Name: Yash Agrawal
Task: Coding Challenge-2
Topic: CareerHub, The Job Board

CODING CHALLENGE - 2

CareerHub

Questions:-

1) SQL Schema

```sql
CREATE DATABASE CareerHub;
USE CareerHub;

CREATE TABLE Company (
    CompanyID INT PRIMARY KEY IDENTITY(1,1),
    CompanyName VARCHAR(255) NOT NULL,
    Location VARCHAR(255)
);


CREATE TABLE JobListing (
    JobID INT PRIMARY KEY IDENTITY(50,1),
    CompanyID INT,
    JobTitle VARCHAR(255) NOT NULL,
    JobDescription TEXT,
    JobLocation VARCHAR(255),
    Salary DECIMAL(15, 2),
    JobType VARCHAR(50),
    PostedDate DATETIME,
    FOREIGN KEY (CompanyID) REFERENCES Company(CompanyID)
);


CREATE TABLE Applicant (
    ApplicantID INT PRIMARY KEY IDENTITY(100,1),
    FirstName VARCHAR(255) NOT NULL,
    LastName VARCHAR(255) NOT NULL,
    Email VARCHAR(255) NOT NULL,
    Phone VARCHAR(20) NOT NULL,
    Resume VARCHAR(255) NOT NULL
);


CREATE TABLE JobApplication (
    ApplicationID INT PRIMARY KEY IDENTITY(200,1),
    JobID INT NOT NULL,
    ApplicantID INT NOT NULL,
    ApplicationDate DATETIME NOT NULL,
    CoverLetter TEXT,
    FOREIGN KEY (JobID) REFERENCES JobListing(JobID),
    FOREIGN KEY (ApplicantID) REFERENCES Applicant(ApplicantID)
);
```
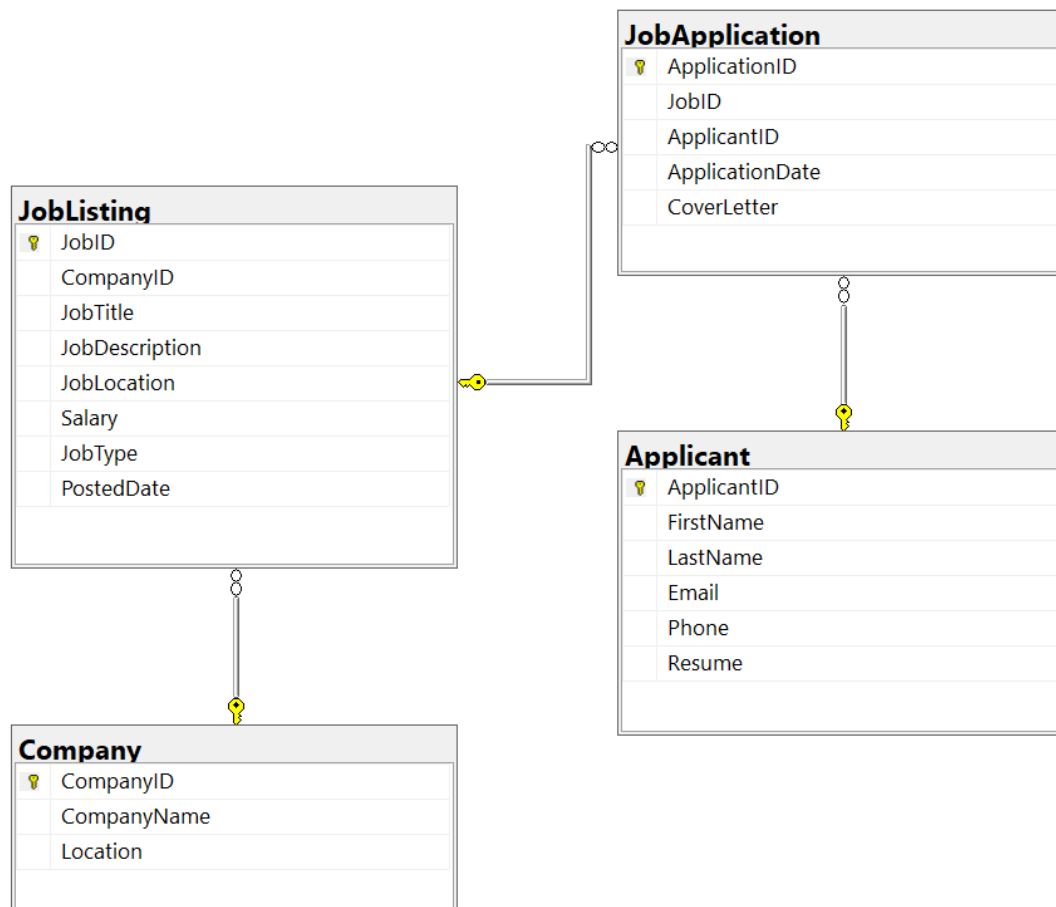
JobApplication
🔑	ApplicationID
	JobID
	ApplicantID
	ApplicationDate
	CoverLetter

JobListing
🔑	JobID
	CompanyID
	JobTitle
	JobDescription
	JobLocation
	Salary
	JobType
	PostedDate

Applicant
🔑	ApplicantID
	FirstName
	LastName
	Email
	Phone
	Resume

Company
🔑	CompanyID
	CompanyName
	Location

2) Menu:

```
Initializing database schema...
Database initialized successfully.

--- Job Board Application ---
1. Post a Job
2. Register a Company
3. Register an Applicant
4. Apply for a Job
5. View All Job Listings
6. View All Companies
7. View All Applicants
8. View Applications for a Specific Job
9. Exit
Enter your choice:
```

3) Post a Job:

```
1. Post a Job
2. Register a Company
3. Register an Applicant
4. Apply for a Job
5. View All Job Listings
6. View All Companies
7. View All Applicants
8. View Applications for a Specific Job
9. Exit
Enter your choice: 1
Enter Company ID: 2
Enter Job Title: Software Developer-1
Enter Job Description: Programming well-designed, testable, efficient codeProducing specifications and determine operational feasibility
Enter Job Location: Pune
Enter Salary: 500000
Enter Job Type (Full-time/Part-time/Contract): Full-Time
Job listing for 'Software Developer-1' added successfully.
Job 'Software Developer-1' posted successfully.
```

4) Register a company:

```
--- Job Board Application ---
1. Post a Job
2. Register a Company
3. Register an Applicant
4. Apply for a Job
5. View All Job Listings
6. View All Companies
7. View All Applicants
8. View Applications for a Specific Job
9. Exit
Enter your choice: 2
Enter Company Name: Genisys
Enter Company Location: Indore
Company 'Genisys' added successfully.
Company 'Genisys' registered successfully.
```

5) Register an Applicant:

```
--- Job Board Application ---
1. Post a Job
2. Register a Company
3. Register an Applicant
4. Apply for a Job
5. View All Job Listings
6. View All Companies
7. View All Applicants
8. View Applications for a Specific Job
9. Exit
Enter your choice: 3
Enter First Name: Jinisha
Enter Last Name: Kataria
Enter Email: jinisha.kataria@gmail.com
Enter Phone Number: 6789012345
Enter Resume (file path or description): jinisha_resume.pdf
Applicant 'Jinisha Kataria' added successfully.
Applicant 'Jinisha Kataria' registered successfully.
```

6) Apply for a Job:

```
--- Job Board Application ---
1. Post a Job
2. Register a Company
3. Register an Applicant
4. Apply for a Job
5. View All Job Listings
6. View All Companies
7. View All Applicants
8. View Applications for a Specific Job
9. Exit
Enter your choice: 4
Enter Applicant ID: 110
Enter Job ID: 60
Enter Cover Letter: N/A
Job application by applicant ID 110 for job ID 60 submitted successfully.
Application submitted for Job ID 60 by Applicant ID 110.
```

7) View All Job Listings:

```
--- Job Listings ---
Job ID: 50, Title: Software Engineer, Company ID: 1, Location: Mumbai, Maharashtra, Salary: 600000.00, Type: Full-time, Posted Date: 2024-09-15 00:00:00
Job ID: 51, Title: Data Analyst, Company ID: 2, Location: Bengaluru, Karnataka, Salary: 450000.00, Type: Full-time, Posted Date: 2024-09-16 00:00:00
Job ID: 52, Title: DevOps Engineer, Company ID: 3, Location: Bengaluru, Karnataka, Salary: 700000.00, Type: Full-time, Posted Date: 2024-09-17 00:00:00
Job ID: 53, Title: Network Engineer, Company ID: 4, Location: Noida, Uttar Pradesh, Salary: 550000.00, Type: Full-time, Posted Date: 2024-09-18 00:00:00
Job ID: 54, Title: Project Manager, Company ID: 5, Location: Mumbai, Maharashtra, Salary: 900000.00, Type: Full-time, Posted Date: 2024-09-19 00:00:00
Job ID: 55, Title: Marketing Manager, Company ID: 6, Location: Bengaluru, Karnataka, Salary: 800000.00, Type: Full-time, Posted Date: 2024-09-20 00:00:00
Job ID: 56, Title: UI/UX Designer, Company ID: 7, Location: Gurgaon, Haryana, Salary: 500000.00, Type: Full-time, Posted Date: 2024-09-21 00:00:00
Job ID: 57, Title: Content Writer, Company ID: 8, Location: Bengaluru, Karnataka, Salary: 400000.00, Type: Part-time, Posted Date: 2024-09-22 00:00:00
Job ID: 58, Title: Finance Analyst, Company ID: 9, Location: Noida, Uttar Pradesh, Salary: 600000.00, Type: Full-time, Posted Date: 2024-09-23 00:00:00
Job ID: 59, Title: Data Engineer, Company ID: 10, Location: Mumbai, Maharashtra, Salary: 750000.00, Type: Full-time, Posted Date: 2024-09-24 00:00:00
Job ID: 60, Title: Software Developer-1, Company ID: 2, Location: Pune, Salary: 500000.00, Type: Full-Time, Posted Date: 2024-10-04 16:42:34.397000
```

8) View All Companies:

```
--- Companies ---
Company ID: 1, Name: Tata Consultancy Services, Location: Mumbai, Maharashtra
Company ID: 2, Name: Infosys, Location: Bengaluru, Karnataka
Company ID: 3, Name: Wipro, Location: Bengaluru, Karnataka
Company ID: 4, Name: HCL Technologies, Location: Noida, Uttar Pradesh
Company ID: 5, Name: Reliance Industries, Location: Mumbai, Maharashtra
Company ID: 6, Name: Flipkart, Location: Bengaluru, Karnataka
Company ID: 7, Name: Zomato, Location: Gurgaon, Haryana
Company ID: 8, Name: Swiggy, Location: Bengaluru, Karnataka
Company ID: 9, Name: Paytm, Location: Noida, Uttar Pradesh
Company ID: 10, Name: Hexaware, Location: Chennai, Tamil Nadu
Company ID: 11, Name: Genisys, Location: Indore
```

9) View All Applicants:

```
--- Applicants ---
Applicant ID: 100, Name: Sarthak Londhey, Email: sarthak.londhey@gmail.com, Phone: 9826996450
Applicant ID: 101, Name: Yash Agrawal, Email: sde.yash.agrawal@gmail.com, Phone: 6263605492
Applicant ID: 102, Name: Khushi Joshi, Email: khushijoshi0129@gmail.com, Phone: 8770108629
Applicant ID: 103, Name: Sneha Verma, Email: sneha.verma@gmail.com, Phone: 9876543200
Applicant ID: 104, Name: Rohit Singh, Email: rohit.singh@gmail.com, Phone: 8876543214
Applicant ID: 105, Name: Neha Kapoor, Email: neha.kapoor@gmail.com, Phone: 6876543215
Applicant ID: 106, Name: Arjun Kumar, Email: arjun.kumar@gmail.com, Phone: 9876543944
Applicant ID: 107, Name: Sakshi Desai, Email: sakshi.desai@gmail.com, Phone: 9876543217
Applicant ID: 108, Name: Vikram Rao, Email: vikram.rao@gmail.com, Phone: 6876543218
Applicant ID: 109, Name: Anjali Jain, Email: anjali.jain@gmail.com, Phone: 7876543219
Applicant ID: 110, Name: Jinisha Kataria, Email: jinisha.kataria@gmail.com, Phone: 6789012345
```

10) View Application for a Specific Job:

```
--- Job Board Application ---
1. Post a Job
2. Register a Company
3. Register an Applicant
4. Apply for a Job
5. View All Job Listings
6. View All Companies
7. View All Applicants
8. View Applications for a Specific Job
9. Exit
Enter your choice: 8
Enter Job ID: 60

--- Applications for Job ID 60 ---
Application ID: 210, Applicant ID: 110, Application Date: 2024-10-04 16:49:37.957000, Cover Letter: N/A
```

11) Exit:

```
--- Job Board Application ---
1. Post a Job
2. Register a Company
3. Register an Applicant
4. Apply for a Job
5. View All Job Listings
6. View All Companies
7. View All Applicants
8. View Applications for a Specific Job
9. Exit
Enter your choice: 9
Exiting the application.
PS D:\Language Training Hexa\Coding_c\CareerHub>
```