Engine: MySQL is used for this project as the database engine. Version 8.0 is used.

Hosting: The database engine is hosted on AWS RDS DB instance and is managed by the MySQL client on the web server. It can only be accessed by the ec2 servers used in this project.

Connection: When the resources are created by terraform the connection parameters can be found in the output variables displayed at the end of infrastructure creation.

Which should look like this.

```
Apply complete! Resources: 19 added, 0 changed, 0 destroyed.

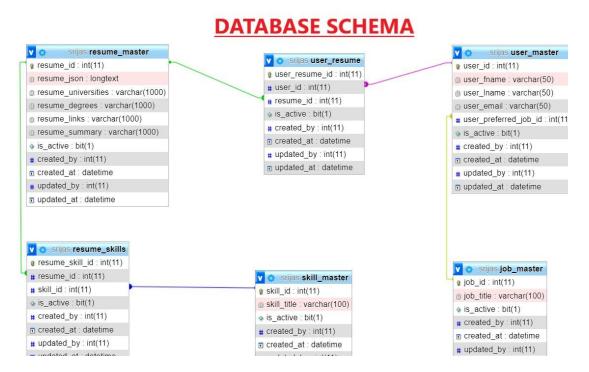
Outputs:

db-address = "srijas.cgdwdytucgi0.us-east-1.rds.amazonaws.com"
db-arn = "arn:aws:rds:us-east-1:765246388793:db:srijas"
db-endpoint = "srijas.cgdwdytucgi0.us-east-1.rds.amazonaws.com:3306"
db-hosted_zone_id = "Z2R2ITUGPM61AM"
db-id = "srijas"
db-name = "srijas"
db-name = "srijas"
db-port = 3306
ec2-scrapper-dns = "ec2-54-90-136-120.compute-1.amazonaws.com"
ec2-scrapper-ip = "54.90.136.120"
ec2-scrapper-private-dns = "ip-192-168-1-102.ec2.internal"
ec2-scrapper-private-ip = "192.168.1.102"
ec2-webserver-dns = "ec2-54-160-218-246.compute-1.amazonaws.com"
ec2-webserver-private-dns = "ip-192-168-1-94.ec2.internal"
ec2-webserver-private-ip = "192.168.1.94"
```

The password can be defined in the Code/Infrastructure/SRIJAS_AWS/terraform.tfvars file. More information about this file can be found in Infrastructure.pdf.

Schema:

The database has 6 tables for storing the user information, resume information, skills information, jobs information and the rest are for mapping of the data. The schema is described in the following diagram



Script: The script for creating database schema and populate the required default data is present in Code/Database/Schema/srijas.sql file.

Automation: When the infrastructure is created using terraform all the required installation is done on the web server for mysql client.

It will then get the connection parameters from the output of terraform apply.

It will connect to the database engine on rds from the mysql client on web server.

It will get the latest repository on the web server and execute the

Code/Database/Schema/srijas.sql for creating the database.

Hosting on local: If user wants to create the database on the local machine. MySQL should be installed on the local machine (We have used XAMPP server).

Users can simply run the <u>Code/Database/Schema/srijas.sql</u> from connecting to the MySQL client or phpMyAdmin on a local machine.