Name: Bhavesh Kewalramani
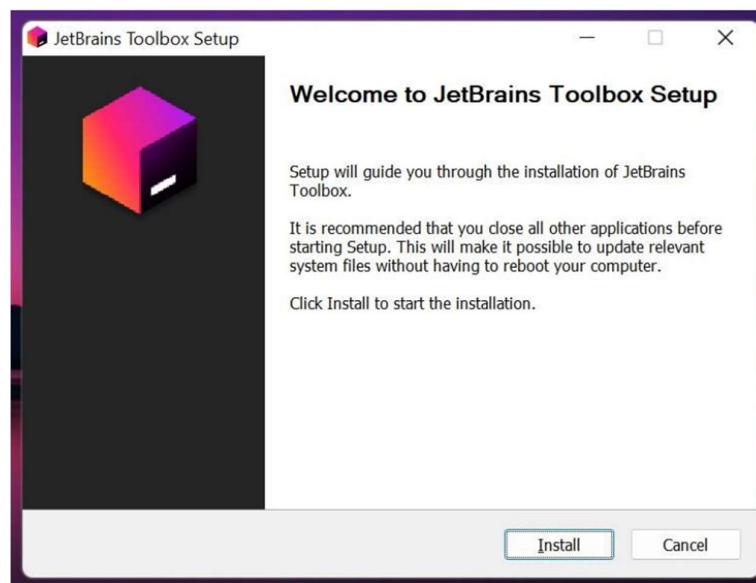
Roll No.: A-25

Section: A
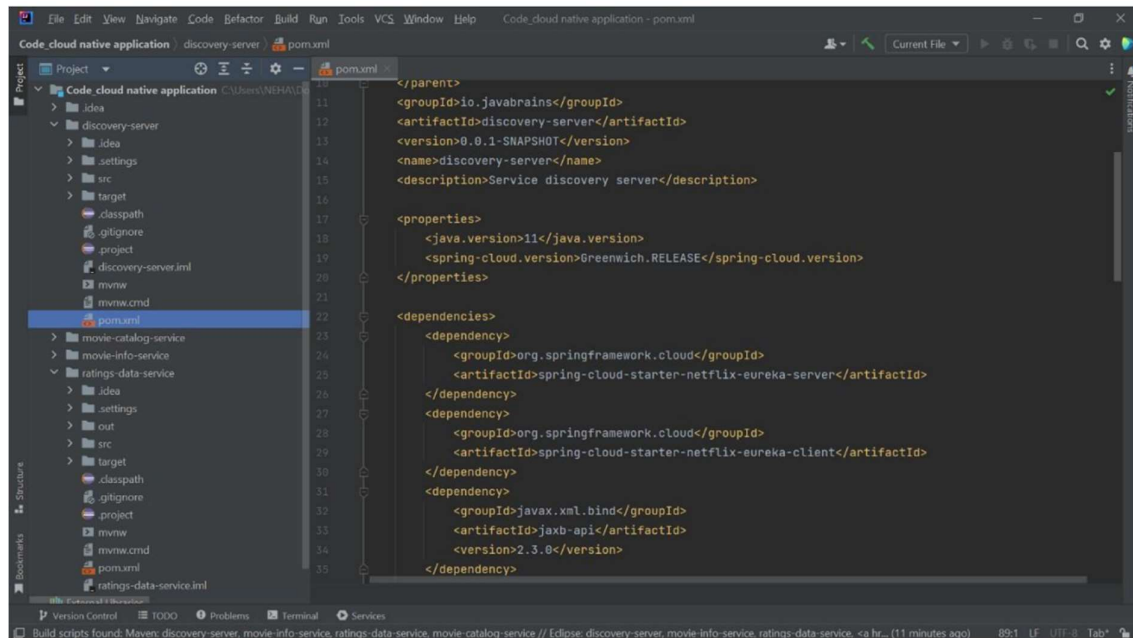
Semester: VII

Shift: I

Batch: A1

Aim: To develop an application using cloud native approach with microservice technique.
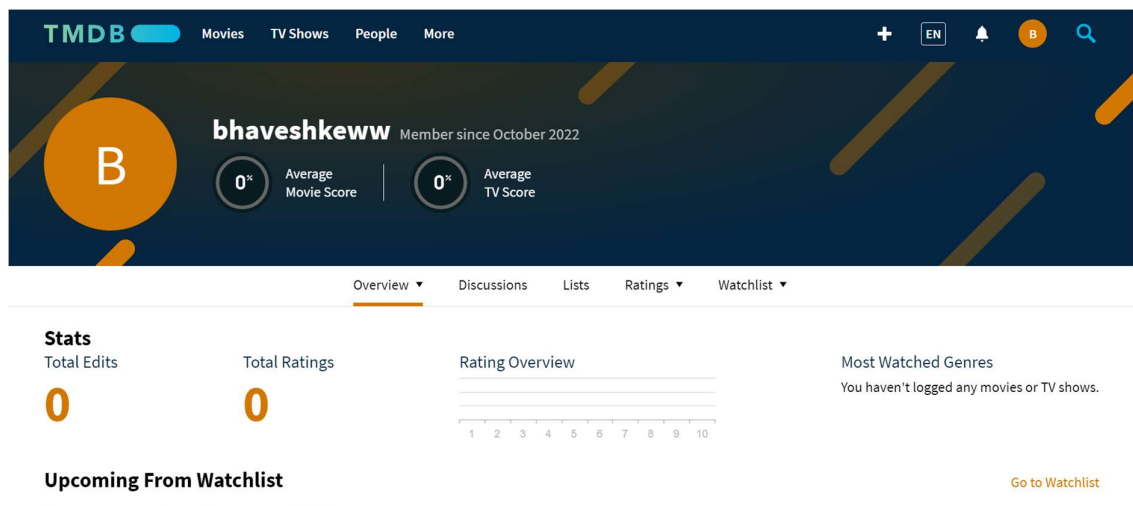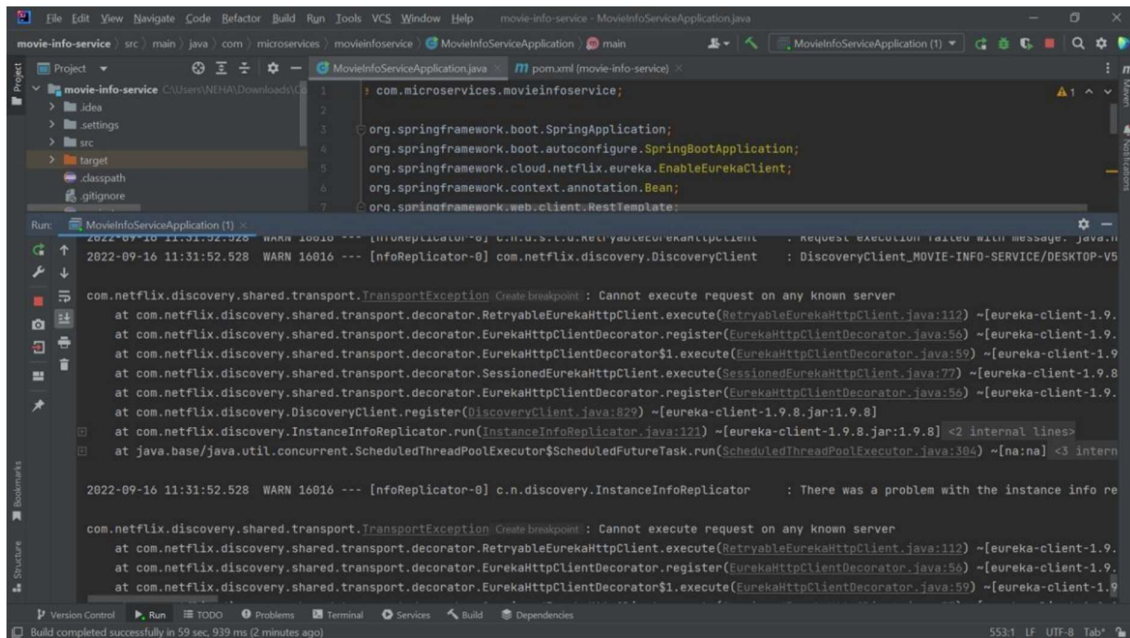
Outputs:

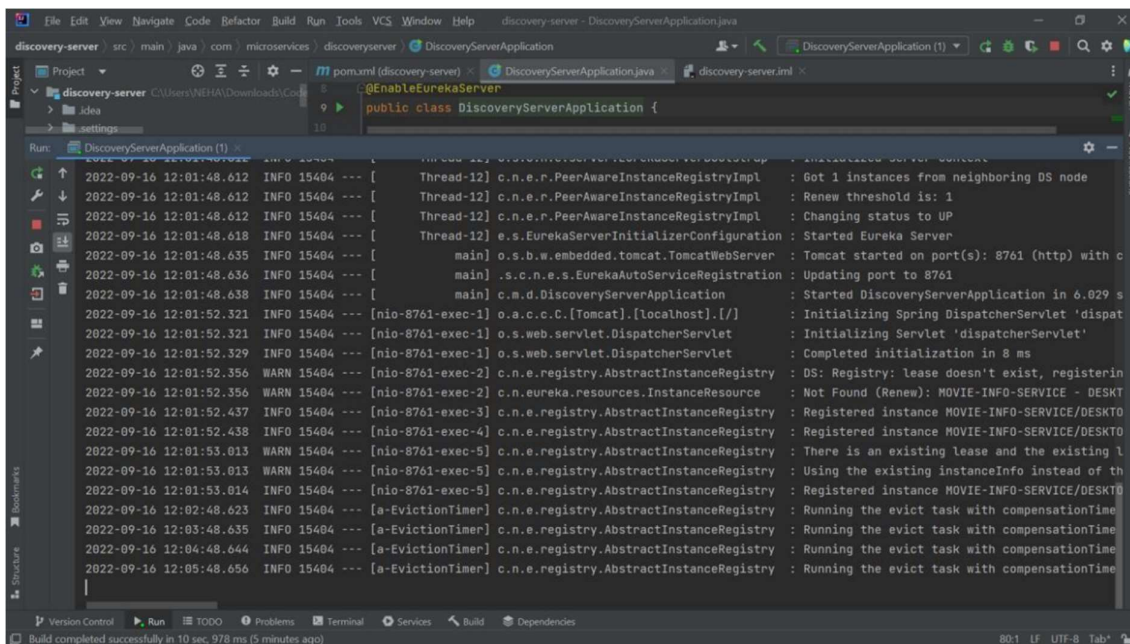Download the Intellij IDE from its official website and install it

We then add springboot and eureka server in the pom.xml file

We then navigate to TMDB website and create the account. After account creation, activate it using the submitted email address. Go to the settings and there navigate to API tab. In that request the key. A new api key will be generated

Now go to ide and open project. Go to movie-info-service project and install dependencies

Go to Discover server project and install dependencies

Go to ratings data service project and install dependencies

Go to the localhost:8761 and you can see the instance data there

You can also see the general information there

Now we run the ratings data service file in the IDE

[{"name":"Lock, Stock and Two Smoking Barrels","desc":"A card shark and his unwillingly-enlisted friends need to make a lot of cash quick after losing a sketchy poker match. To do this they decide to pull a heist on a small-time gang who happen to be operating out of the flat next door.","rating":3},{"name":"Star Trek: Insurrection","desc":"When an alien race and factions within Starfleet attempt to take over a planet that has \"regenerative\" properties, it falls upon Captain Picard and the crew of the Enterprise to defend the planet's people as well as the very ideals upon which the Federation itself was founded.","rating":4}]

Now we navigate to the localhost:8081/catalog/foo and see the output generated

Now we open the command prompt and run the same file. We can see the output as shown above.

Instances currently registered with Eureka

Application	AMIs	Availability Zones	Status
MOVIE-CATALOG-SERVICE	n/a (1)	(1)	UP (1) - LAPTOP-RJ1TG8BM.mshome.net:movie-catalog-service:8081
MOVIE-INFO-SERVICE	n/a (1)	(1)	UP (1) - LAPTOP-RJ1TG8BM.mshome.net:movie-info-service:8082
RATINGS-DATA-SERVICE	n/a (2)	(2)	UP (2) - LAPTOP-RJ1TG8BM:ratings-data-service:8083 , LAPTOP-RJ1TG8BM.mshome.net:ratings-data-service:8200

General Info

Name	Value
total-avail-memory	183mb
environment	test
num-of-cpus	8
current-memory-usage	100mb (54%)
server-uptime	00:54
registered-replicas	http://localhost:8761/eureka/
unavailable-replicas	http://localhost:8761/eureka/,
available-replicas	

Instance Info

Name	Value

In the eureka we can also see the fault tolerance and load balancing

Conclusion:

The cloud native approach with microservice technique is a great way to develop an application. It allows for a more modular approach to development, which can make the development process more efficient and less error-prone. Additionally, microservices can be deployed independently, which can make the overall application more scalable.