PROJECT REPORT

TITLE: RESUME BUILDER

TEAM MEMBERS:

LIKHITH V KUNDER (PES1UG21CS303)

K S SHASHANK (PES1UG21CS259)

Resume Builder

Overview

Resume Builder is a web application developed using Flask, HTML, CSS, JavaScript, and Jinja templating. Its purpose is to assist users in creating and customizing professional resumes. The application features an intuitive user interface for entering personal and professional information, and it offers a single template for customization.

Features

User Authentication: Ensure secure user authentication through Flask sessions, providing data protection.

Dynamic Form: Utilize an interactive form created with HTML and JavaScript to input personal details, education, work experience, skills, etc.

Template: Incorporate a professionally designed resume template using HTML, CSS, and Jinja templating.

Notifications: Implement a notification system to inform users about successful actions and errors.

Technologies Used:

Backend: Flask (Python)

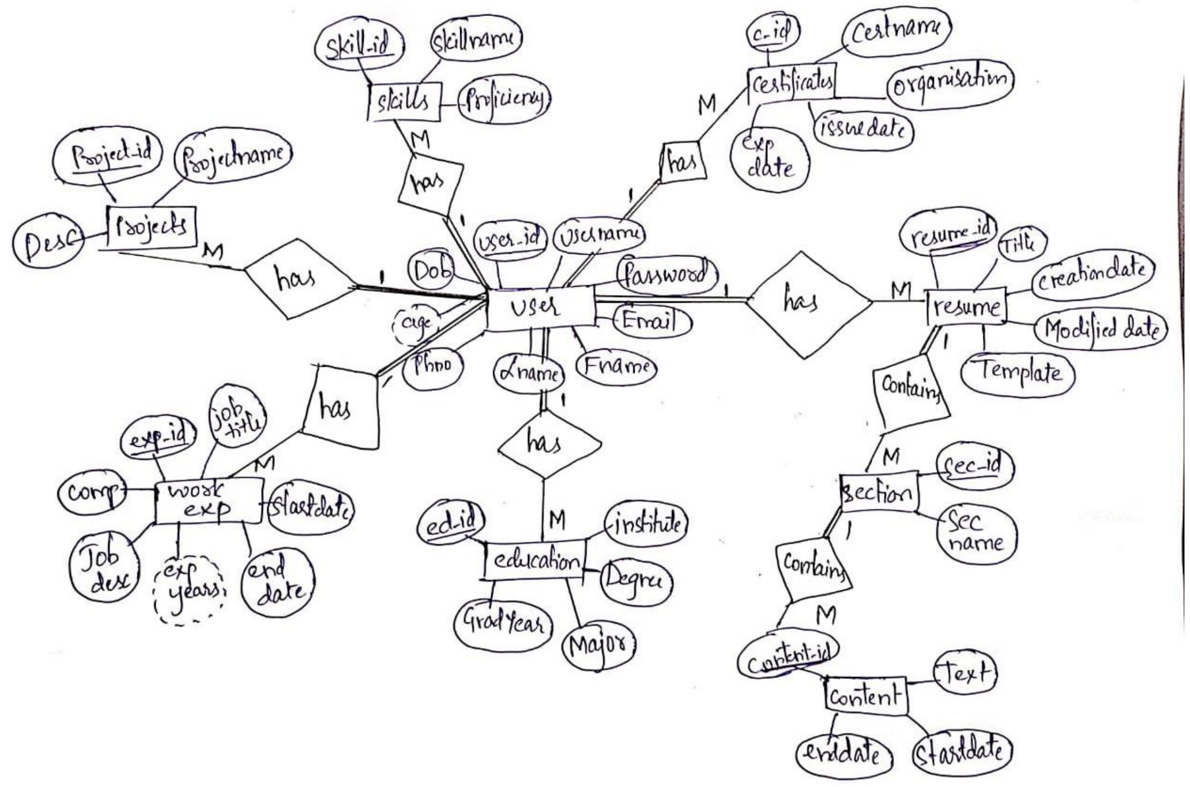
Frontend: HTML, CSS, JavaScript

Template Engine: Jinja

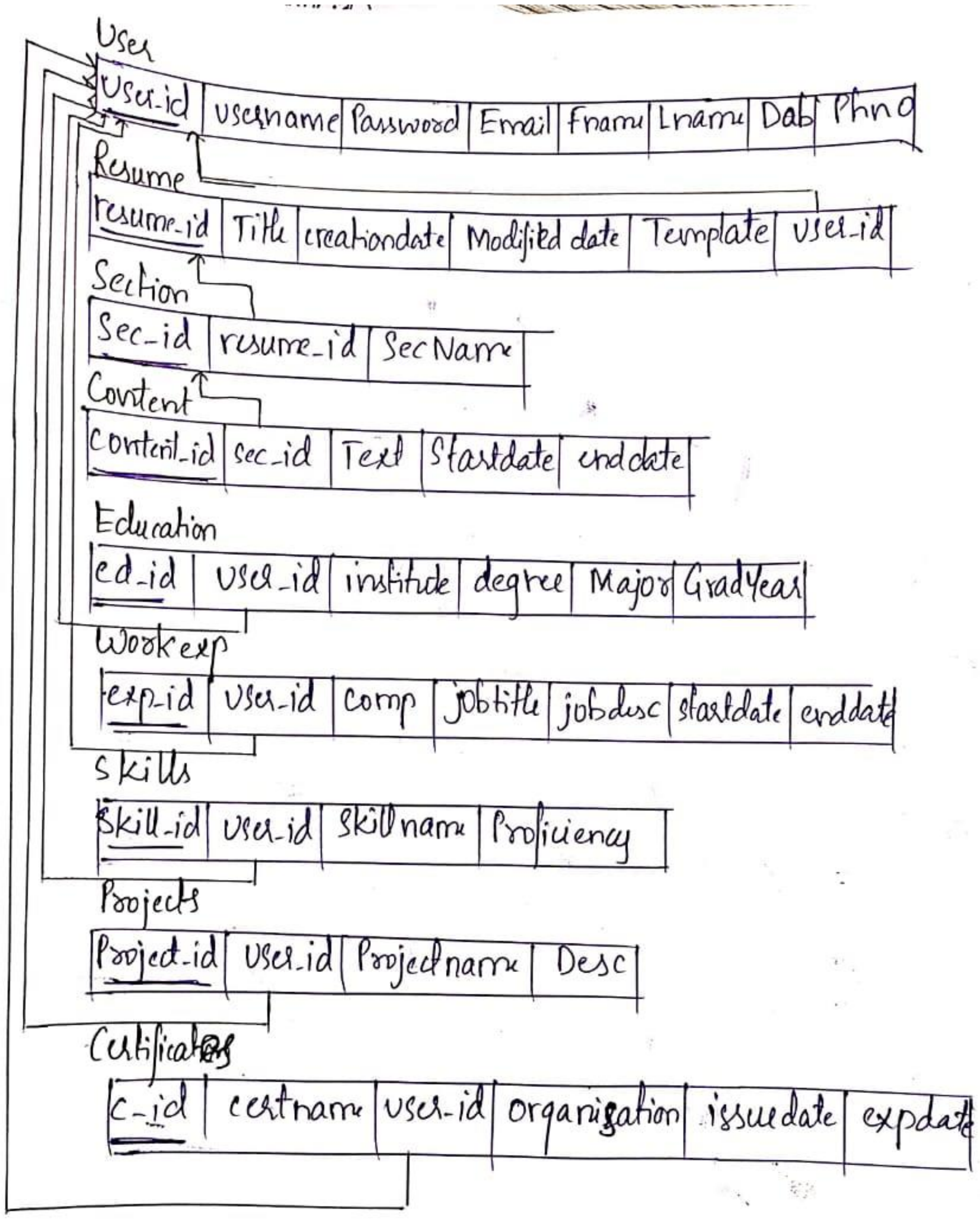
Database: MySQL, Flask-SQLAlchemy

Authentication: Flask Sessions

ER DIAGRAM:



RELATIONAL SCHEMA:



User

User-id	username	Password	Email	Fname	Lname	Dob	Phno

Resume

resume-id	Title	creationdate	Modified date	Template	user-id

Section

Sec-id	resume-id	SecName

Content

Content-id	sec-id	Text	Startdate	enddate

Education

ed-id	user-id	institute	degree	Major	GradYear

Workexp

exp-id	user-id	comp	jobtitle	jobdesc	startdate	enddate

Skills

Skill-id	user-id	Skillname	Proficiency

Projects

Project-id	User-id	Projectname	Desc

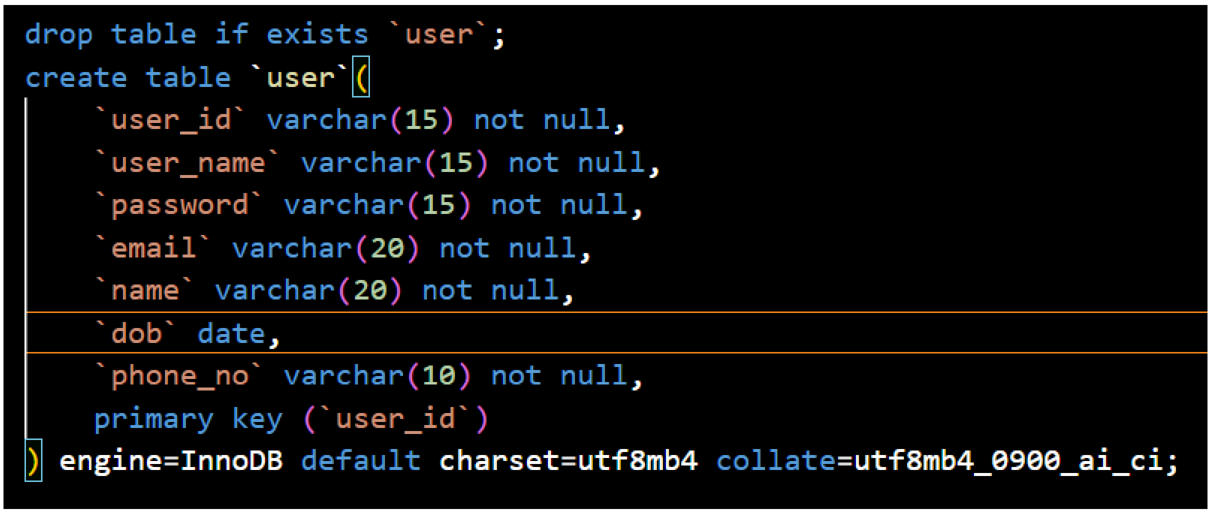
Certificates

c-id	certname	user-id	organization	issuedate	expdate

ABSTRACT:

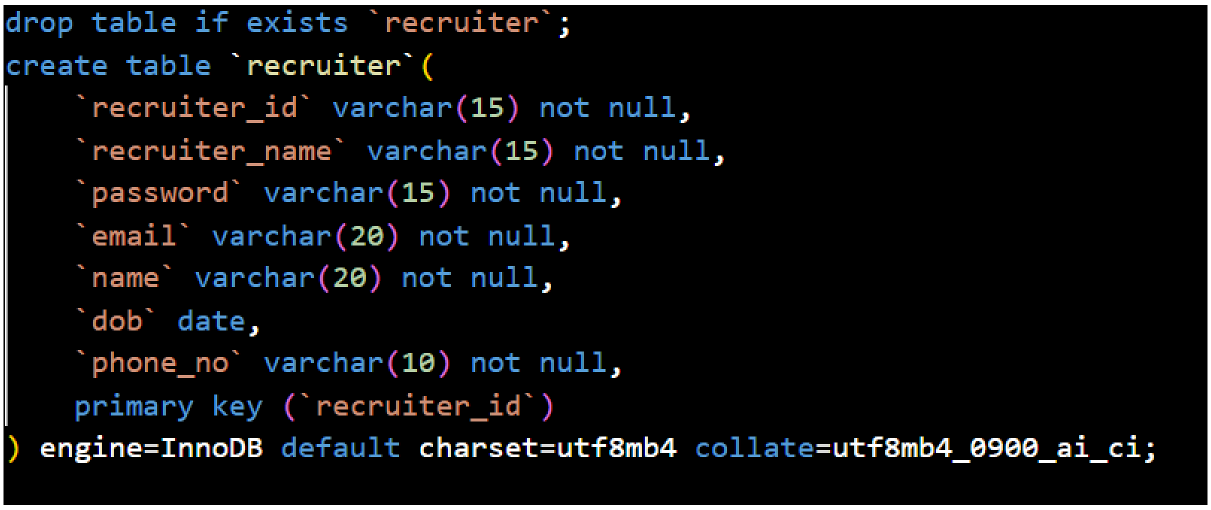
DDL COMMANDS:

Table user:



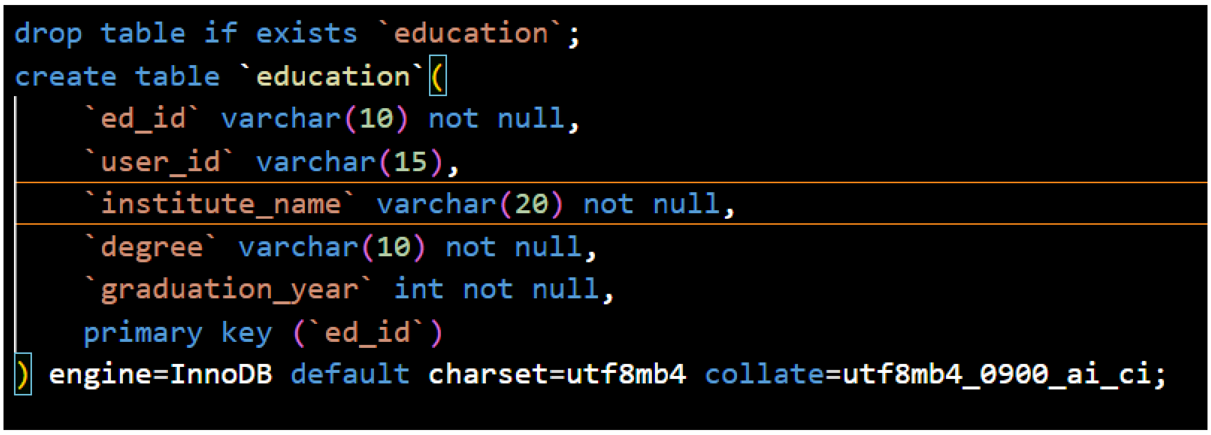
```
drop table if exists `user`;
create table `user`(
    `user_id` varchar(15) not null,
    `user_name` varchar(15) not null,
    `password` varchar(15) not null,
    `email` varchar(20) not null,
    `name` varchar(20) not null,
    `dob` date,
    `phone_no` varchar(10) not null,
    primary key (`user_id`)
) engine=InnoDB default charset=utf8mb4 collate=utf8mb4_0900_ai_ci;
```

RECRUITER:



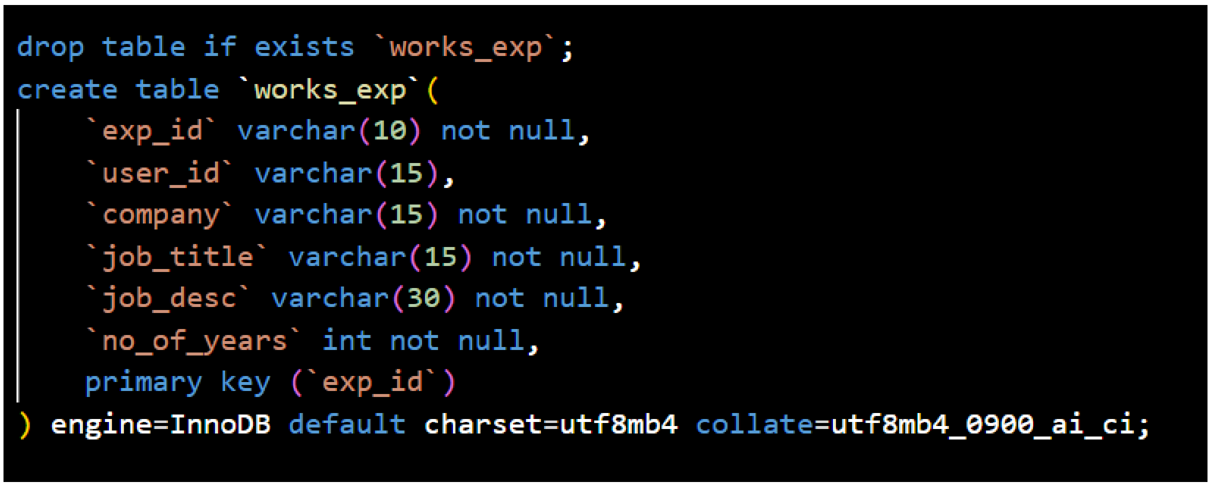
```
drop table if exists `recruiter`;
create table `recruiter`(
    `recruiter_id` varchar(15) not null,
    `recruiter_name` varchar(15) not null,
    `password` varchar(15) not null,
    `email` varchar(20) not null,
    `name` varchar(20) not null,
    `dob` date,
    `phone_no` varchar(10) not null,
    primary key (`recruiter_id`)
) engine=InnoDB default charset=utf8mb4 collate=utf8mb4_0900_ai_ci;
```

EDUCATION:



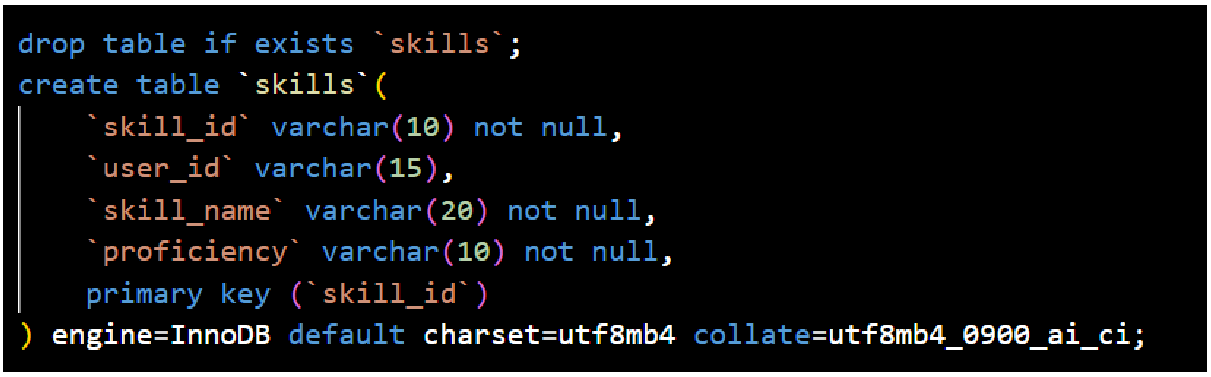
```sql
drop table if exists `education`;
create table `education`(
    `ed_id` varchar(10) not null,
    `user_id` varchar(15),
    `institute_name` varchar(20) not null,
    `degree` varchar(10) not null,
    `graduation_year` int not null,
    primary key (`ed_id`)
) engine=InnoDB default charset=utf8mb4 collate=utf8mb4_0900_ai_ci;
```

WORK EXP:



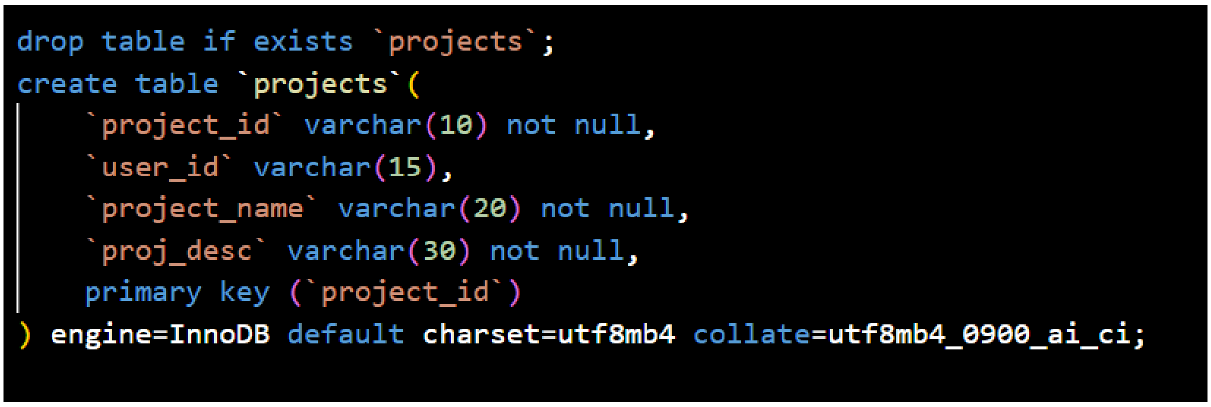
```sql
drop table if exists `works_exp`;
create table `works_exp`(
    `exp_id` varchar(10) not null,
    `user_id` varchar(15),
    `company` varchar(15) not null,
    `job_title` varchar(15) not null,
    `job_desc` varchar(30) not null,
    `no_of_years` int not null,
    primary key (`exp_id`)
) engine=InnoDB default charset=utf8mb4 collate=utf8mb4_0900_ai_ci;
```

SKILLS:



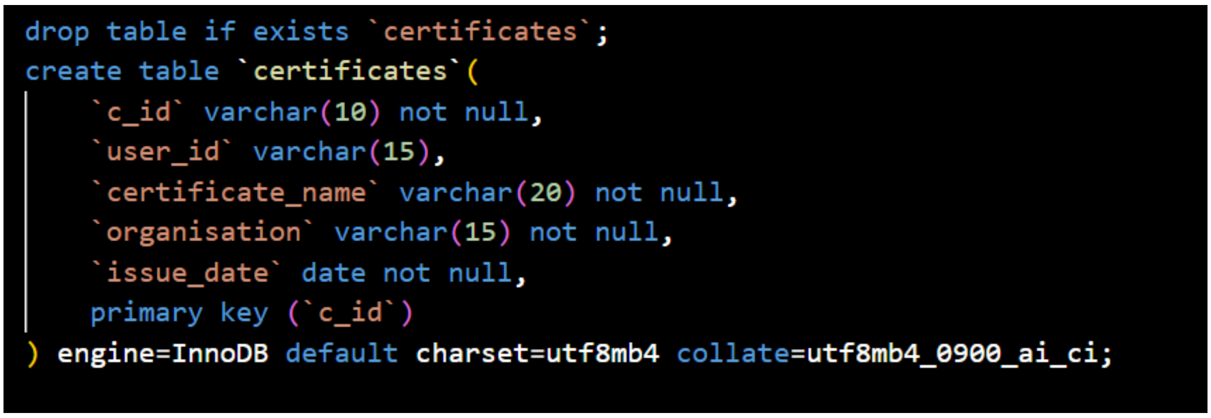
```sql
drop table if exists `skills`;
create table `skills`(
    `skill_id` varchar(10) not null,
    `user_id` varchar(15),
    `skill_name` varchar(20) not null,
    `proficiency` varchar(10) not null,
    primary key (`skill_id`)
) engine=InnoDB default charset=utf8mb4 collate=utf8mb4_0900_ai_ci;
```

PROJECTS:



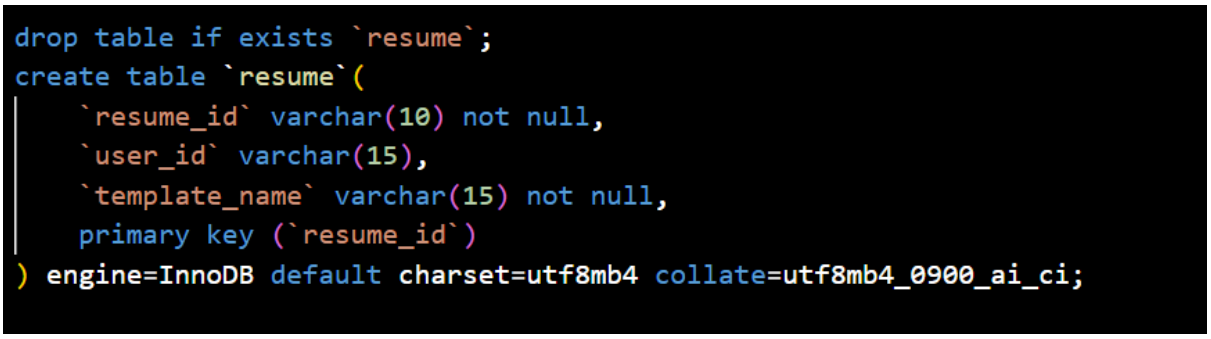
```
drop table if exists `projects`;
create table `projects`(
    `project_id` varchar(10) not null,
    `user_id` varchar(15),
    `project_name` varchar(20) not null,
    `proj_desc` varchar(30) not null,
    primary key (`project_id`)
) engine=InnoDB default charset=utf8mb4 collate=utf8mb4_0900_ai_ci;
```

CERTIFICATES:



```
drop table if exists `certificates`;
create table `certificates`(
    `c_id` varchar(10) not null,
    `user_id` varchar(15),
    `certificate_name` varchar(20) not null,
    `organisation` varchar(15) not null,
    `issue_date` date not null,
    primary key (`c_id`)
) engine=InnoDB default charset=utf8mb4 collate=utf8mb4_0900_ai_ci;
```

RESUME:

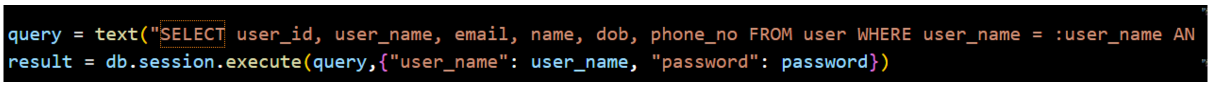


```
drop table if exists `resume`;
create table `resume`(
    `resume_id` varchar(10) not null,
    `user_id` varchar(15),
    `template_name` varchar(15) not null,
    primary key (`resume_id`)
) engine=InnoDB default charset=utf8mb4 collate=utf8mb4_0900_ai_ci;
```

CRUD OPERATIONS:

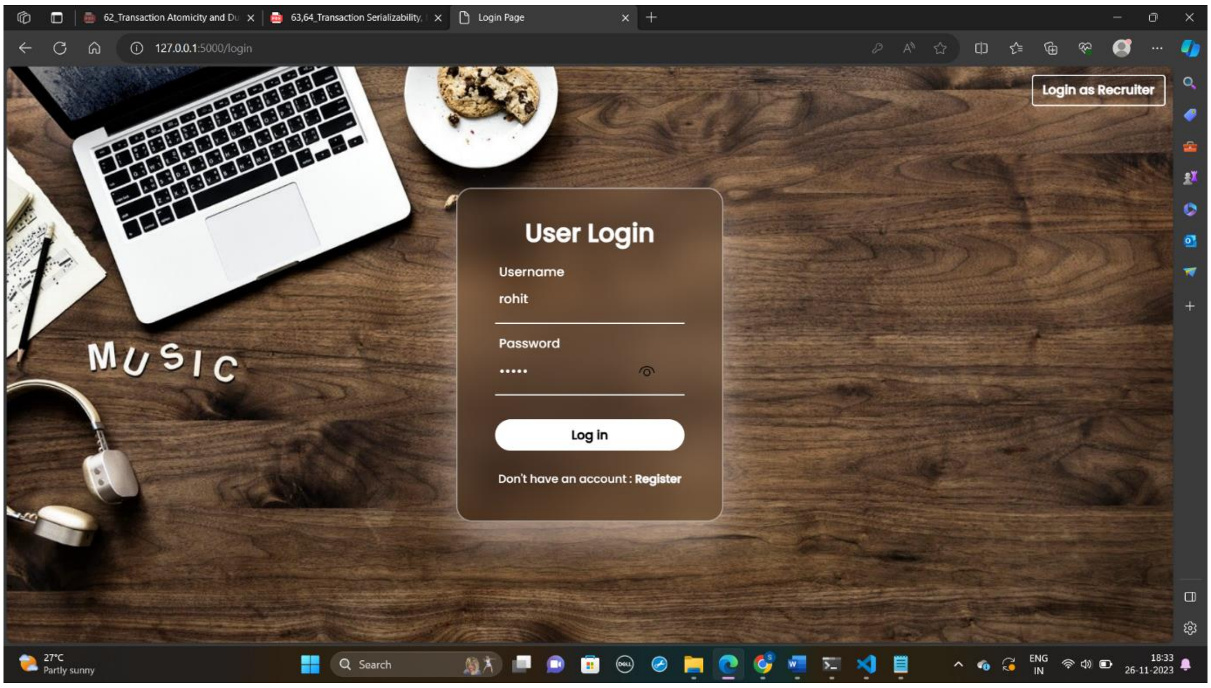
Select:

One of the select statement used is:



```
query = text("SELECT user_id, user_name, email, name, dob, phone_no FROM user WHERE user_name = :user_name AN
result = db.session.execute(query,{"user_name": user_name, "password": password})
```

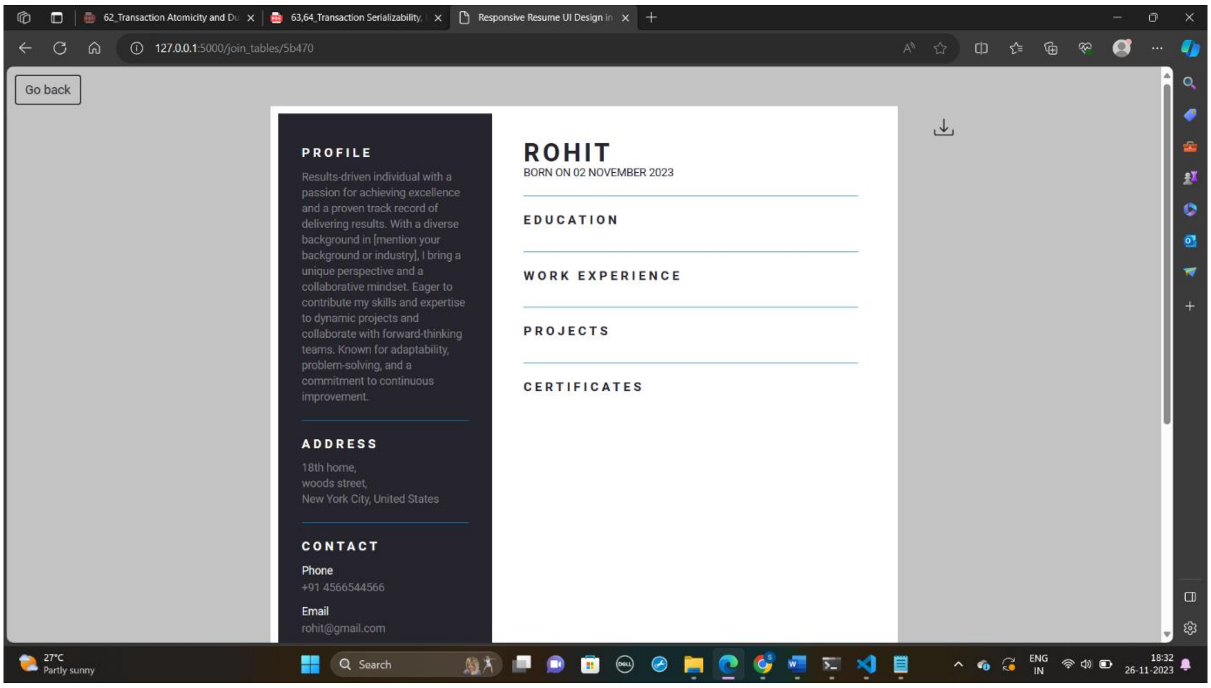
Select statement is used to retrieve a user's ID from a database based on their username and password



User Login

Username
rohit

Password
•••••


62_Transaction Atomicity and Du
63,64_Transaction Serializability,
Responsive Resume UI Design in
127.0.0.1:5000/join_tables/5b470
Go back

PROFILE

Results-driven individual with a passion for achieving excellence and a proven track record of delivering results. With a diverse background in [mention your background or industry], I bring a unique perspective and a collaborative mindset. Eager to contribute my skills and expertise to dynamic projects and collaborate with forward-thinking teams. Known for adaptability, problem-solving, and a commitment to continuous improvement.

ADDRESS

18th home,
woods street,
New York City, United States

CONTACT

Phone
+91 4566544566

Email
rohit@gmail.com

ROHIT
BORN ON 02 NOVEMBER 2023

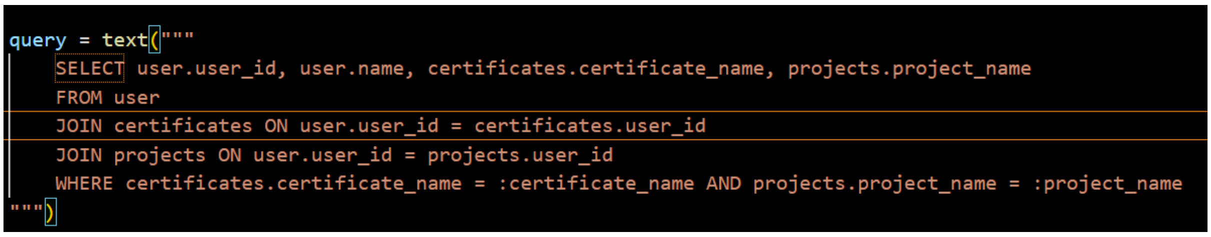
EDUCATION

WORK EXPERIENCE

PROJECTS

CERTIFICATES

If user name is present in user table, then the details are selected and used in resume template based on user table. We have used select statements.

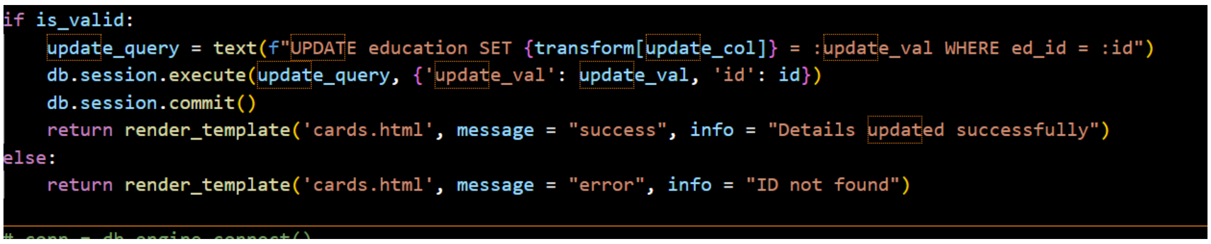


```
query = text("""
    SELECT user.user_id, user.name, certificates.certificate_name, projects.project_name
    FROM user
    JOIN certificates ON user.user_id = certificates.user_id
    JOIN projects ON user.user_id = projects.user_id
    WHERE certificates.certificate_name = :certificate_name AND projects.project_name = :project_name
""")
```

Here selects statement is used to select users based on certificates and projects entered by recruiter.

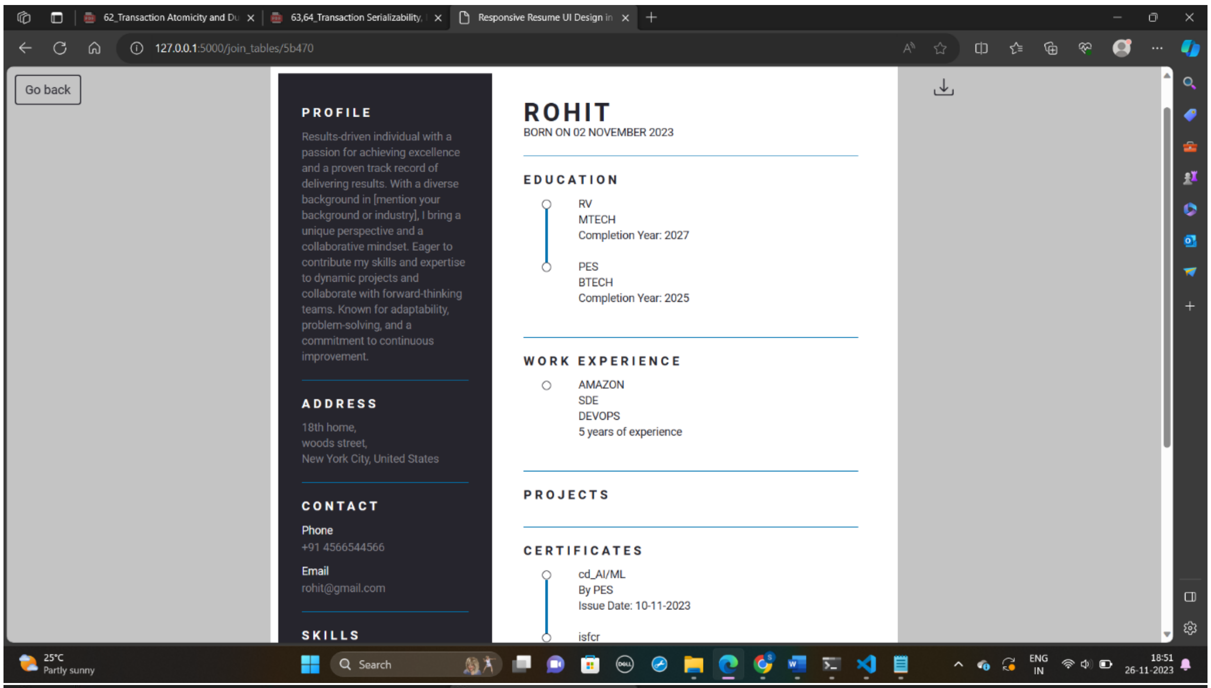
<u>UPDATE:</u>

<u>Query:</u>



```
if is_valid:
    update_query = text(f"UPDATE education SET {transform[update_col]} = :update_val WHERE ed_id = :id")
    db.session.execute(update_query, {'update_val': update_val, 'id': id})
    db.session.commit()
    return render_template('cards.html', message = "success", info = "Details updated successfully")
else:
    return render_template('cards.html', message = "error", info = "ID not found")
```

Before:



62_Transaction Atomicity and Du
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SKILLS

ROHIT
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EDUCATION

RV
MTECH
Completion Year: 2027

PES
BTECH
Completion Year: 2025

WORK EXPERIENCE

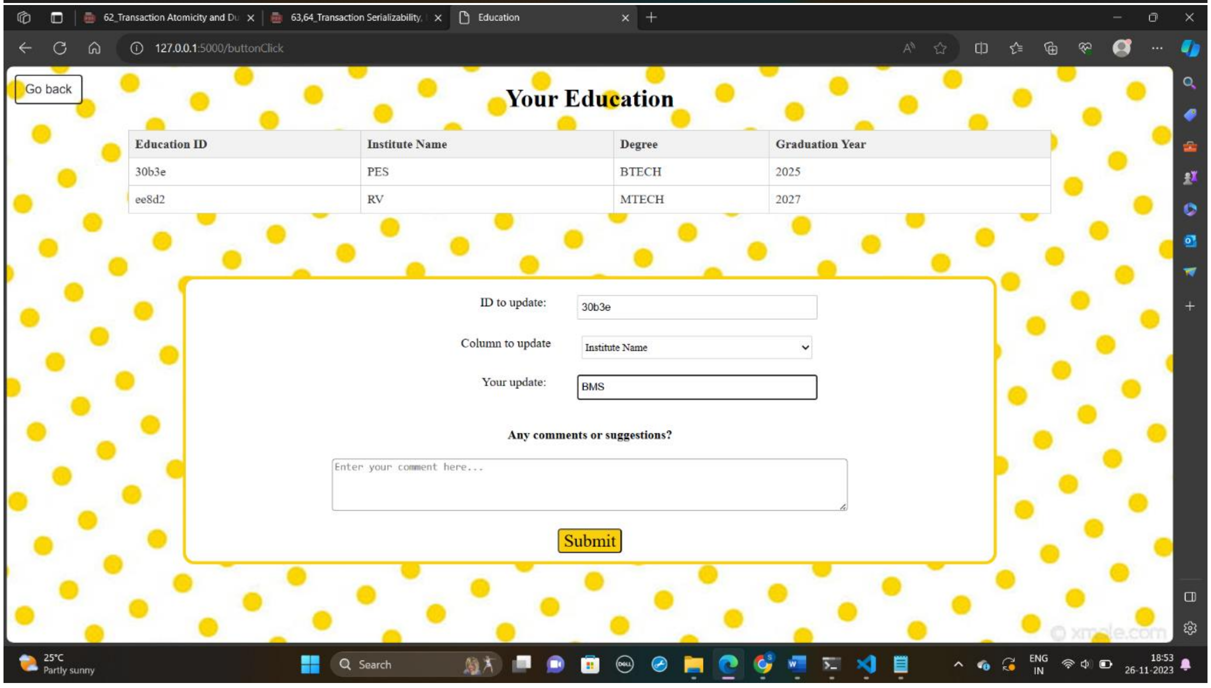
AMAZON
SDE
DEVOPS
5 years of experience

PROJECTS

CERTIFICATES

cd_AI/ML
By PES
Issue Date: 10-11-2023

isfcr



62_Transaction Atomicity and Du
63,64_Transaction Serializability
Education
127.0.0.1:5000/buttonClick
Go back

Your Education

Education ID	Institute Name	Degree	Graduation Year
30b3e	PES	BTECH	2025
ee8d2	RV	MTECH	2027

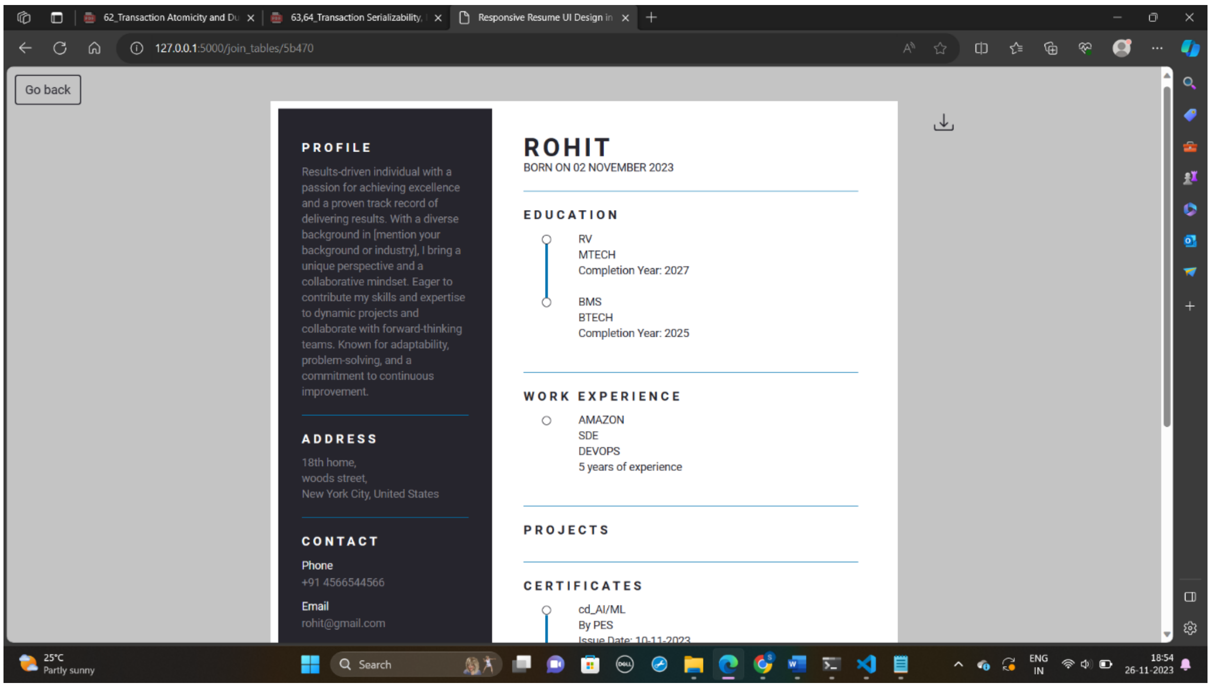
ID to update:	30b3e
Column to update	Institute Name
Your update:	BMS

Any comments or suggestions?

Enter your comment here...

Submit

After: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BMS
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Completion Year: 2025

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PROJECTS

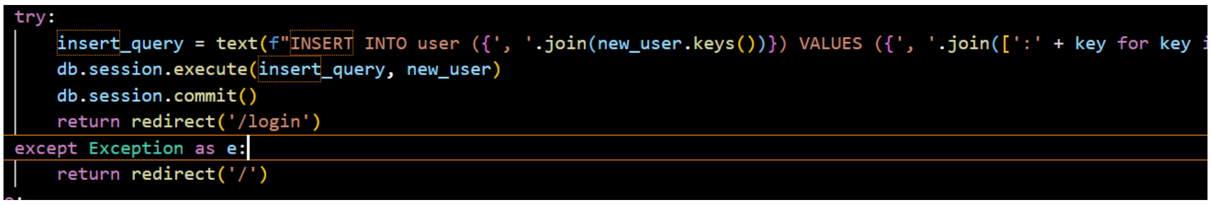
CERTIFICATES

cd_AI/ML
By PES
Issue Date: 10-11-2023

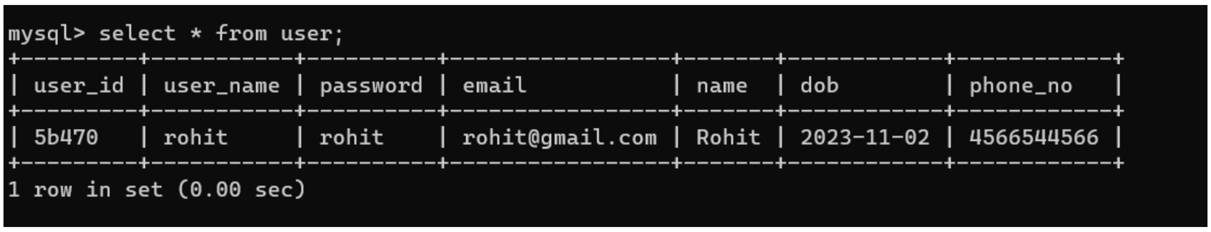
After update in education section college name from which Rohit obtained BTECH is changed from PES TO BMS.

Insert:

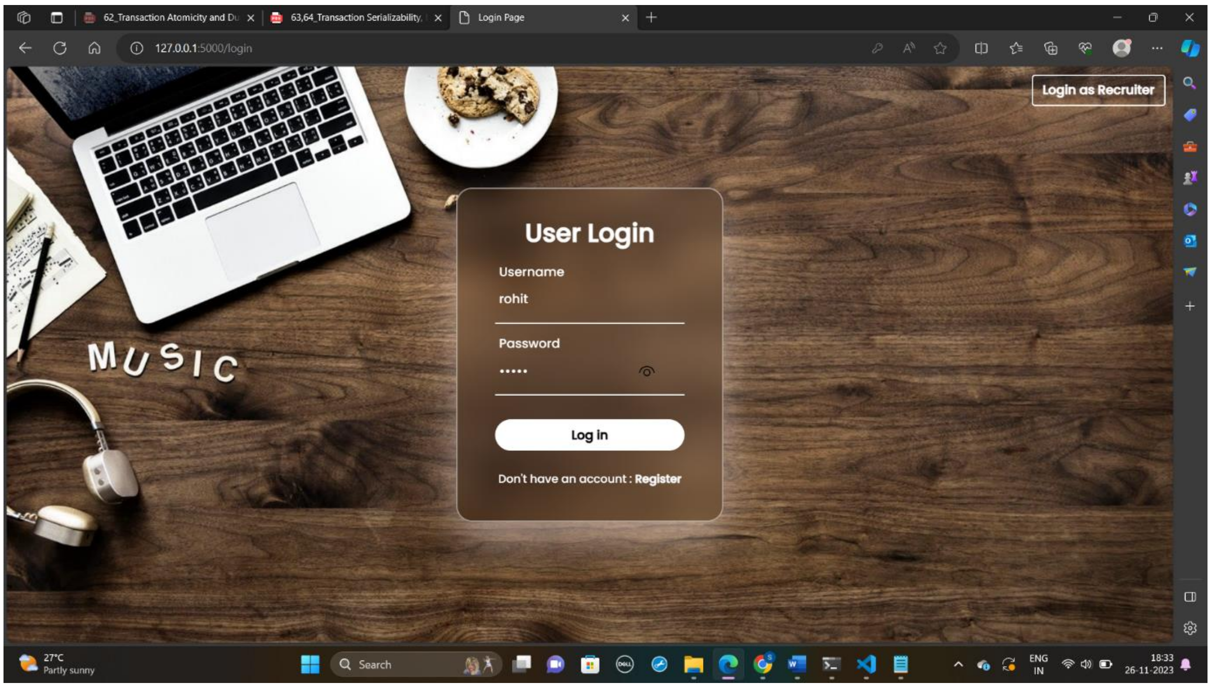
Query:



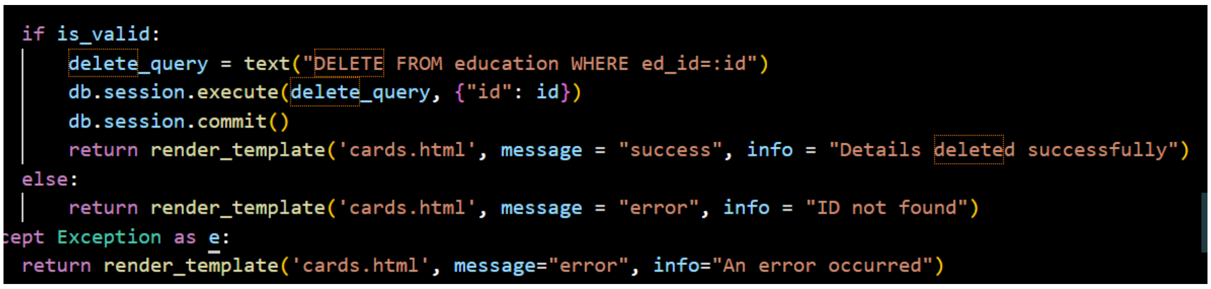
```
try:
    insert_query = text(f"INSERT INTO user ({', '.join(new_user.keys())}) VALUES ({', '.join([':' + key for key 
    db.session.execute(insert_query, new_user)
    db.session.commit()
    return redirect('/login')
except Exception as e:
    return redirect('/')
```



```
mysql> select * from user;
+---------+-----------+----------+-----------------+-------+------------+------------+
| user_id | user_name | password | email           | name  | dob        | phone_no   |
+---------+-----------+----------+-----------------+-------+------------+------------+
| 5b470   | rohit     | rohit    | rohit@gmail.com | Rohit | 2023-11-02 | 4566544566 |
+---------+-----------+----------+-----------------+-------+------------+------------+
1 row in set (0.00 sec)
```

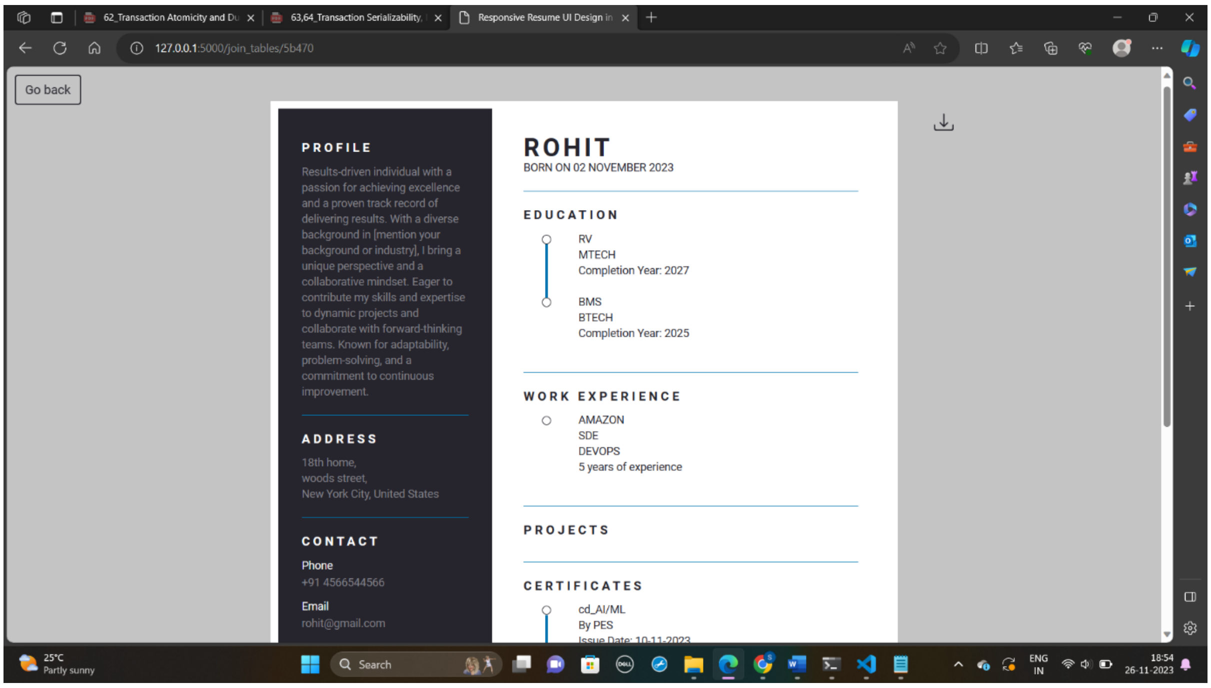


Delete:



```
if is_valid:
    delete_query = text("DELETE FROM education WHERE ed_id=:id")
    db.session.execute(delete_query, {"id": id})
    db.session.commit()
    return render_template('cards.html', message = "success", info = "Details deleted successfully")
else:
    return render_template('cards.html', message = "error", info = "ID not found")
ept Exception as e:
return render_template('cards.html', message="error", info="An error occurred")
```

Before:


62_Transaction Atomicity and Du
63,64_Transaction Serializability,
Responsive Resume UI Design in
127.0.0.1:5000/join_tables/5b470
Go back

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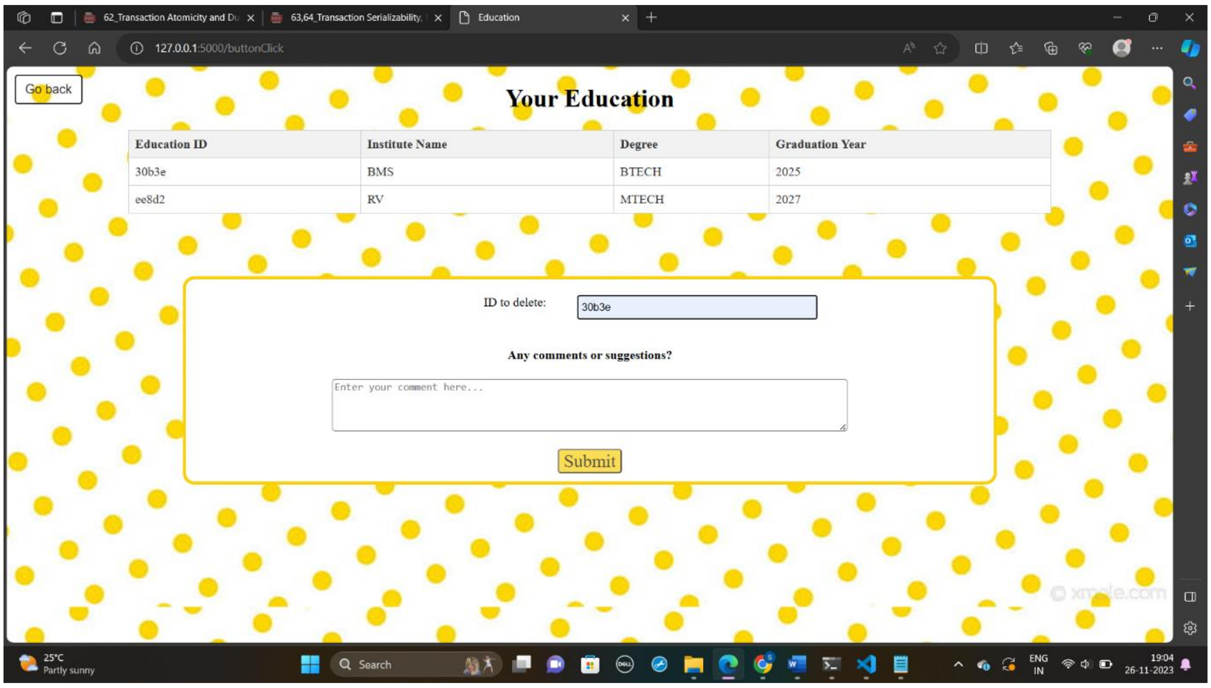
CERTIFICATES

cd_AI/ML
By PES
Issue Date: 10-11-2023


62_Transaction Atomicity and Du
63,64_Transaction Serializability,
Education
127.0.0.1:5000/buttonClick
Go back

Your Education

Education ID	Institute Name	Degree	Graduation Year
30b3e	BMS	BTECH	2025
ee8d2	RV	MTECH	2027

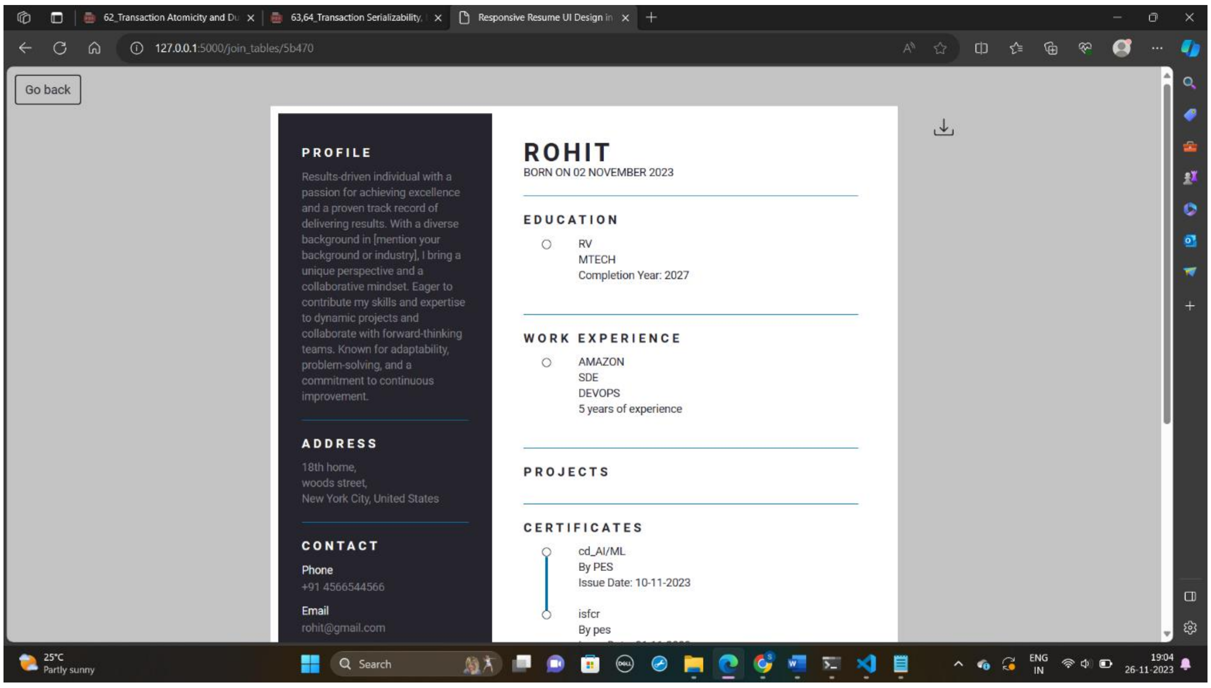
ID to delete: 30b3e

Any comments or suggestions?

Enter your comment here...

Submit

After: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SDE
DEVOPS
5 years of experience

PROJECTS

CERTIFICATES

cd_AI/ML
By PES
Issue Date: 10-11-2023

isfcr
By pes

After running delete query we were successfully able to delete BMS BTECH degree using edu_id.

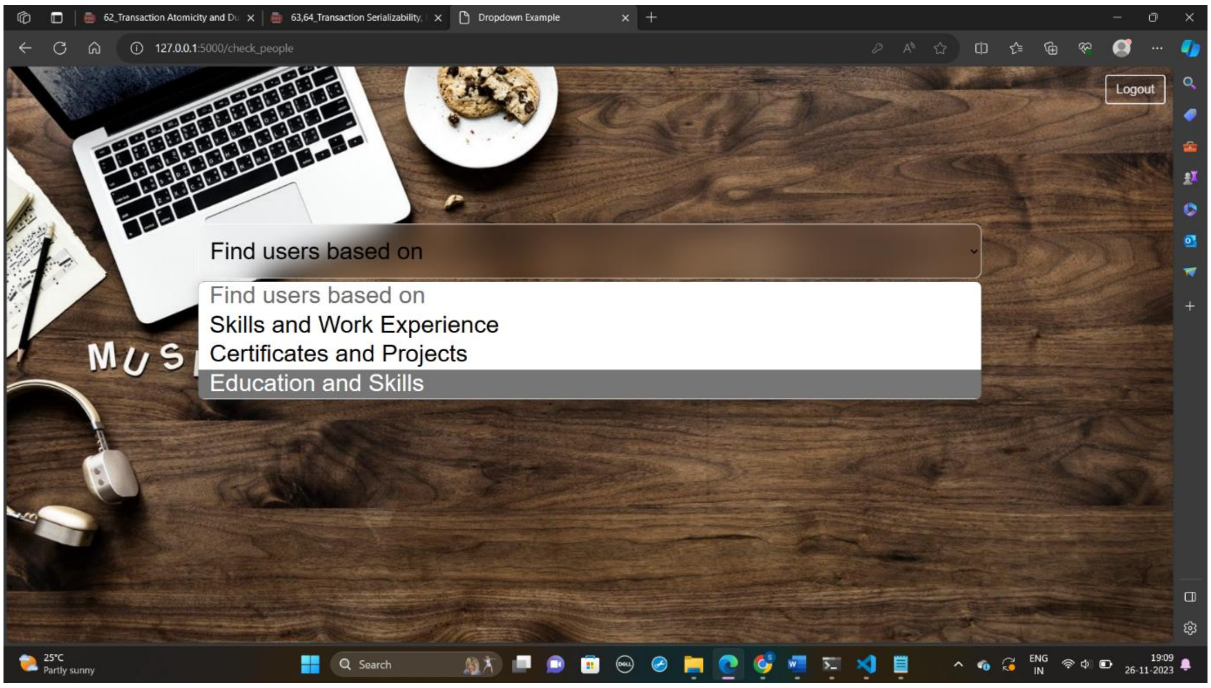
FUNCTIONALITIES:

FIND/SEARCH:

```
@app.route('/findDetails', methods=['POST'])
def findDetails():
    buttonType = request.form.get("type")
```

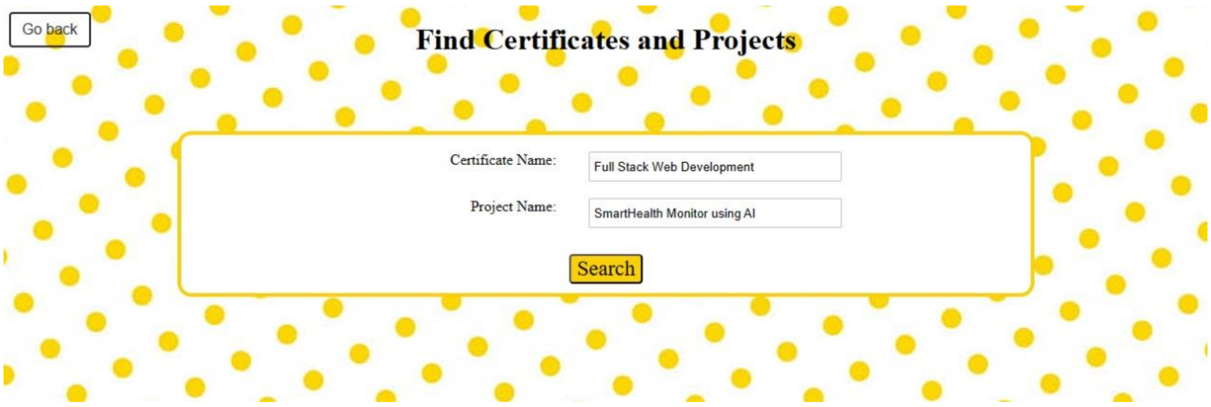
```
elif buttonType == "second":
    certificate_name = request.form.get('detail1')
    project_name = request.form.get('detail2')

    query = text("""
        SELECT user.user_id, user.name, certificates.certificate_name, projects.project_name
        FROM user
        JOIN certificates ON user.user_id = certificates.user_id
        JOIN projects ON user.user_id = projects.user_id
        WHERE certificates.certificate_name = :certificate_name AND projects.project_name = :project_name
    """)
```


62_Transaction Atomicity and Du
63,64_Transaction Serializability,
Dropdown Example
127.0.0.1:5000/check_people
Logout
MUSI
25°C
Partly sunny
Search
ENG
IN
19:09
26-11-2023

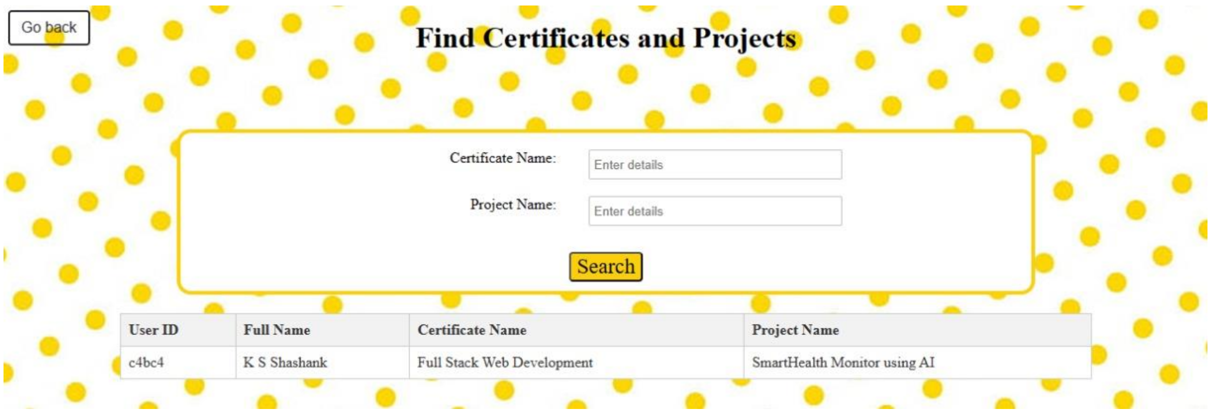
Find users based on

- Find users based on
- Skills and Work Experience
- Certificates and Projects
- Education and Skills



Find Certificates and Projects

Certificate Name:	Full Stack Web Development
Project Name:	SmartHealth Monitor using AI



Find Certificates and Projects

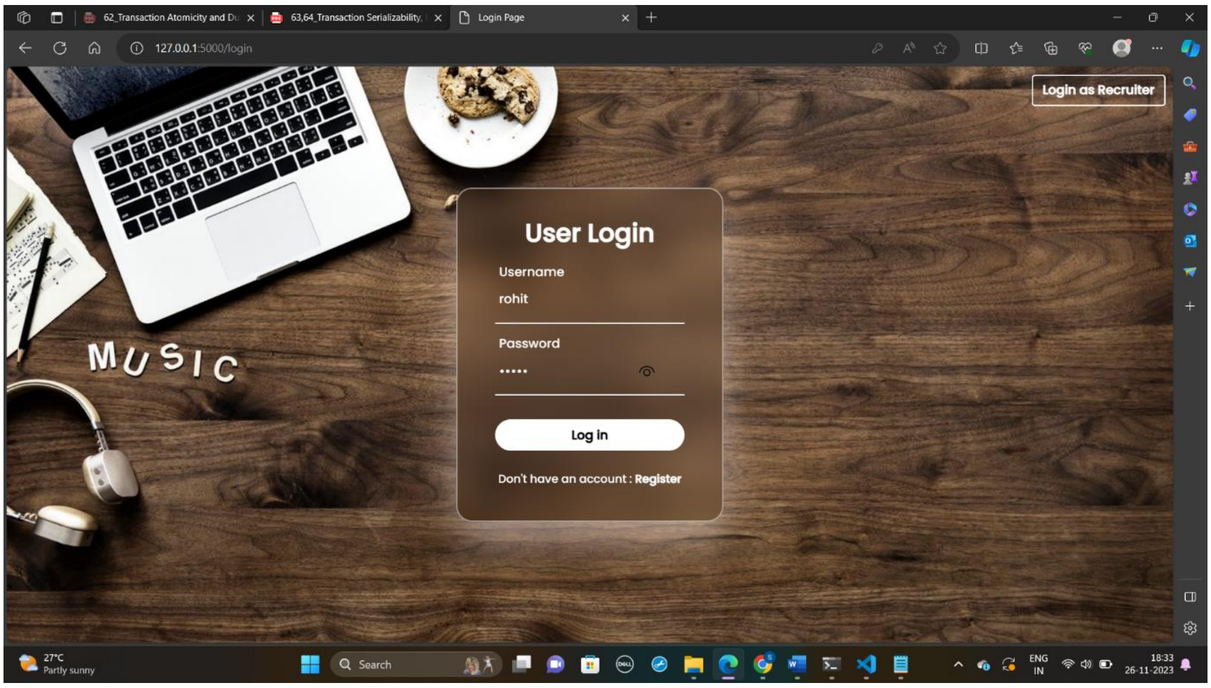
Certificate Name:

Project Name:

User ID	Full Name	Certificate Name	Project Name
c4bc4	K S Shashank	Full Stack Web Development	SmartHealth Monitor using AI

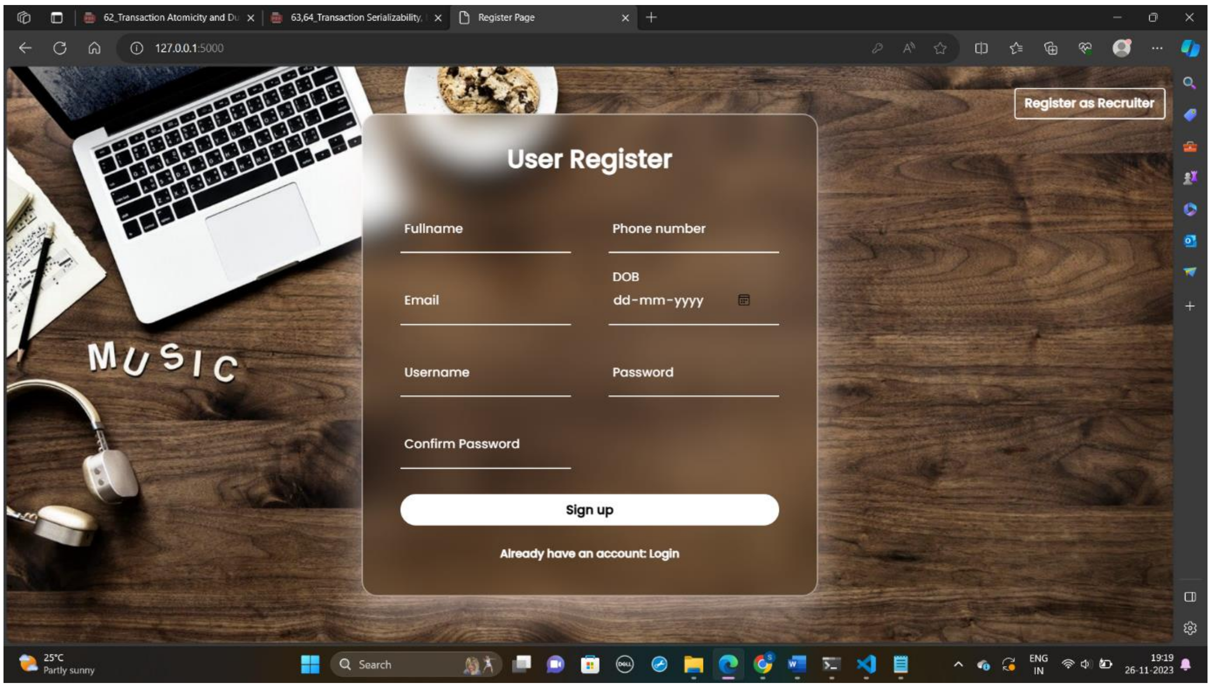
By registering as recruiter we are able to find certificates or projects that we are interested by using select statements and join conditions.

Login page:

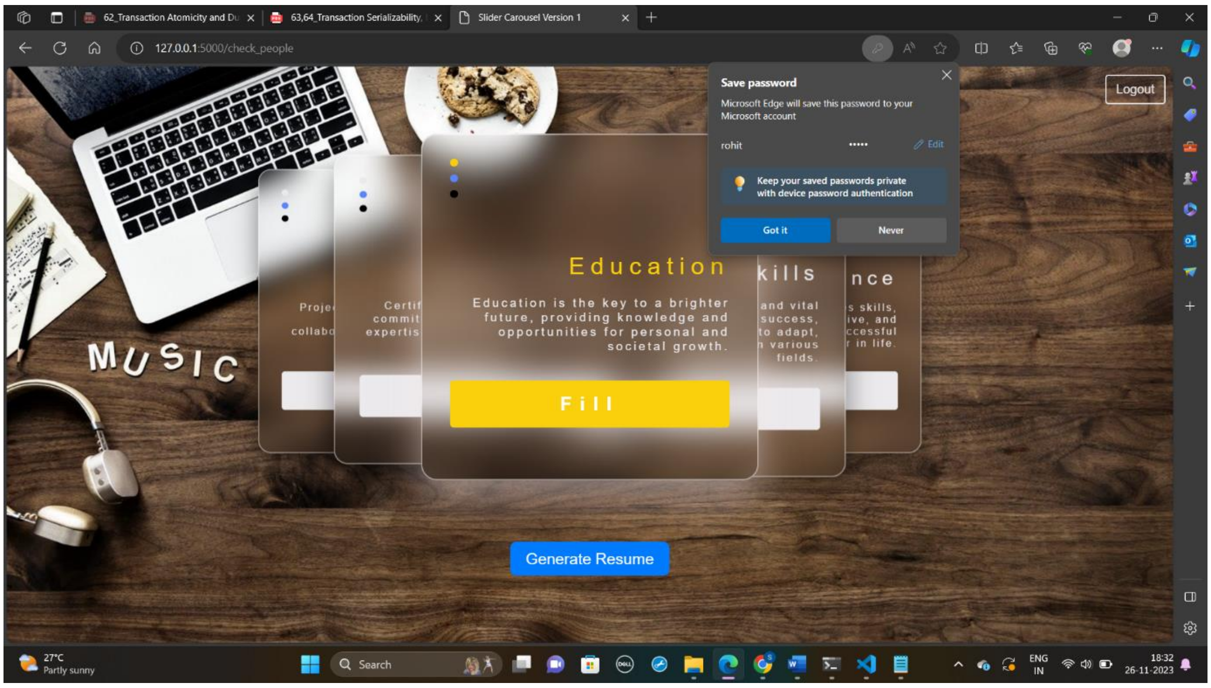


It has 2 types of logins as user and recruiter.

Register page:



Home page:



62_Transaction Atomicity and Du
63,64_Transaction Serializability,
Slider Carousel Version 1
127.0.0.1:5000/check_people
Save password
Microsoft Edge will save this password to your Microsoft account
rohit
Edit
Keep your saved passwords private with device password authentication
Got it
Never
Logout
MUSIC
Got it

Education

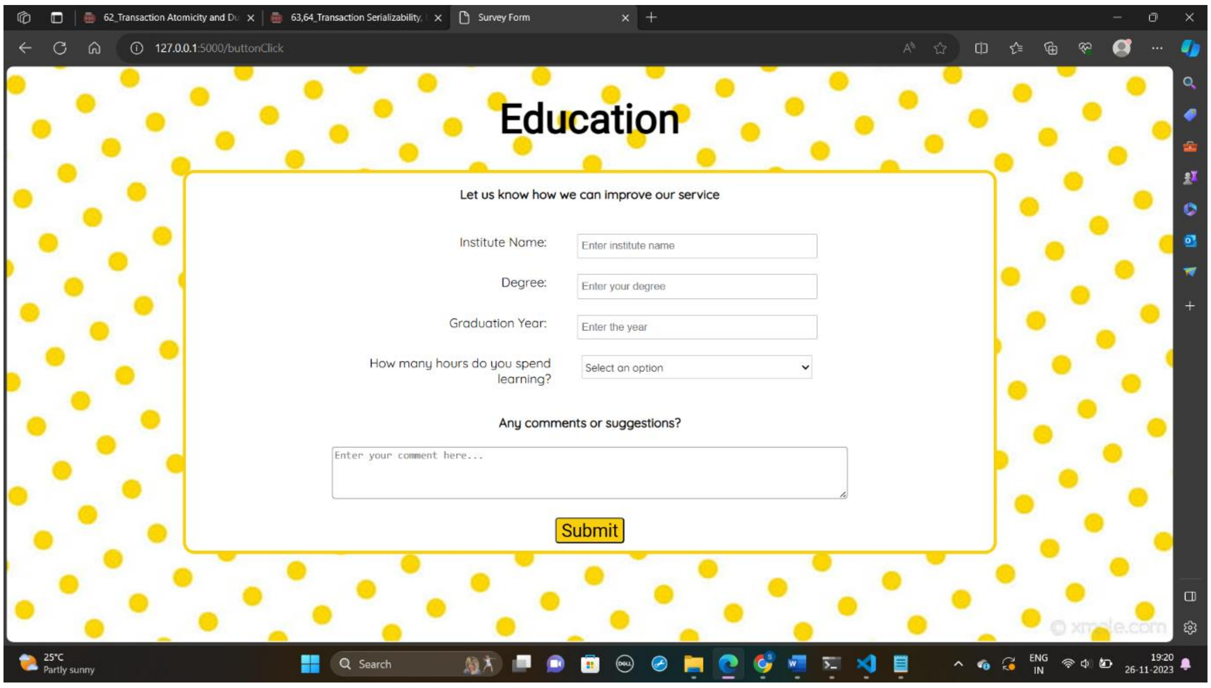
Education is the key to a brighter future, providing knowledge and opportunities for personal and societal growth.

Fill

Generate Resume

Forms used to get user information:

Ex: education details:



62_Transaction Atomicity and Du
63,64_Transaction Serializability,
Survey Form
127.0.0.1:5000/buttonClick

Education

Let us know how we can improve our service

Institute Name:	Enter institute name
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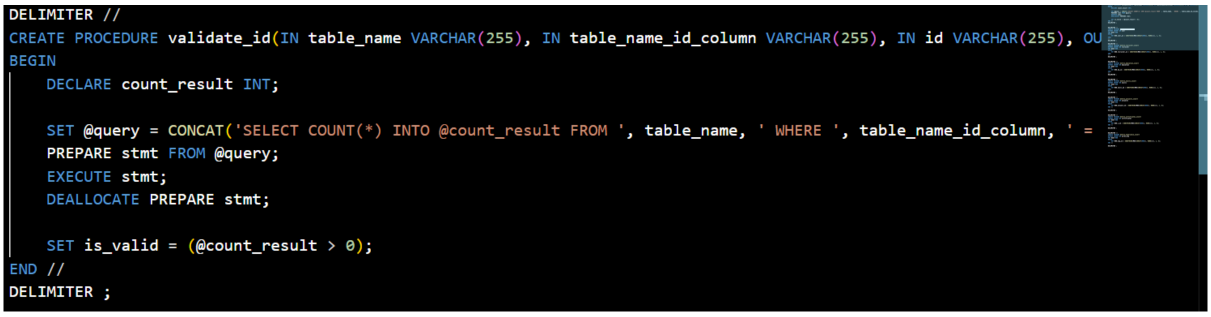
Procedures And Triggers:

Procedures:

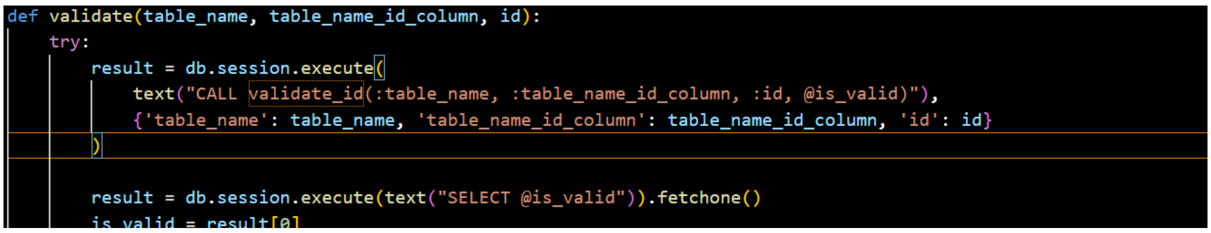


```
DELIMITER //
CREATE PROCEDURE validate_id(IN table_name VARCHAR(255), IN table_name_id_column VARCHAR(255), IN id VARCHAR(255), OU
BEGIN
    DECLARE count_result INT;

    SET @query = CONCAT('SELECT COUNT(*) INTO @count_result FROM ', table_name, ' WHERE ', table_name_id_column, ' =
    PREPARE stmt FROM @query;
    EXECUTE stmt;
    DEALLOCATE PREPARE stmt;

    SET is_valid = (@count_result > 0);
END //
DELIMITER ;
```

Calling procedure:

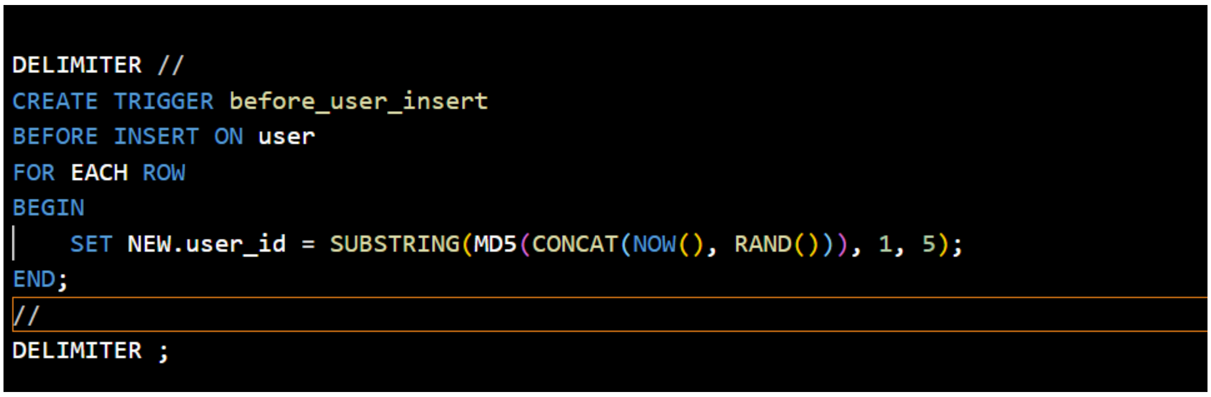


```
def validate(table_name, table_name_id_column, id):
    try:
        result = db.session.execute(
            text("CALL validate_id(:table_name, :table_name_id_column, :id, @is_valid)"),
            {'table_name': table_name, 'table_name_id_column': table_name_id_column, 'id': id}
        )

        result = db.session.execute(text("SELECT @is_valid")).fetchone()
        is_valid = result[0]
```

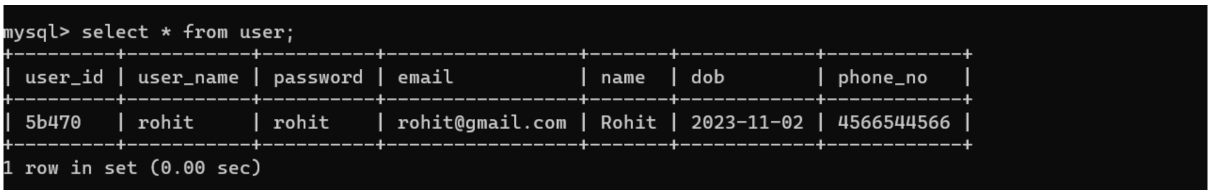
Here procedure dynamically creates query which validates user_id whether it is present in the table or not during update or delete by invoking function call.

Triggers:



```
DELIMITER //
CREATE TRIGGER before_user_insert
BEFORE INSERT ON user
FOR EACH ROW
BEGIN
    SET NEW.user_id = SUBSTRING(MD5(CONCAT(NOW(), RAND())), 1, 5);
END;
//
DELIMITER ;
```

Here we use trigger to generate user_id by making use of concatenation, using MD5 family hashing algorithm.



```
mysql> select * from user;
+---------+-----------+----------+-----------------+-------+------------+------------+
| user_id | user_name | password | email           | name  | dob        | phone_no   |
+---------+-----------+----------+-----------------+-------+------------+------------+
| 5b470   | rohit     | rohit    | rohit@gmail.com | Rohit | 2023-11-02 | 4566544566 |
+---------+-----------+----------+-----------------+-------+------------+------------+
1 row in set (0.00 sec)
```