

# Microservices Assignment

## Business Use Case

Design & Develop a Backend System for Application similar to Urban Clap, The business idea is to bridge the gap between service providers and service receivers.

- Service Receivers (Consumers) can hire electricians, yoga trainers etc. They can avail all these services via placing an order through the Mobile App.
- When a service is requested, Admin team will assign the request to the Service Providers according to the Area or Availability, the professionals (Service providers) in that area get a notification. They can either accept or deny.
- If the request is accepted, the user(Service Receiver) will get a notification with respect to the booking confirmation and service provider details & Service Provider will also get the Detailed Job Description & Other details (ex- Address, Contact Number of Consumer).

## Tools/Technologies

1. Any language of choice for writing microservices
2. Service Discovery (Eureka for Java/DotNet, other languages can choose any)
3. API Gateway for implementing routing (Zuul for Java, Ocelot for DotNet, other languages can choose any)

## Deliverables

1. A writeup of identified microservices for above use case along with reasonable explanation (with High Level Diagram).
2. URL definitions of the scenarios (API Endpoints) (request/response JSONs)
3. API Gateway, Service Discovery Integration
4. Interservice Communication Approach Write up & Implementation
5. Source code of all microservices.

## Guidelines:

1. This assignment only requires to identify all the microservices for above mentioned use case and expose the API endpoints.
2. No User interface is required.
3. Mention relevant assumptions taken while implementing application.
4. Your solution should be able to build/compile and run.
5. Standard coding guideline should be strictly followed.
6. Integration with database is not mandatory, in memory data structures (lists,maps) can be used to store data temporarily for the assignment.
7. Choose the proper communication and microservices design patterns as per the scenario and design.

Priority wise parameters on which we will be evaluating the assignment:

- Write-up for Microservices Identification with HLD
- Expose API Endpoints (request/response)
- Implementation of API Gateway & Service Discovery
- Implementation for all microservices with respect to Use cases & Interservice Communication Approach

Assignment Submission: 2 weeks from the Start Date.