**non-business components.**

* Gateway
* Config Server
* Open feign
* Eureka Discovery
* Business Microservice

1- **Gateway** :

API Gateway is responsible for **request routing, composition,** and **protocol translation**. All the requests made by the client go through the API Gateway. After that, the API Gateway routes requests to the appropriate microservice. Gateway includes routing , security , Caching.

2- **Config Server** :

Spring Cloud Services Config Server is an externalized application

configuration service Instead of embedding configuration details within each service, you can externalize them to a centralized repository.

3- **Open Feign:**

Open Feign is often used for communication between different services in a microservices

Architecture, allows created relationship between services.

4- **Eureka Discovery**:

Eureka service have information about all client-service applications. Every Micro service will register into the Eureka server and Eureka server knows all the client applications running on each port and IP address. Eureka Server is also known as Discovery Server.

5- **Business Microservice:**

Created 4 service each service has one entity

1. Student
2. Instructor
3. Center
4. Course

There are communication between student with instructor ,

student with center and student with course .

**End points**

|  |
| --- |
| API |
| http://localhost:8081/api/student/save |
| <http://localhost:8081/api/student/getAllStudent> |
| http://localhost:8081/api/student/delete/{id} |
| http://localhost:8081/api/student/update{id} |
| <http://localhost:8086/api/instructor/save> |
| http://localhost:8086/api/instructor/getAllInstructor |
| http://localhost:8086/api/instructor/update{id} |
| http://localhost:8086/api/instructor/delete{id} |
| <http://localhost:8086/api/instructor/with-student>  {teacherId} |
| http://localhost:9095/api/center/save |
| http://localhost:9095/api/center/getAllCenter |
| http://localhost:9095/api/center/delete{id} |
| http://localhost:9095/api/center/update{id} |
| http://localhost:9095/api/center/with-student{centerId} |
| http://localhost:8083/api/course/save |
| http://localhost:8083/api/course/getAllCourse |
| http://localhost:8083/api/course/delete{id} |
| http://localhost:8083/api/course/update{id} |
| http://localhost:8083/api/course/with-student{courseId} |

* **Future Insight**
* Add Security to project
* Monitoring using Prometheus & Grafana