1	Delete from <i>table name</i> Where <i>condition</i>
	Delete from app_notification where id=1	
	Delete from app_lender where id=1	

## Advanced Queries

OPERATION	SAMPLE QUERY	SYNTAX
Nested Inner Join (To project name,author and genre as searched by a user)	select name,aname,genre from app_author inner join (app_books inner join app_books_author on app_books.id=app_books_author.book s_id) on app_author.id=app_books_author.aut hor_id where app_books.name like "%Algebra%" and app_books.available=1;	SELECT column_name(s) FROM table1 INNER JOIN (table2 INNER JOIN table3 ON table1.column_name = table2.column_name)ON table1.column_name = table2.column_name;

$\pi(\text{name}, \text{aname}, \text{genre})$

$(\text{app\_author} \bowtie \langle \text{app\_author.ID} = \text{app\_books\_author.books\_id} \rangle (\text{app\_books\_author} \bowtie \langle \text{app\_books\_author.books\_id} = \text{app\_books.id} \rangle (\sigma \langle \text{name} = \text{"Algebra"} \rangle (\text{app\_books})))$

	name	aname	genre
▶	College Algebra	Jay Abramson	CLB


(To project  
period\_day,  
subject\_id,  
gmeet\_link  
and teacher  
name  
depending  
upon the  
branch of  
user)

```
select distinct(time_phase)
period_day,subject_id,gmeet_link,teacher_name
from app_linklesson inner join
(app_lesson inner join app_user on
app_user.branch=app_lesson.branch)
on
app_linklesson.period_no=app_lesson.
period_no_id
where period_day="Monday" and
app_user.branch="CSE";
```

$\pi(\text{time\_phase}, \text{period\_day}, \text{subject\_id}, \text{gmeet\_link}, \text{teacher\_name})$

$(\text{app\_linklesson} \bowtie \langle \text{app\_linklesson.period\_no} = \text{app\_lesson.period\_no\_id} \rangle (\text{app\_lesson} \bowtie \langle \text{app\_user.branch} = \text{app\_lesson.branch} \rangle (\sigma \langle \text{period\_day} = \text{"Monday"} \rangle \cap \text{app\_user.branch} = \text{"CSE"} \rangle (\text{app\_books})))$

	period_day	subject_id	gmeet_link	teacher_name
▶	8.30-9.30	NULL	NULL	NULL
	9.30-10.30	ECB204	<a href="https://meet.google.com/mch-zvkw-gcq?authus...">https://meet.google.com/mch-zvkw-gcq?authus...</a>	Dr NS Singha
	10.30-11.30	ECB204 G1+G2	<a href="https://meet.google.com/mch-zvkw-gcq?authus...">https://meet.google.com/mch-zvkw-gcq?authus...</a>	Dr NS Singha
	11.30-12.30	ECB204 G1+G2	<a href="https://meet.google.com/mch-zvkw-gcq?authus...">https://meet.google.com/mch-zvkw-gcq?authus...</a>	Dr NS Singha
	12.30-13.30	CSL201	<a href="https://meet.google.com/tvb-odii-kfu?authuser=0">https://meet.google.com/tvb-odii-kfu?authuser=0</a>	Dr. SHRUTI GUPTA
	13.30-14.30	NULL	NULL	NULL
	14.30-15.30	CSB202	<a href="https://meet.google.com/tvb-odii-kfu?authuser=0">https://meet.google.com/tvb-odii-kfu?authuser=0</a>	Dr S. Sachdeva
	15.30-16.30	NULL	NULL	NULL
	16.30-17.30	NULL	NULL	NULL

Union (To project details of book if user searches by book name or author name)	<pre>select  name,aname,genre from  app_author inner join (app_books inner join app_books_author on app_books.id=app_books_author.book s_id) on app_author.id=app_books_author.aut hor_id where app_books.name like "%Algebra%" and app_books.available=1 union select  name,aname,genre from  app_books inner join(app_author inner join app_books_author on app_author.id=app_books_author.aut hor_id)on app_books.id=app_books_author.id where app_author.aname like "%jay Abramson%" and app_books.available=1;</pre>	<pre>SELECT column_name(s) FROM table1 UNION SELECT column_name(s) FROM table2;</pre>
		

Left Outer Join	<pre>select app_user.id, email, username, bid_id from app_user left outer join app_borrower on app_user.id=app_borrower.borrower_id;</pre>	<pre>SELECT column_name(s) FROM table1 LEFT OUTER JOIN table2 ON table1.column_name = table2.column_name;</pre>																				
(To project the borrowed record of each user)	<pre><math>\pi</math>(app_user.id,email,username,bid_id) (app_user <math>\bowtie</math> &lt;app_user.id=app_borrower.borrower_id&gt; app_borrower)</pre> <table><tr><th></th><th>id</th><th>email</th><th>username</th><th>bid_id</th></tr><tr><td>▶</td><td>1</td><td>201210002@nitdelhi.ac.in</td><td>areaofjha</td><td>11</td></tr><tr><td></td><td>2</td><td>201210003@nitdelhi.ac.in</td><td>abhi</td><td>NULL</td></tr><tr><td></td><td>3</td><td>201210023@nitdelhi.ac.in</td><td>himanshu</td><td>NULL</td></tr></table>		id	email	username	bid_id	▶	1	201210002@nitdelhi.ac.in	areaofjha	11		2	201210003@nitdelhi.ac.in	abhi	NULL		3	201210023@nitdelhi.ac.in	himanshu	NULL	
	id	email	username	bid_id																		
▶	1	201210002@nitdelhi.ac.in	areaofjha	11																		
	2	201210003@nitdelhi.ac.in	abhi	NULL																		
	3	201210023@nitdelhi.ac.in	himanshu	NULL																		
(To project the lent record of each user)	<pre>select app_user.id, email, username, bid_id from app_user left outer join app_lends on app_user.id=app_lends.lender_id;</pre>																					
<pre><math>\pi</math>(app_user.id,email,username,bid_id) (app_user <math>\bowtie</math> &lt;app_user.id=app_lends.lender_id&gt; app_lends)</pre> <table><tr><th></th><th>id</th><th>email</th><th>username</th><th>bid_id</th></tr><tr><td>▶</td><td>1</td><td>201210002@nitdelhi.ac.in</td><td>areaofjha</td><td>28</td></tr><tr><td></td><td>2</td><td>201210003@nitdelhi.ac.in</td><td>abhi</td><td>NULL</td></tr><tr><td></td><td>3</td><td>201210023@nitdelhi.ac.in</td><td>himanshu</td><td>NULL</td></tr></table>				id	email	username	bid_id	▶	1	201210002@nitdelhi.ac.in	areaofjha	28		2	201210003@nitdelhi.ac.in	abhi	NULL		3	201210023@nitdelhi.ac.in	himanshu	NULL
	id	email	username	bid_id																		
▶	1	201210002@nitdelhi.ac.in	areaofjha	28																		
	2	201210003@nitdelhi.ac.in	abhi	NULL																		
	3	201210023@nitdelhi.ac.in	himanshu	NULL																		
INNER JOIN	<pre>SELECT app_todo.todo_text, app_todo.reminder_date, app_user.email, app_user.username FROM app_todo INNER JOIN app_user on app_todo.user_id_id = app_user.id;</pre>	<pre>SELECT column_name(s) FROM table1 INNER JOIN table2 ON table1.column_name = table2.column_name;</pre>																				

(To project the text, reminder date Of a user)	$\pi(\text{app\_todo.todo\_text}, \text{app\_todo.reminder\_date}, \text{app\_user.email}, \text{app\_user.username})$ $(\text{app\_todo} \bowtie \langle \text{app\_todo.user\_id\_id} = \text{app\_user.id} \rangle \text{app\_user})$	<table><tr><th></th><th>todo_text</th><th>reminder_date</th><th>email</th><th>username</th></tr><tr><td>▶</td><td>class on sat</td><td>2021-11-20 00:00:00.000000</td><td>0@nitdelhi.ac.in</td><td>new user</td></tr><tr><td></td><td>Finish ECB206 Assignment</td><td>2021-11-20 00:00:00.000000</td><td>201210010@nitdelhi.ac.in</td><td>Aryan</td></tr><tr><td></td><td>test reminder</td><td>2021-11-24 19:06:00.000000</td><td>201210010@nitdelhi.ac.in</td><td>Aryan</td></tr><tr><td></td><td>Vedant's Bday</td><td>2022-08-31 00:03:00.000000</td><td>201210010@nitdelhi.ac.in</td><td>Aryan</td></tr></table>		todo_text	reminder_date	email	username	▶	class on sat	2021-11-20 00:00:00.000000	0@nitdelhi.ac.in	new user		Finish ECB206 Assignment	2021-11-20 00:00:00.000000	201210010@nitdelhi.ac.in	Aryan		test reminder	2021-11-24 19:06:00.000000	201210010@nitdelhi.ac.in	Aryan		Vedant's Bday	2022-08-31 00:03:00.000000	201210010@nitdelhi.ac.in	Aryan							
	todo_text	reminder_date	email	username																														
▶	class on sat	2021-11-20 00:00:00.000000	0@nitdelhi.ac.in	new user																														
	Finish ECB206 Assignment	2021-11-20 00:00:00.000000	201210010@nitdelhi.ac.in	Aryan																														
	test reminder	2021-11-24 19:06:00.000000	201210010@nitdelhi.ac.in	Aryan																														
	Vedant's Bday	2022-08-31 00:03:00.000000	201210010@nitdelhi.ac.in	Aryan																														
	<pre>SELECT app_user.username, app_user.email, app_post.post_text FROM app_user INNER JOIN app_post ON app_post.user_id_id = app_user.id;</pre>																																	
(To project the text of post, username and email of the user who have posted )	<table><tr><th></th><th>username</th><th>email</th><th>post_text</th></tr><tr><td>▶</td><td>dummy</td><td>hi@gmail.com</td><td>test post no 1</td></tr><tr><td></td><td>dummy</td><td>hi@gmail.com</td><td>test post 2</td></tr><tr><td></td><td>new user</td><td>0@nitdelhi.ac.in</td><td>hello</td></tr><tr><td></td><td>new user</td><td>0@nitdelhi.ac.in</td><td>my name is aryan</td></tr><tr><td></td><td>new user</td><td>0@nitdelhi.ac.in</td><td>siddhart</td></tr><tr><td></td><td>Aryan</td><td>201210010@nitdelhi.ac.in</td><td>finished with my book</td></tr><tr><td></td><td>Aryan</td><td>201210010@nitdelhi.ac.in</td><td>sinda is great</td></tr></table> $\pi(\text{app\_user.username}, \text{app\_user.email}, \text{app\_post.post\_text})$ $(\text{app\_user} \bowtie \langle \text{app\_post.user\_id\_id} = \text{app\_user.id} \rangle \text{app\_post})$		username	email	post_text	▶	dummy	hi@gmail.com	test post no 1		dummy	hi@gmail.com	test post 2		new user	0@nitdelhi.ac.in	hello		new user	0@nitdelhi.ac.in	my name is aryan		new user	0@nitdelhi.ac.in	siddhart		Aryan	201210010@nitdelhi.ac.in	finished with my book		Aryan	201210010@nitdelhi.ac.in	sinda is great	
	username	email	post_text																															
▶	dummy	hi@gmail.com	test post no 1																															
	dummy	hi@gmail.com	test post 2																															
	new user	0@nitdelhi.ac.in	hello																															
	new user	0@nitdelhi.ac.in	my name is aryan																															
	new user	0@nitdelhi.ac.in	siddhart																															
	Aryan	201210010@nitdelhi.ac.in	finished with my book																															
	Aryan	201210010@nitdelhi.ac.in	sinda is great																															
(To print book id of the books a user has lent)	<pre>select app_user.id, email, username, bid_id from app_user inner join app_lends on app_user.id=app_lends.lender_id where app_user.id=1;</pre>																																	

	id	email	username	bid_id
▶	1	201210002@nitdelhi.ac.in	areaofjha	28

$\pi(\text{app\_user.id}, \text{email}, \text{username}, \text{bid\_id})$

$(\text{app\_user} \bowtie_{\text{on app\_user.id=app\_lends.lender\_id}} \sigma_{\text{app\_user.id=1}} (\text{app\_lends}))$

# POPULATED TABLES

```
SELECT * FROM project_dbms.app_user;
```

	id	password	last_login	email	branch	username	year	is_active	is_admin	is_staff
▶	5	pbkdf2_sha256\$260000\$UISK2bEnEgOHuBIazM...	NULL	122@nitdelhi.ac.in	CSE	hitestuser	2024	1	0	0
	6	pbkdf2_sha256\$260000\$4YAnMChDLOJU6g5AT...	NULL	1@nitdelhi.ac.in	CSE	test	2024	1	0	0
	7	pbkdf2_sha256\$260000\$GLR0I2ZS76nzFfyaTD...	2021-11-16 05:35:12.707349	12@nitdelhi.ac.in	CSE	test	2024	1	0	0
	8	pbkdf2_sha256\$260000\$rdRpROWj7iOiopDuH8...	NULL	11@nitdelhi.ac.in	CSE	ui	2024	1	0	0
	9	pbkdf2_sha256\$260000\$loqUViwhNOx2XrLmaJ...	NULL	255@nitdelhi.ac.in	CSE	ty	2024	1	0	0
	10	pbkdf2_sha256\$260000\$8FYDXrp0m3Ge1hY9v...	NULL	00@nitdelhi.ac.in	ECE	india	2023	1	0	0
	11	pbkdf2_sha256\$260000\$PICC4wzKskjLIVJZv0f6...	2021-11-23 04:22:10.507621	hi@gmail.com	EEE	dummy	2022	1	0	0
	12	pbkdf2_sha256\$260000\$bkdwesSXxXfQoqypu...	2021-11-19 07:53:38.812907	0@nitdelhi.ac.in	CSE	new user	2024	1	0	0
	13	pbkdf2_sha256\$260000\$LTRi5M1YUpV34JlwVI...	2021-11-23 04:34:49.657640	201210010@nitdelhi.ac.in	CSE	Aryan	2024	1	0	0
	14	pbkdf2_sha256\$260000\$49lKTjaPfrCVbR8oYBv...	2021-11-19 07:50:20.019097	hel@gmail.com	EEE	lorem	2024	1	0	0
▲	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

```
SELECT * FROM project_dbms.auth_user;
```

	id	password	last_login	is_superuser	username	first_name	last_name	email	is_staff	is_active	date_joined
▶	1	pbkdf2_sha256\$260000\$WD4IxVzEbKiWN5Om...	2021-11-10 12:08:32.037491	1	aryansri				1	1	2021-10-30 06:36:04.621822
	2	pbkdf2_sha256\$260000\$Hj1Fr9IRUXMRICjzjSrI...	2021-11-07 12:39:20.275077	1	areaofjha				1	1	2021-10-30 06:36:22.213369
-	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

```
SELECT * FROM project_dbms.app_apppyq;
```

	id	q_year	link	qtype	ccode_id
	1	2019	https://drive.google.com/file/d/1oj2lIKbvlKzf-88...	ES	MAL241
	2	2019	https://drive.google.com/file/d/1oj2lIKbvlKzf-88...	ES	MAL241
	3	2018	https://drive.google.com/file/d/1wOduct3a83F...	ES	MAL241
	4	2018	https://drive.google.com/file/d/1m_1TRSRcaQv...	MS	MAL241
	5	2019	https://drive.google.com/file/d/1woaXQLez0BC...	ES	ECB206
	6	2019	https://drive.google.com/file/d/18VMgsK3-EuZt...	MS	ECB206
	7	2018	https://drive.google.com/file/d/1lamW80fk6rdn...	ES	ECB206
	8	2018	https://drive.google.com/file/d/1lX9MIDK3NJW...	MS	ECB206
	9	2019	https://drive.google.com/file/d/12EKb_yDqraqj...	ES	CSL201
	10	2019	https://drive.google.com/file/d/1IxIPFWHONlia...	MS	CSL201
	11	2018	https://drive.google.com/file/d/1PYk6-0dWiIZU...	ES	CSL201
	12	2018	https://drive.google.com/file/d/1Q0Kr65fAPmXz...	MS	CSL201
	13	2019	https://drive.google.com/file/d/16-2G5mXftyko...	ES	CSB202
	14	2019	https://drive.google.com/file/d/1fvn1Ora2QHJ...	MS	CSB202
	15	2018	https://drive.google.com/file/d/1UNLzULDbNBB9...	ES	CSB202
	16	2018	https://drive.google.com/file/d/1tStGHFJgj6M2i...	MS	CSB202



id	q_year	link	qtype	ccode_id
17	2019	https://drive.google.com/file/d/1LxjWjs48pg48...	ES	ECB204
18	2019	https://drive.google.com/file/d/1p4-wzEVTIMmu...	MS	ECB204
19	2018	https://drive.google.com/file/d/1ERnGM7IpVPp...	ES	ECB204
20	2018	https://drive.google.com/file/d/13ALuxoTyawL...	MS	ECB204
21	2019	https://drive.google.com/file/d/1ghcZuFVriJTN...	ES	CSL203
22	2019	https://drive.google.com/file/d/1s4kVL7Y01gNz...	MS	CSL203
23	2018	https://drive.google.com/file/d/1Zb_3-jZzFsiyO...	ES	CSL203
24	2018	https://drive.google.com/file/d/1es4M7vCsVbp...	MS	CSL203
25	2019	https://drive.google.com/file/d/1qMuqmtgYAuf...	ES	ECB201
26	2019	https://drive.google.com/file/d/15LxuHvytrLieh...	MS	ECB201
27	2018	https://drive.google.com/file/d/1VG4oAKUeKxF...	ES	ECB201
28	2018	https://drive.google.com/file/d/100_oZBQQ-Ps...	MS	ECB201
29	2019	https://drive.google.com/file/d/1NIIdiM440YLy...	ES	EEL201
30	2019	https://drive.google.com/file/d/1UZXiMDeQM8C...	MS	EEL201
31	2018	https://drive.google.com/file/d/1QtZ6z89tNF8T...	ES	EEL201
32	2018	https://drive.google.com/file/d/1JrP-VNzxeYTn...	MS	EEL201
33	2019	https://drive.google.com/file/d/1qJbyr9zbWGS...	ES	ECB202
34	2019	https://drive.google.com/file/d/1KqzNp5jvZW6I...	MS	ECB202
35	2018	https://drive.google.com/file/d/1OlchpYEVonX5...	ES	ECB202
36	2018	https://drive.google.com/file/d/1JXMPaEG_5jrb...	MS	ECB202
37	2019	https://drive.google.com/file/d/1tPu0tzol1KT4V...	ES	ECL203
38	2019	https://drive.google.com/file/d/1LNpwVu6vFjH-...	MS	ECL203
39	2018	https://drive.google.com/file/d/12I_hpnurvlbx_...	ES	ECL203
40	2018	https://drive.google.com/file/d/1BuYj_BLA6j4D...	MS	ECL203

SELECT \* FROM project\_dbms.app\_author;

id	aname
1	John
2	Stienbeck
NULL	NULL



SELECT \* FROM project\_dbms.app\_books\_author;

	id	books_jd	author_jd
▶	1	1	1
	2	1	2
•	NULL	NULL	NULL

SELECT \* FROM project\_dbms.app\_department;

	dept
▶	ASC
	CSE
	ECE
	EEE
	HUM
•	NULL

SELECT \* FROM project\_dbms.app\_lends;

	id	bid_jd	lender_jd
▶	1	1	13

SELECT \* FROM project\_dbms.app\_lesson;

	id	period_day	subject_id	gmeet_link	teacher_name	period_no_id	branch	year
▶	1	MONDAY	NULL	NULL	NULL	1	CSE	2024
	2	TUESDAY	CSL201	<a href="https://meet.google.com/tvb-odii-kfu?authuser=0">https://meet.google.com/tvb-odii-kfu?authuser=0</a>	Dr. SHRUTI GUPTA	1	CSE	2024
	3	WEDNESDAY	ECB204	<a href="https://meet.google.com/mch-zvkw-gcq?authuser=0">https://meet.google.com/mch-zvkw-gcq?authuser=0</a>	Dr. NS Singha	1	CSE	2024
	4	THURSDAY	ECB206	<a href="https://meet.google.com/nst-jygs-kje?authuser=0">https://meet.google.com/nst-jygs-kje?authuser=0</a>	Dr. Harikesh	1	CSE	2024
	5	FRIDAY	NULL	NULL	NULL	1	CSE	2024
	6	MONDAY	ECB204	<a href="https://meet.google.com/mch-zvkw-gcq?authuser=0">https://meet.google.com/mch-zvkw-gcq?authuser=0</a>	Dr NS Singha	2	CSE	2024
	7	TUESDAY	MAL241	<a href="https://meet.google.com/jqb-bomy-cqo?authuser=0">https://meet.google.com/jqb-bomy-cqo?authuser=0</a>	Dr. P. Kumar	2	CSE	2024
	8	WEDNESDAY	NULL	NULL	NULL	2	CSE	2024
	9	THURSDAY	NULL	NULL	NULL	2	CSE	2024
	10	FRIDAY	NULL	NULL	NULL	2	CSE	2024
	11	MONDAY	ECB204 ...	<a href="https://meet.google.com/mch-zvkw-gcq?authuser=0">https://meet.google.com/mch-zvkw-gcq?authuser=0</a>	Dr NS Singha	3	CSE	2024
	12	TUESDAY	CSB202 G2	<a href="https://meet.google.com/tyh-qyfz-ekk?authuser=0">https://meet.google.com/tyh-qyfz-ekk?authuser=0</a>	Dr S. Sachdeva	3	CSE	2024
	13	WEDNESDAY	CSL201	<a href="https://meet.google.com/tvb-odii-kfu?authuser=0">https://meet.google.com/tvb-odii-kfu?authuser=0</a>	Dr. SHRUTI GUPTA	3	CSE	2024
	14	THURSADAY	NULL	NULL	NULL	3	CSE	2024
	15	FRIDAY	CSL203	<a href="https://meet.google.com/hiv-jjae-pvo?authuser=0">https://meet.google.com/hiv-jjae-pvo?authuser=0</a>	Dr. Rohini Mahajan	3	CSE	2024
	16	MONDAY	ECB204 ...	<a href="https://meet.google.com/mch-zvkw-gcq?authuser=0">https://meet.google.com/mch-zvkw-gcq?authuser=0</a>	Dr NS Singha	4	CSE	2024
	17	TUESDAY	CSB202 G2	<a href="https://meet.google.com/tyh-qyfz-ekk?authuser=0">https://meet.google.com/tyh-qyfz-ekk?authuser=0</a>	Dr S. Sachdeva	4	CSE	2024

id	period_day	subject_id	gmeet_link	teacher_name	period_no_id	branch	year
18	WEDNESDAY	CSL203		Dr. Rohini Mahajan	4	CSE	2024
19	THURSDAY	CSB202	<a href="https://meet.google.com/tyh-qyfz-ekk?authuse...">https://meet.google.com/tyh-qyfz-ekk?authuse...</a>	Dr S. Sachdeva	4	CSE	2024
20	FRIDAY	CSB202 G1	<a href="https://meet.google.com/tvb-odii-kfu?authuser=0">https://meet.google.com/tvb-odii-kfu?authuser=0</a>	Dr S. Sachdeva	4	CSE	2024
21	MONDAY	CSL201	<a href="https://meet.google.com/tvb-odii-kfu?authuser=0">https://meet.google.com/tvb-odii-kfu?authuser=0</a>	Dr. SHRUTI GUPTA	5	CSE	2024
22	TUESDAY	CSB202 G1	<a href="https://meet.google.com/tvb-odii-kfu?authuser=0">https://meet.google.com/tvb-odii-kfu?authuser=0</a>	Dr S. Sachdeva	5	CSE	2024
23	WEDNESDAY	NULL	NULL	NULL	5	CSE	2024
24	THURSDAY	NULL	NULL	NULL	5	CSE	2024
25	FRIDAY	CSB202 G1	<a href="https://meet.google.com/tvb-odii-kfu?authuser=0">https://meet.google.com/tvb-odii-kfu?authuser=0</a>	Dr S. Sachdeva	5	CSE	2024
26	MONDAY	NULL	NULL	NULL	6	CSE	2024
27	TUESDAY	NULL	NULL	NULL	6	CSE	2024
28	WEDNESDAY	NULL	NULL	NULL	6	CSE	2024
29	THURDAY	CSL201	<a href="https://meet.google.com/tvb-odii-kfu?authuser=0">https://meet.google.com/tvb-odii-kfu?authuser=0</a>	Dr. SHRUTI GUPTA	6	CSE	2024
30	FRIDAY	ECB204	<a href="https://meet.google.com/mch-zvkw-gcq?authus...">https://meet.google.com/mch-zvkw-gcq?authus...</a>	Dr. NS Singha	6	CSE	2024
31	MONDAY	CSB202	<a href="https://meet.google.com/tvb-odii-kfu?authuser=0">https://meet.google.com/tvb-odii-kfu?authuser=0</a>	Dr S. Sachdeva	7	CSE	2024
32	TUESDAY	MAL241	<a href="https://meet.google.com/jqb-bomy-cqo?authus...">https://meet.google.com/jqb-bomy-cqo?authus...</a>	Dr. P. Kumar	7	CSE	2024
33	WEDNESDAY	ECB206	<a href="https://meet.google.com/nst-jygs-kje?authuser...">https://meet.google.com/nst-jygs-kje?authuser...</a>	Dr. Harikesh	7	CSE	2024
34	THURSDAY	CSL203	<a href="https://meet.google.com/niv-jjae-pvo?authuser...">https://meet.google.com/niv-jjae-pvo?authuser...</a>	Dr. Rohini Mahajan	7	CSE	2024
35	FRIDAY	NULL	NULL	NULL	7	CSE	2024
36	MONDAY	NULL	NULL	NULL	8	CSE	2024
37	TUESDAY	ECB206	<a href="https://meet.google.com/nst-jygs-kje?authuser...">https://meet.google.com/nst-jygs-kje?authuser...</a>	Dr. Harikesh	8	CSE	2024
38	WEDNESDAY	MAL241	<a href="https://meet.google.com/jqb-bomy-cqo?authus...">https://meet.google.com/jqb-bomy-cqo?authus...</a>	Dr. P. Kumar	8	CSE	2024
39	THURSDAY	MAL241	<a href="https://meet.google.com/jqb-bomy-cqo?authus...">https://meet.google.com/jqb-bomy-cqo?authus...</a>	Dr. P. Kumar	8	CSE	2024
40	FRIDAY	ECB206 ...	<a href="https://meet.google.com/nst-jygs-kje?authuser...">https://meet.google.com/nst-jygs-kje?authuser...</a>	Dr. BALJIT KAUR	8	CSE	2024
41	MONDAY	NULL	NULL	NULL	9	CSE	2024
42	TUESDAY	CSL203	<a href="https://meet.google.com/niv-jjae-pvo?authuser...">https://meet.google.com/niv-jjae-pvo?authuser...</a>	Dr. Rohini Mahajan	9	CSE	2024
43	WEDNESDAY	NULL	NULL	NULL	9	CSE	2024
44	THURSDAY	NULL	NULL	NULL	9	CSE	2024
45	FRIDAY	ECB206 ...	<a href="https://meet.google.com/nst-jygs-kje?authuser...">https://meet.google.com/nst-jygs-kje?authuser...</a>	Dr. BALJIT KAUR	9	CSE	2024

SELECT \* FROM project\_dbms.app\_linklesson;

id	time_phase	period_no
1	8.30-9.30	1
2	9.30-10.30	2
3	10.30-11.30	3
4	11.30-12.30	4
5	12.30-13.30	5
6	13.30-14.30	6
7	14.30-15.30	7
8	15.30-16.30	8
9	16.30-17.30	9

SELECT \* FROM project\_dbms.app\_post;

	id	post_text	likes	dislikes	user_id_id	post_date	post_img
	1	vedant is GOD	7	4	13	2021-11-26 00:00:00.000000	NULL
	2	aarya is a girl	1	0	13	2021-11-26 00:00:00.000000	NULL
	3	kalash is a good comedian	1	1	15	2021-11-26 00:00:00.000000	NULL
	8	hi i am payal jain, i am in love with cse and canada	1	0	16	2021-11-27 09:07:07.850570	
	9	hi bhatla ji...lets watch anime	0	0	17	2021-11-27 14:26:01.984289	
▶	15	Grew up correcting people pronouncing my nam...	0	1	15	2021-11-28 09:21:41.685007	pics/kalash_befKZgk.jpg
	16	Hey am Payal from mansa district of punjab I a...	0	0	16	2021-11-28 09:24:25.642552	pics/payal.jpg
	17	All for one...one for all	0	0	18	2021-11-28 09:27:28.271367	pics/sub_council.jpg
	18	I want someone to look at me the way Vedant d...	0	0	19	2021-11-28 11:26:20.181811	pics/sindaved.jpg
	19	I want someone to look at me the way Aryan d...	0	0	19	2021-11-28 11:26:50.372103	pics/sindaaryan.jpg

SELECT \* FROM project\_dbms.app\_todo;

	id	todo_text	user_id_id	reminder_date
▶	2	class on sat	12	2021-11-20 00:00:00.000000
	3	Finish ECB206 Assignment	13	2021-11-20 00:00:00.000000
	4	test reminder	13	2021-11-24 19:06:00.000000
	5	Vedant's Bday	13	2022-08-31 00:03:00.000000
	6	Project Final presentation	15	2021-11-30 09:30:00.000000
	7	Mere tushar ka bday	16	2022-01-09 01:19:00.000000
	8	tushar's bday	17	2022-01-09 05:26:00.000000
	9	kashyap's bday	13	2022-08-06 14:23:00.000000
	10	endsems finish	13	2021-12-17 07:23:00.000000
	11	happy new year	13	2021-12-31 18:30:00.000000
	12	republic day celebs	13	2022-01-26 06:29:00.000000
	13	wish payal didi	13	2021-12-05 03:50:00.000000

# DATABASE CONNECTIVITY

---

The database has been connected to the frontend user interface using PYTHON 3.9.7.

The code for establishing the connection is as follows:

```
DATABASES = {  
    'default': {  
        'ENGINE': 'django.db.backends.mysql',  
        'NAME': 'project_dbms',  
        'USER': 'root',  
        'PASSWORD': '123456',  
        'PORT': 3306,  
        'HOST': '127.0.0.1'  
    }  
}
```

The above code serves to establish a secure connection between the backend (database made on MySQL) and frontend (user-interface)

The Python 3.9.7 codes correspond to each functionality being implemented are mentioned along with the respective functionality in the following pages.

# FUNCTIONALITY

---

Below are the functionalities that are implemented in the project along with the necessary HTML and Python 3.9.7 codes

---

## *Register Page*

Please provide the following details to register:

Email:

Branch:

Year:

Username:

Password:

Confirm Password:

Register

Already have an account? [Login here](#)

*in html*

```
<form action="register" id="stud_deet" method="post">
    {% csrf_token %}
    {{form}}
    <button type="submit" class="btn">Register</button>
</form>
```

*In forms.py*

```
class RegisterForm(forms.ModelForm):
    password = forms.CharField(widget=forms.PasswordInput)
    password_2 = forms.CharField(label='Confirm Password',
    widget=forms.PasswordInput)

    class Meta:
        model = User
        fields = ['email', 'branch', 'year', 'username']

    def clean_email(self):
        """
        Verify email is available.
        """
        email = self.cleaned_data.get('email')
        qs = User.user_obj.filter(email=email)
        if qs.exists():
            raise forms.ValidationError("email is taken")
        return email
    def clean(self):
        """
        Verify both passwords match.
        """
        data = self.cleaned_data
        password = str(self.cleaned_data.get("password"))
        password_2 = str(self.cleaned_data.get("password_2"))

        if password != password_2:
            raise forms.ValidationError("Passwords don't match")
        return data

    def save(self, commit=True):
        # Save the provided password in hashed format
```

```
user = super().save(commit=False)
user.set_password(self.cleaned_data["password"])
if commit:
    user.save()
return user
```

*in views.py*

```
def register(request):
    if request.method == 'POST':
        form = RegisterForm(request.POST)
        if form.is_valid():
            form.save()
            return redirect('login')

    else:
        form = RegisterForm(request.POST)
        return render(request, 'register.html', {"form":form})

    else:
        form = RegisterForm()
        return render(request, 'register.html', {"form":form})
```

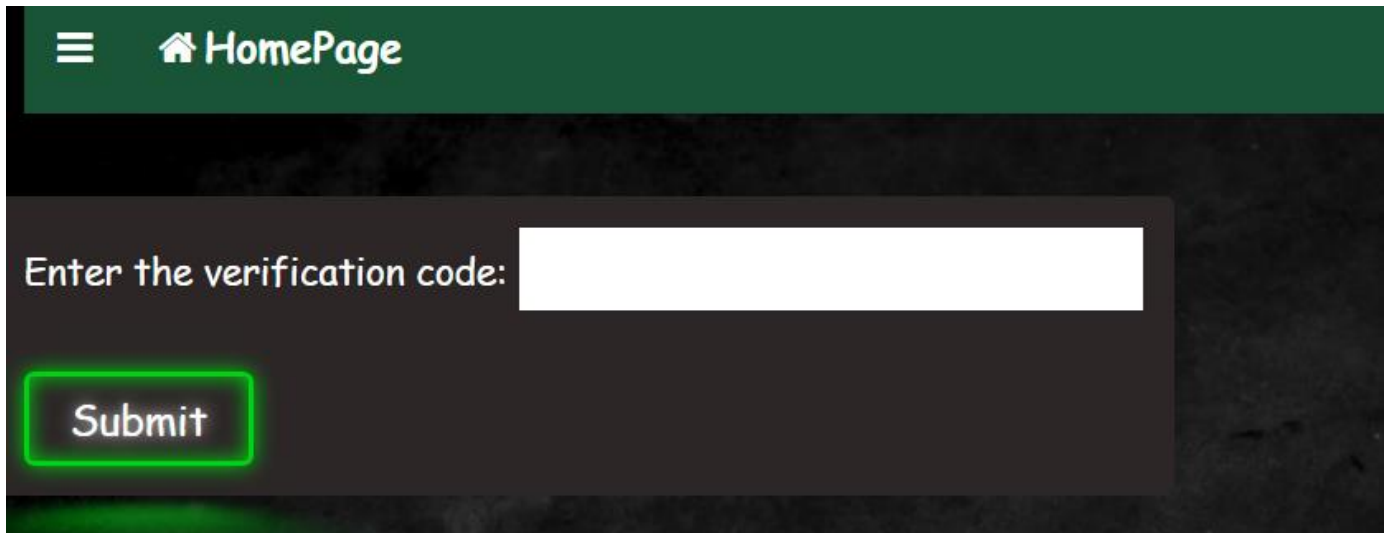
*in urls.py*

```
urlpatterns = [
    path("register", views.register, name="register"),
]
```

---

## Verification of email

---



HomePage

Enter the verification code:

Submit

### Blackboard-User Verification

External

Inbox ×



**blackboardaryanaarya@gmail.com**

to me ▼

Your verification code is: 12767

↩ Reply

➡ Forward

*In html*

```
<form action="verification" method="POST">
  {% csrf_token %}
  <label for="v_code" class="labels">Enter the verification
code:</label>
```



```

        <input type="text" class="inputs" name="code" style="height:40px;"
required><br><br>

        <button type="submit" class="neon-button">Submit</button>
    </form>

```

### *In views.py*

```

def sendmail(mail):
    import smtplib, random
    from email.message import EmailMessage
    mail=str(student.cleaned_data['email'])
    code=str(random.randint(10000,99999))
    global vcode
    vcode=code
    content="Your verification code is: "+code

    msg = EmailMessage()
    msg.set_content(content)

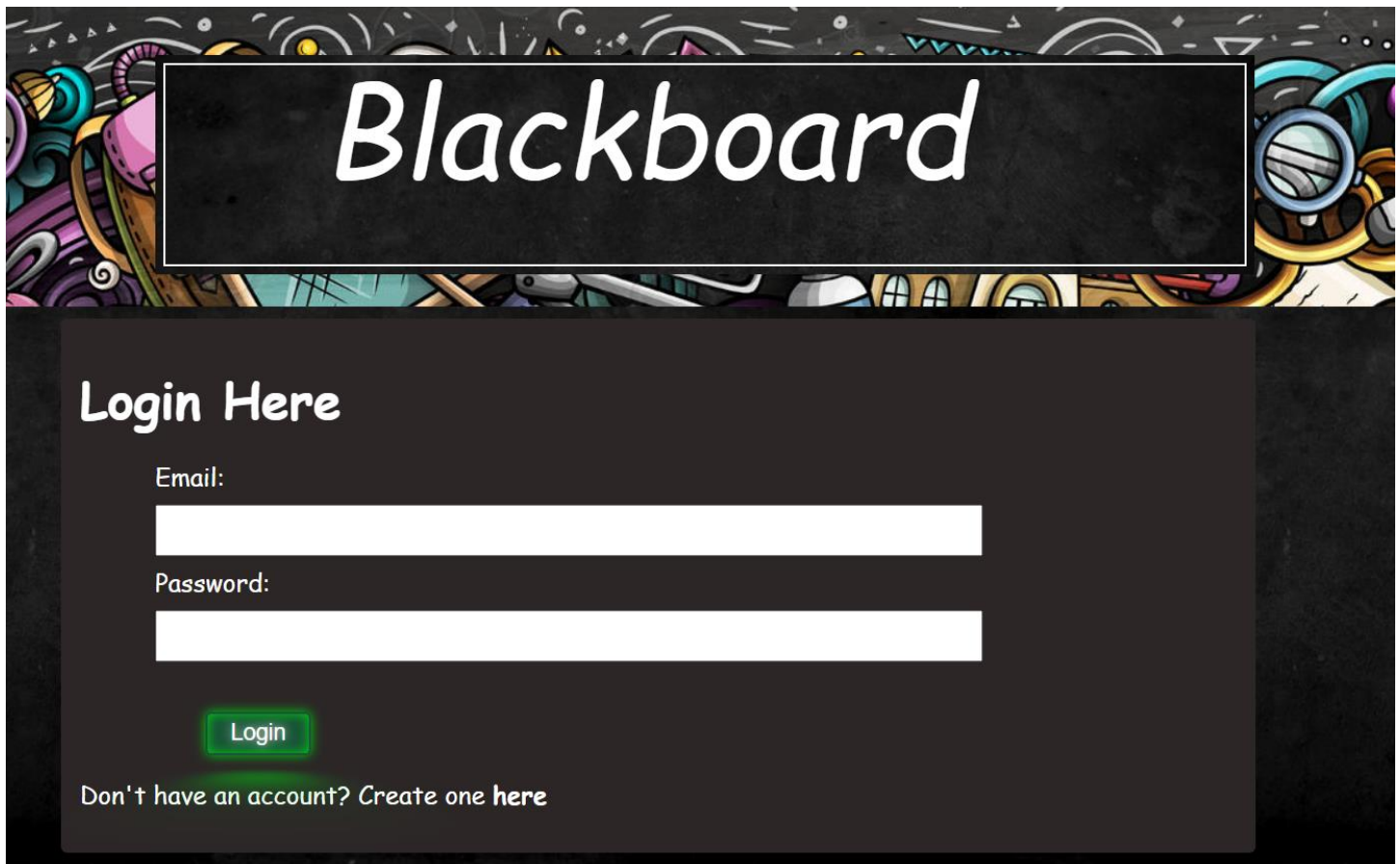
    msg['Subject'] = 'Blackboard-User Verification '
    msg['From'] = "blackboardaryanaarya@gmail.com"
    msg['To'] = mail
    # Send the message via our own SMTP server.
    server = smtplib.SMTP_SSL('smtp.gmail.com', 465)
    server.login("blackboardaryanaarya@gmail.com", "aaryadurba")
    server.send_message(msg)
    server.quit()

```

---

## Login Page

---



### *In html*

```
<form method="post" class="form-group">
  {% csrf_token%}
  {{form}}
  <button type="submit" class="btn btn-success">Login </button>
  <p>Don't have an account? Create one <a href="/register"> here</a></p>
</form>
```

### *In hosting/urls.py*

```
urlpatterns = [
    path('', include('django.contrib.auth.urls')),
]
```

### *In settings.py*

```
LOGIN_REDIRECT_URL = '/home'
```

---

## *Logout Function*

---



### *In html*

```
<a href="logout"><i class="fa fa-fw fa-user"></i>LogOut</a>
```

### *In hosting/urls.py*

```
urlpatterns = [  
    path('', include('django.contrib.auth.urls')),  
]
```

### *In settings.py*

```
LOGOUT_REDIRECT_URL = '/home'
```

---

## Previous Year Question Paper

---

Type what you want to search

Go!

- PROBABILITY AND STATISTICS -MAL 241
- ANALOG ELECTRONICS -ECB 206
- DISCRETE STRUCTURES -CSL 201
- DATABASE MANAGEMENT SYSTEM -CSB 202
- SIGNALS AND SYSTEM -ECB 204
- SYSTEM PROGRAMMING -CSL 203
- SOLID STATE DEVICES -ECB 201
- NETWORK ANALYSIS AND SYNTHESIS -EEL 201
- DIGITAL ELECTRONICS -ECB 202
- ELECTROMAGNETIC THEORY -ECL 203

Course Code: ECB206

Year: 2019

Type: End Semester

Link: To view the file click [here](#)

### In html

```
{% for result in qp %}
<div id="items">
    <p>Course Code: {{result.ccode.ccode}}</p>
    <p>Year: {{result.q_year}}</p>
    <p>Type: {{result.qtype}}</p>
    <p>Link: To view the file click <a href="{{result.link}}" style="text-decoration:none; color:white; font-weight:bold;" target="_blank"> here</a></p>
</div>
{% endfor %}
<script>
    var x="{{qp}}";
    console.log(x=="&lt;QuerySet []&gt;");
    if (document.getElementById("items")==null){
        var newel=document.createElement("p");
        newel.innerHTML="Didn't find a match. Please check the course code";
        newel.style.color="white";
        newel.style.fontSize="x-large";
        document.body.appendChild(newel);
    }
```

```
}  
</script>
```

### In views.py

```
def pyq(request):  
    if request.user.is_authenticated:  
        print('user is authenticated')  
        if request.method=="POST":  
            searched=request.POST['searched']  
            searched=searched.strip()  
            datas = AppPYQ.objects.filter(ccode__ccode__icontains=searched)  
            for data in datas:  
                data.link=str(data.link).strip()  
                data.q_year=str(data.q_year).strip()  
                data.qtype=str(data.qtype).strip()  
                data.qtype="End Semester" if data.qtype=="ES" else "Mid Semester"  
            return render(request, 'pyq.html',{'qp':datas})  
  
        return render(request, 'pyq.html')  
    else:  
        return redirect('/')
```

### in urls.py

```
urlpatterns = [  
    path("pyq", views.pyq, name="pyq"),  
]
```

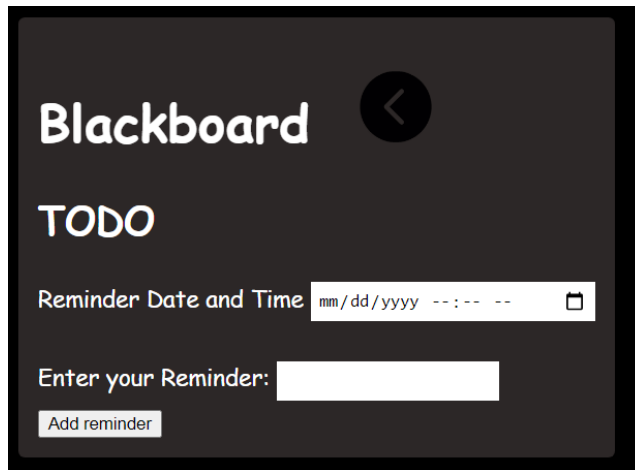
### In models.py

```
class AppPYQ(models.Model):  
    id=models.IntegerField(primary_key=True)  
    q_year=models.IntegerField(blank=True,null=True)  
    link=models.CharField(max_length=3000)  
    ccode=models.ForeignKey(AppCourse,on_delete=models.DO_NOTHING)  
    qtype=models.CharField(max_length=10)
```

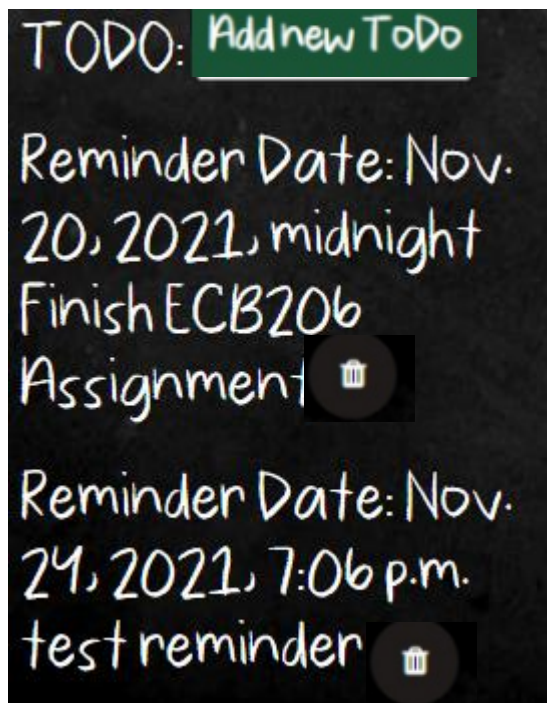
---

## TODO

---



The screenshot shows a web application titled "Blackboard" with a "TODO" section. It features a "Reminder Date and Time" input field with a placeholder "mm/dd/yyyy --:-- --" and a calendar icon. Below this is a text input field labeled "Enter your Reminder:" and an "Add reminder" button.



*in html*

```
• <form action="/todo_fn" id="stud_deet" method="post">
•   {% csrf_token %}
•   <label for = "reminder_date", class = "labels">Reminder Date and Time</label>
```

```

• <input type='datetime-local' class='inputs' name='reminder_date'
  id='reminder_date'>
•
• <br><br>
•
• <label for = 'todo_text' class='labels'>Enter your Reminder: </label>
• <input type= "text" class="inputs" name = 'todo_text' width = 75 px, height= 250
  px>
•
• <br>
•
• <button type "submit"> Add reminder </button>
• </form>

```

```

<p>TODO: <button type="submit"><a href = "/todo_fn">Add new TODO</button></a></p>
{%for j in todo_cse%}
<p>Reminder Date: {{j.reminder_date}}<br>
{{j.todo_text}}</p>
{% endfor %}
<br><br>

```

### *in models.py*

```

class todo (models.Model):
    user_id = models.ForeignKey(User, models.DO_NOTHING)
    reminder_date = models.DateTimeField(auto_now_add=False, auto_now = False, null = False,
default= None)
    todo_text = models.CharField(max_Length=1000)

```

### *in views.py*

```

def todo_fn(request):
    if request.user.is_authenticated:
        if request.method == 'POST':
            reminder_date = request.POST.get('reminder_date')
            todo_text = request.POST.get('todo_text')
            print("hi i am here")
            notif_todo = todo(user_id=request.user, reminder_date=reminder_date
, todo_text=todo_text)
            notif_todo.save()
            return redirect('home')

        else:
            return redirect('/')

    return render(request, 'todo.html')

```



*in urls.py*

```
urlpatterns = [  
    path("home", views.home, name="home"),]
```

---

## *Search BOOK*

---

The screenshot shows a web interface with a dark background. At the top, there is a white search bar with the placeholder text "Type what you want to search" and a green "Go!" button to its right. Below the search bar, there is a "Filter Genre" label followed by a dropdown menu currently showing "Non-Fiction". Below the filter, a green box displays the following text: "Name: Angels and Demons", "Author: Dan Brown", "Genre: Fiction", and "To borrow the book click here".

*In html*

```
<form action="search_book" method="POST"> {% csrf_token %}  
    <input name="searched" type="text" id="search_bar" class="js-userinput container-  
textinput" onClick="document.getElementById('search_bar').value=' ' " placeholder="Type what  
you want to search"/><br><br>  
    <label for="genre" class="labels filter">Filter Genre</label>  
    <select name="genre" class="inputs drop_down">  
        <option value="NF">Non-Fiction</option>  
        <option value="F">Fiction</option>  
        <option value="Th">Thriller</option>  
        <option value="AA">Action and Adventure</option>  
        <option value="C">Comic</option>  
        <option value="BG">Biographies</option>  
        <option value="CLB">College Books</option>
```



```

    </select>
<button type="submit" class="js-go container-button search_btn" >Go!</button>
</form>
<div id="result" class="content" style="height:100%; width:100%; ">

    {% for result in bk %}
    <div id="book" class="books" name="{{result.id}}">
        <p>Name: {{result.name}} </p>
        {% for author in result.author.all %}
        <p>Author: {{author.aname}}</p>
        {% endfor %}

```

### *in models.py*

```

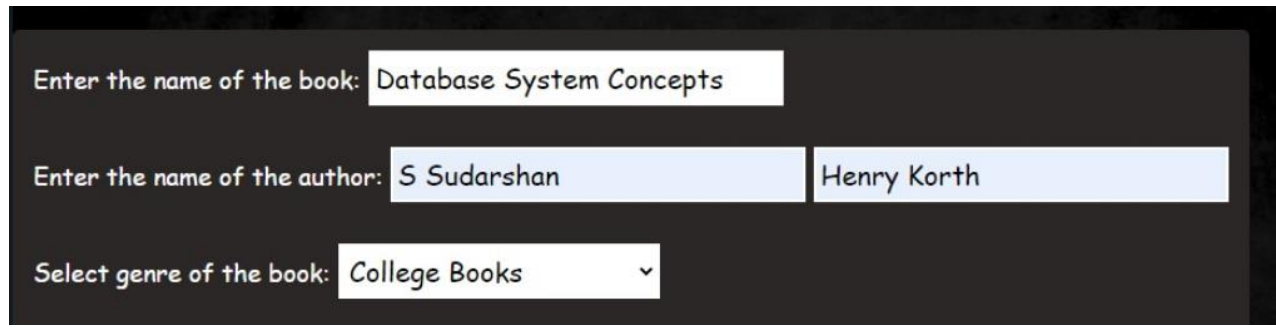
class author(models.Model):
    aname=models.CharField(max_length=300)
    class Meta:
        ordering=['aname']

```

---

## Add Book

---



Enter the name of the book: Database System Concepts

Enter the name of the author: S Sudarshan Henry Korth

Select genre of the book: College Books

### In html

```
<form action="addbook" method="POST">
  {% csrf_token %}
  <label for="book_name" class="labels">Enter the name of the book:</label>
  <input type="text" class="inputs" name="book_name" required><br><br>
  <label for="aname1" class="labels">Enter the name of the author:</label>
  <input type="text" class="inputs" name="aname1" placeholder="First Author" required>
  <input type="text" class="inputs" name="aname2" placeholder="Second Author"><br><br>
  <label for="genre" class="labels">Select genre of the book: </label>
  <select name="genre" class="inputs select">
    <option value="NF">Non-Fiction</option>
    <option value="F">Fiction</option>
    <option value="Th">Thriller</option>
    <option value="AA">Action and Adventure</option>
    <option value="C">Comic</option>
    <option value="BG">Biographies</option>
    <option value="CLB">College Books</option>
  </select><br><br>
  <label for="myfile">Post a picture</label>
  <input type="file" name="picture"><br>
  <button type="submit" class="container-button next">Next</button>
</form>
```

### In models.py

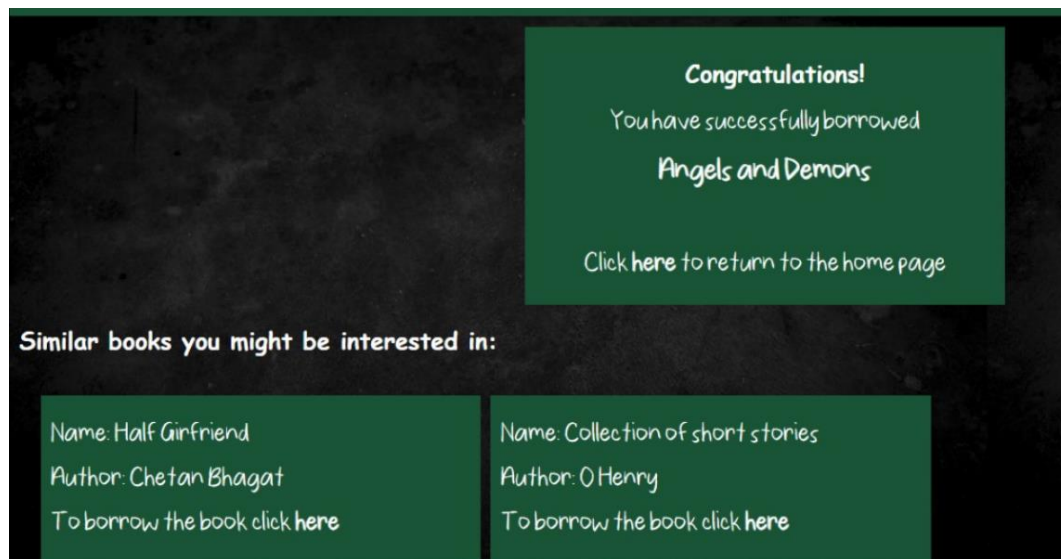
```
genre_choices=[
    ('NF','Non-Fiction'),
    ('F','Fiction'),
    ('Th','Thriller'),
    ('AA','Action and Adventure'),
    ('C','Comic'),
    ('BG','Biographies and Autobiographies'),
    ('CLB','College Level Books'),
]
```

```
class Books(models.Model):
    name=models.CharField(max_length=100)
    author=models.ManyToManyField(author)
    genre=models.CharField(max_length=100,choices=genre_choices,default='CLB')
    available=models.BooleanField(default=True)
    img=models.ImageField(upload_to='pics',null=True)
```

---

## *Confirmation of Book Borrow*

---



### *In models.py*

```
class Lends(models.Model):
    bid=models.ForeignKey(Books, on_delete=models.DO_NOTHING)
    lender=models.ForeignKey(User, on_delete=models.DO_NOTHING)
```

---

## Social Media Adding post

---



Share with us

Post a picture  No file chosen

**In html**

```
<form action="/sm_pg2" id="stud_deet" method="post" enctype="multipart/form-data">
    {% csrf_token %}

    <label for="post" class="labels">Share with us</label>
    <input type="text" class="inputs" name="post_text" required ><br><br>

    <label for="myfile">Post a picture</label>
    <input type="file" name="post_img"><br>

    <button type "submit" class = "neon-button"> POST </button>
</form>
```

**in models.py**

```
class post(models.Model):
    user_id = models.ForeignKey(User, models.DO_NOTHING)
    post_text = models.CharField(max_length=500)
    post_date = models.DateTimeField((u"Conversation Date"), auto_now_add=True, blank=True)
    post_img=models.ImageField(upload_to='pics',null=True)
    likes=models.IntegerField(max_length=1000, default=0, null = True)
    dislikes=models.IntegerField(max_length=1000, default=0, null = True)
```

---

## Book Transaction Histories

---

### The books you have borrowed:

Name: Mr Pip

Author: Jones

Author: Lloyd

### Do you want to return a book?

Select the book you wish to return: Mr Pip ▾

Return

In html

```
</form>

    {%endif%}
    {% if borrowed %}
    <br><h2>The books you have borrowed:</h2>
    {% for bb in borrowed %}
    <div class="books">
    <p>Name: {{bb.bid.name}}</p>
    {% for author in bb.bid.author.all %}
        <p>Author: {{author.aname}}</p>
    {% endfor %}
    </div>
    {% endfor %}
```

```

{%endif%}
{% if lent %}
<br><h2>The books you have lent:</h2>
{% for lb in lent %}
<div class="books">
<p>Name:{{lb.bid.name}}</p>
{% for author in lb.bid.author.all %}
    <p>Author: {{author.aname}}</p>
{% endfor %}
</div>
{% endfor %}
{%endif%}
{%if borrowed %}
<br><h2>Do you want to return a book?</h2>
<form action="book_transaction" method="post">
    {%csrf_token%}
    <label for="Book" class="labels"
style="color:white;">Select the book you wish to return: </label>
    <select name="book" class="inputs select"
style="height:40px;">
        {% for book in borrowed %}
        <option
value="{{book.bid.id}}">{{book.bid.name}}</option>

        {%endfor%}
    </select><br><br>
    <button type="submit" class="container-
button">Return</button>
</form>
{%endif%}

```



## in html

```
{% for i in data %}
    {% for i in data %}
        <div id="content">
            <div id="details_box">
                <p><h2>{{i.user_id}}</h2>

                {{i.post_date}}
                <br>
                {{i.post_text}}
                <br>
                <hr width=250 px>
                {% if i.post_img %}
                    <img src = "media/{{i.post_img}}" height= 450px width = 500px>
                {% else %}
                    <p></p>
                {% endif %}
                <form action="{% url 'likes' i.id%}" method="POST">
                {% csrf_token %}
                    <button type = 'submit' class = 'like-button'></button> {{i.likes}}
                </form>
                <form action = "{% url 'dislikes' i.id%}" id="stud_deet"
method="post">
                    {% csrf_token %}
                    <button type = 'submit' class = 'dislike-button'></button> {{i.dislikes}}
                </form>
                <hr width=400 px, height = 10px><hr width=400 px, height = 10px></p>
            </div>
```

## In views.py

```
def sm_post(request):
    if request.user.is_authenticated:
        print("user is authenticated")
        posts = post.objects.all()
        for i in posts:
            setattr(i, 'username', i.user_id.username)

        return render(request, 'sm_post.html', {'data':posts})
    else:
        print("else")
        return redirect('/')
```



## TimeTable

# Timetable

Batch of 2024

Branch: CSE

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8.30-9.30	None	CSL201	ECB204	ECB206	None
W 8.45-	None	Dr. SHRUTI	Dr. NS Singha	Dr. Harikesh	None
9.30	Join Class	GUPTA	Join Class	Join Class	Join Class
9.30-10.30	ECB204	MAL241	None	None	None
W 9.30-	Dr NS Singha	Dr. P. Kumar	None	None	None
10.15	Join Class	Join Class	Join Class	Join Class	Join Class
10.30-	ECB204 G1+G2	CSB202 G2	CSL201	None	CSL203
11.30	Dr NS Singha	Dr S. Sachdeva	Dr. SHRUTI	None	Dr. Rohini
W 10.15-	Join Class	Join Class	GUPTA	Join Class	Mahajan
12.30	Dr NS Singha	Dr S. Sachdeva	Dr. Rohini	Dr S. Sachdeva	Dr S. Sachdeva
W 11.00-	Join Class	Join Class	Mahajan	Join Class	Join Class
11.45			Join Class		
12.30-	CSL201	CSB202 G1	None	None	CSB202 G1
13.30	Dr. SHRUTI	Dr S. Sachdeva	None	None	Dr S. Sachdeva
W 11.45-	GUPTA	Join Class	Join Class	Join Class	Join Class
12.30	Join Class				
13.30-	None	None	None	CSL201	ECB204
14.30	None	None	None	Dr. SHRUTI	Dr. NS Singha
W 12.30-	Join Class	Join Class	Join Class	GUPTA	Join Class
13.15				Join Class	
14.30-	CSB202	MAL241	ECB206	CSL203	None
15.30	Dr S. Sachdeva	Dr. P. Kumar	Dr. Harikesh	Dr. Rohini	None
W 13.15-	Join Class	Join Class	Join Class	Mahajan	Join Class
14.00				Join Class	

14.30-15.30 W 13.15-14.00	CSB202 Dr.S.Sachdeva Join Class	MAAL241 Dr.P.Kumar Join Class	ECB206 Dr.Harikesh Join Class	CSL203 Dr.Rohini Mahajan Join Class	None None Join Class
15.30-16.30 W 14.00-14.45	None None Join Class	ECB206 Dr.Harikesh Join Class	MAAL241 Dr.P.Kumar Join Class	MAAL241 Dr.P.Kumar Join Class	ECB206 G1+G2 Dr.BALJIT KAUR Join Class
16.30-17.30 W 14.45-15.15	None None Join Class	CSL203 Dr.Rohini Mahajan Join Class	None None Join Class	None None Join Class	ECB206 G1+G2 Dr.BALJIT KAUR Join Class

### In html

```

<h1>Timetable</h1>
    <p> Batch of  {{user.year}}</p>
    <p> Branch : {{user.branch}}</p>
    <table class="table table-bordered">
        <thead>
            <tr>
                <th>TIME</th>
                <th>MONDAY</th>
                <th>TUESDAY</th>
                <th>WEDNESDAY</th>
                <th>THURSDAY</th>
                <th>FRIDAY</th>
            </tr>
        </thead>
        <tr>
            <td>8.30-9.30<br>W 8.45-9.30</td>

            {%for i in data_cse_1%}
                <td> {{i.subject_id}}<br>
                    {{i.teacher_name}}<br>
                    <a href="{{i.gmeet_link}}">Join Class</a>
            
```

```

        </td>
        {%endfor%}
    </tr>
    <tr>
        <td>9.30-10.30<br>W 9.30-10.15</td>
        {%for i in data_cse_2%}
            <td> {{i.subject_id}}<br>
                {{i.teacher_name}}<br>
                <a href="{{i.gmeet_link}}">Join Class</a>
            </td>
        {%endfor%}
    </tr>
    <tr>
        <td>10.30-11.30<br>W 10.15-11.00</td>
        {%for i in data_cse_3%}
            <td> {{i.subject_id}}<br>
                {{i.teacher_name}}<br>
                <a href="{{i.gmeet_link}}">Join Class</a>
            </td>
        {%endfor%}
        <td></td>
    </tr>
    <tr>
        <td>11.30-12.30<br>W 11.00-11.45</td>
        {%for i in data_cse_4%}
            <td> {{i.subject_id}}<br>
                {{i.teacher_name}}<br>
                <a href="{{i.gmeet_link}}">Join Class</a>
            </td>
        {%endfor%}
        <td></td>
    </tr>
    <tr>
        <td>12.30-13.30<br>W 11.45-12.30</td>
        {%for i in data_cse_5%}
            <td> {{i.subject_id}}<br>
                {{i.teacher_name}}<br>
                <a href="{{i.gmeet_link}}">Join Class</a>
            </td>
        {%endfor%}
        <td></td>
    </tr>
    <tr>
        <td>13.30-14.30<br>W 12.30-13.15</td>
        {%for i in data_cse_6%}

```

```

        <td> {{i.subject_id}}<br>
        {{i.teacher_name}}<br>
        <a href="{{i.gmeet_link}}">Join Class</a>
        </td>
    {%endfor%}
    <td></td>
</tr>
<tr>
    <td>14.30-15.30<br>W 13.15-14.00</td>
    {%for i in data_cse_7%}
        <td> {{i.subject_id}}<br>
        {{i.teacher_name}}<br>
        <a href="{{i.gmeet_link}}">Join Class</a>
        </td>
    {%endfor%}
    <td></td>
</tr>
<tr>
    <td>15.30-16.30<br>W 14.00-14.45</td>
    {%for i in data_cse_8%}
        <td> {{i.subject_id}}<br>
        {{i.teacher_name}}<br>
        <a href="{{i.gmeet_link}}">Join Class</a>
        </td>
    {%endfor%}
    <td></td>
</tr>
<tr>
    <td>16.30-17.30<br>W 14.45-15.15</td>
    {%for i in data_cse_9%}
        <td> {{i.subject_id}}<br>
        {{i.teacher_name}}<br>
        <a href="{{i.gmeet_link}}">Join Class</a>
        </td>
    {%endfor%}
    <td></td>
</tr>
</table>
</div>
{% comment %} <form action="/todo" id="stud_deet" method="post">
{% csrf_token %} {% endcomment %}
<div id="side_bar">
    <p>TODO:<button type="submit"><a href = "/todo_fn" >Add new
TODO</a></button></p>
    {%for j in todo_cse%}

```



```
<p>Reminder Date: {{j.reminder_date}}<br>
{{j.todo_text}}</p>
{% endfor %}
</div>
```

## In views.py

```
def home(request):
    if request.user.is_authenticated:
        if request.user.year == 2024 and request.user.branch == 'CSE': #for cse 2024
            timetable_cse_1 = lesson.objects.filter(year=2024, branch = 'CSE',
period_no_id=1)
            timetable_cse_2 = lesson.objects.filter(year=2024, branch = 'CSE',
period_no_id=2)
            timetable_cse_3 = lesson.objects.filter(year=2024, branch = 'CSE',
period_no_id=3)
            timetable_cse_4 = lesson.objects.filter(year=2024, branch = 'CSE',
period_no_id=4)
            timetable_cse_5 = lesson.objects.filter(year=2024, branch = 'CSE',
period_no_id=5)
            timetable_cse_6 = lesson.objects.filter(year=2024, branch = 'CSE',
period_no_id=6)
            timetable_cse_7 = lesson.objects.filter(year=2024, branch = 'CSE',
period_no_id=7)
            timetable_cse_8 = lesson.objects.filter(year=2024, branch = 'CSE',
period_no_id=8)
            timetable_cse_9 = lesson.objects.filter(year=2024, branch = 'CSE',
period_no_id=9)

            #for todo:
            todo_cse = todo.objects.filter(user_id = request.user.id)

            return render(request, 'home.html', {'todo_cse': todo_cse, 'data_cse_1':
timetable_cse_1, 'data_cse_2':timetable_cse_2, 'data_cse_3':timetable_cse_3,
'data_cse_4':timetable_cse_4, 'data_cse_5':timetable_cse_5, 'data_cse_6':timetable_cse_6,
'data_cse_7':timetable_cse_7, 'data_cse_8':timetable_cse_8, 'data_cse_9':timetable_cse_9})

        else:
            return render(request, 'home.html')
    else:
        return redirect('/')
```

*in models.py*

```
class linklesson(models.Model):
    time_phase = models.CharField(max_length=20)
    period_no = models.IntegerField(default=1)

class lesson(models.Model):
    year=models.IntegerField(max_length =4, default = 2024, null = True)
    branch=models.CharField(max_length=3, default = 'CSE')
    period_day = models.CharField(max_length=10)
    subject_id = models.CharField(max_length=15, null = True)
    gmeet_link = models.CharField(max_length=1000, null = True)
    # period_no = models.IntegerField()
    period_no = models.ForeignKey(linklesson, on_delete=models.SET_NULL, null=True)
    teacher_name=models.CharField(max_length = 50, null = True)
```

# BIBLIOGRAPHY

---

<https://www.youtube.com/watch?v=OTmQOjsl0eg&t=5317s>

[https://www.w3schools.com/js/js\\_ajax\\_intro.asp](https://www.w3schools.com/js/js_ajax_intro.asp)

<https://www.tutorialrepublic.com/html-tutorial/html-forms.php>

<https://www.freecodecamp.org/news/how-to-center-anything-with-css-align-a-div-text-and-more/>

[https://www.w3schools.com/howto/howto\\_js\\_slideshow.asp](https://www.w3schools.com/howto/howto_js_slideshow.asp) <https://css-tricks.com/> <https://developer.mozilla.org/en-US/docs/Web>

<https://www.geeksforgeeks.org/html-tables/>

<https://stackoverflow.com/questions/14675738/display-an-image-located-in-the-database-in-django/14675921>

<https://codedec.com/tutorials/upload-and-display-image-in-django/>

<https://www.youtube.com/watch?v=1UvTNMH7zDo&list=PLbcZOMGdqnetQ446-P300PiUHkvUF6bz&index=3&t=2727s>

<https://www.youtube.com/watch?v=HshbjK1vDtY&list=PLbcZOMGdqnetQ446-P300PiUHkvUF6bz&index=4&t=2655s>

<https://www.youtube.com/watch?v=6xNcXwC6ikQ&list=PLbcZOMGdqnetQ446-P300PiUHkvUF6bz&index=5&t=2590s>