CORPORATE CLASSIFIEDS

MFPE Project

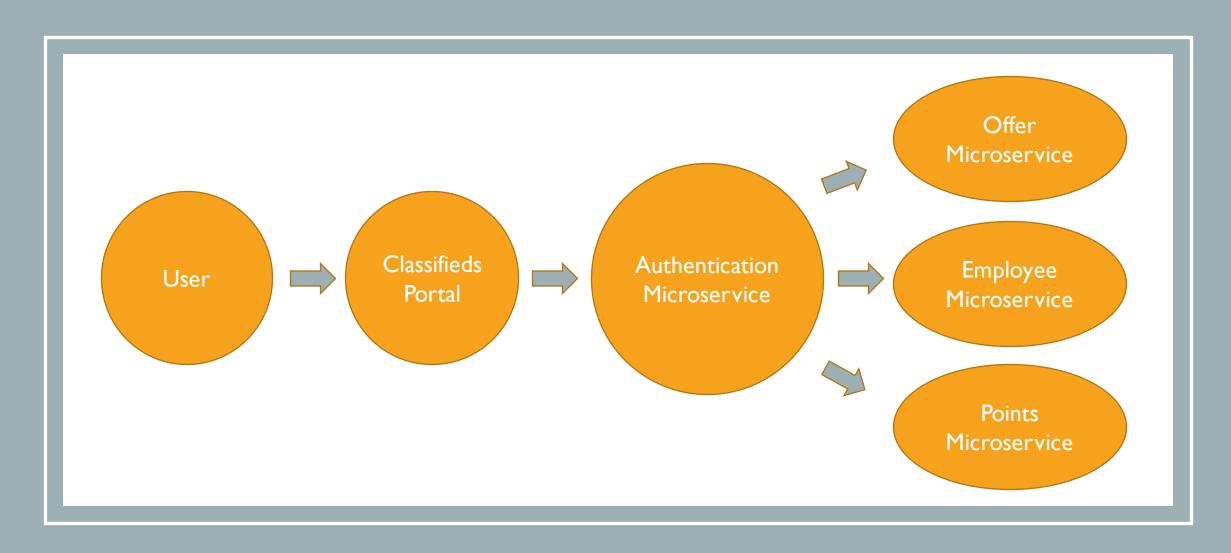
Team

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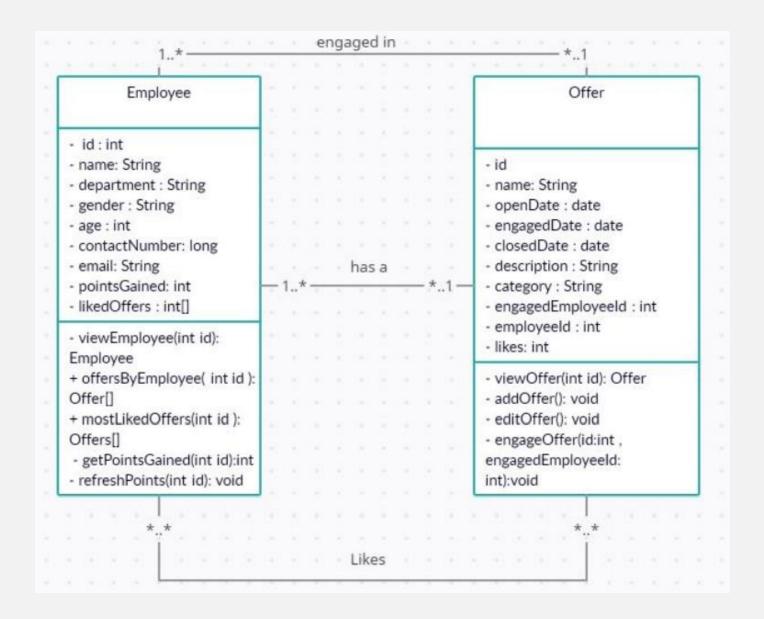
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Outline of the Project

REQUIREMENT ANALYSIS

CLASS DIAGRAM



DATABASE SCHEMA

	Field	Type	Null	Key	Default	Extra
•	id	int	NO	PRI	NULL	auto_increment
	name	varchar(50)	NO		HULL	
	department	varchar(50)	YES		NULL	
	gender	varchar(6)	NO		NULL	
	age	int	NO		NULL	
	contact_number	bigint	YES		NULL	
	email	varchar(100)	YES	UNI	NULL	
	points_gained	int	YES		0	

	Field	Туре	Null	Key	Default	Extra
•	id	int	NO	PRI	NULL	auto_increment
	name	varchar(50)	NO		NULL	
	description	varchar(100)	YES		NULL	
	category	varchar(50)	NO		NULL	
	open_date	timestamp	YES		CURRENT_TIMESTAMP	DEFAULT_GENERATED
	closed_date	timestamp	YES		NULL	
	engaged_date	timestamp	YES		NULL	
	engaged_emp_id	int	YES	MUL	NULL	
	emp_id	int	NO	MUL	NULL	
	likes	int	YES		0	

	Field	Туре	Null	Key	Default	Extra
•	emp_id	int	NO	PRI	NULL	
	offer_id	int	NO	PRI	NULL	
	liked_on	timestamp	YES		CURRENT_TIMESTAMP	DEFAULT_GENERATED

DESIGN & DEVELOPMENT

MICROSERVICES

Auth Microservice: To handle authentication of the employee.

Employee Microservice: To handle employee-related services.

Offer Microservice: To handle offer-related services.

Points Microservice: To refresh points gained by the employee.



AUTH MICROSERVICE

REST Endpoints

- /login: to log in the employee and generate JWT token.
- /validate: to validate the JWT token.



A look at swagger.html for Auth Microservice

REST Controller

• Rest controller calls the UserServiceImpl.java where all the necessary details are implemented.

```
@PostMapping("/login")
public ResponseEntity<UserToken> login(@RequestBody UserModel user) {
    log.info("Inside Login : ");
    return new ResponseEntity<UserToken>(userServiceImpl.login(user), HttpStatus.OK);
}
```

One of the Post mappings of the rest controller (to login the user)

AUTH SERVICE

```
// validates the JWT token
public AuthResponse getValidity(String token) {
   // retrieving the token ( removing the Bearer from the header)
   String token1 = token.substring(7);
   AuthResponse authResponse = new AuthResponse();
   // if valid
   if (jwtUtil.validateToken(token1)) {
        log.info("Token is valid");
        // extract the user name
        String username = jwtUtil.extractUsername(token1);
       // set the values for the response
        authResponse.setUsername(username);
        authResponse.setValid(true);
       authResponse.setEmpid(userRepository.findByEmpUsername(username).getEmpid());
    } else {
        authResponse.setValid(false);
        log.error("Token is invalid or expired...");
   return authResponse;
```

One of the Post mappings of the rest controller (to login the user)

Exception Handling

- **Rest Exception Handler:** To handle all the exceptions that occurs in the microservice with proper status code.
- UnauthorizedException: Thrown when the user is invalid.



EMPLOYEE MICROSERVICE

REST Endpoints

- /employee/viewProfile/{id} to view employee details by id parameter
- /employee/viewEmployeeOffers/{id} to view all the offers posted by the employee through id parameter
- /employee/viewMostLiked/{id} to view top 3 most liked offers of the employee by id parameter

REST Controller

 Rest controller calls the employeeServiceImpl.java where all the necessary details are implemented.

One of the Get mappings of the rest controller (to view the profile of the user)

EMPLOYEE SERVICE

```
@Override
public List<EmployeeOffers> viewEmpOffers(String token, int id) throws MicroserviceException, InvalidUserException {
    log.info("Inside view employee offers");
   AuthResponse authResponse;
    List<EmployeeOffers> empOffers;
    // validate the user
    try {
       authResponse = authClient.getValidity(token).getBody();
    } catch (Exception e) {
        throw new MicroserviceException(e.getMessage());
    // if token is valid
    if (authResponse.isValid()) {
        // verify the user id with the token id
        if (authResponse.getEmpid() != id) {
            throw new InvalidUserException("invalid token for the user");
            empOffers = offerClient.getOffersById(token, id);
        } catch (Exception e) {
            throw new MicroserviceException(e.getMessage());
        return empOffers;
    } else {
       log.error("Token invalid");
       throw new InvalidUserException("Invalid User");
```

Exception Handling

- Employee Exception handler: to handle all the exceptions that occurs in the microservice with proper status code
- InvalidUserException: thrown when the user is unauthorized
- **MicroserviceException:** thrown when there is an error in the communicated microservice.

Feign Clients

- Auth client: to communicate with the authentication microservice
- Offer client: to communicate with the offer microservice

```
//to connect to authentication service
@FeignClient(url = "${auth.feign.client}", name = "${auth.feign.name}")
public interface AuthClient {{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tex
```



OFFER MICROSERVICE

REST Endpoints

- /offer/addOffer to post a new offer.
- /offer/editOffer to edit an existing offer.
- /offer/engageOffer to engage an offer.
- /offer/getOfferByCategory to filter offers by category
- /offer/getOfferByPostedDate to filter offers by posted date.
- /offer/getOfferByTopLikes to retrieve top 3 most liked offers.
- /offer/getOfferDetails/{id} to retrieve offer by id parameter.

REST Controller

 Rest controller calls the offerService.java where all the necessary details are implemented

One of the Get mappings of the rest controller (to get the details of an offer, by offer id)

OFFER SERVICE

```
public Offer getOfferDetails(String token, int offerId)
        throws OfferNotFoundException, InvalidTokenException, MicroserviceException {
   // authenticate the user
    ResponseEntity<AuthResponse> response;
    try {
        response = authClient.verifyToken(token);
    } catch (Exception e) {
        log.info("some error in auth microservice");
        throw new MicroserviceException(e.getMessage());
   // check if token is valid
    if (response.getBody().isValid()) {
        Optional<Offer> offer = offerRepository.findById(offerId);
       // if offer is not found
        if (!offer.isPresent())
            throw new OfferNotFoundException("No offer found");
        return offer.get();
    // if token is invalid
    else {
        throw new InvalidTokenException("token is invalid");
```

Exception Handling

- Global Exception handler to handle all the exceptions that occurs in the microservice with proper status code.
- EmployeeNotFoundException thrown when no employee is found.
- ImproperDateException thrown when improper date is passed.
- InvalidTokenException thrown when the jwt token is invalid.
- **MicroserviceException** thrown when the communicated microservice is not working.
- OfferNotFoundException thrown when no offers are found.

Feign Clients

- Auth client to communicate with the authentication microservice.
- Employee client to communicate with the employee microservice.



POINTS MICROSERVICE

REST Endpoints

- /getpointsbyemp/{id} to get points gained by the employee.
- /refreshpointsbyemp/{id} to refresh the points of the employee.



A look at swagger (for points controller)

REST Controller

• RESR controller calls the pointsServiceImpl.java where all the necessary details are implemented.

One of the Get mappings of the REST controller (to get the points gained by the employee)

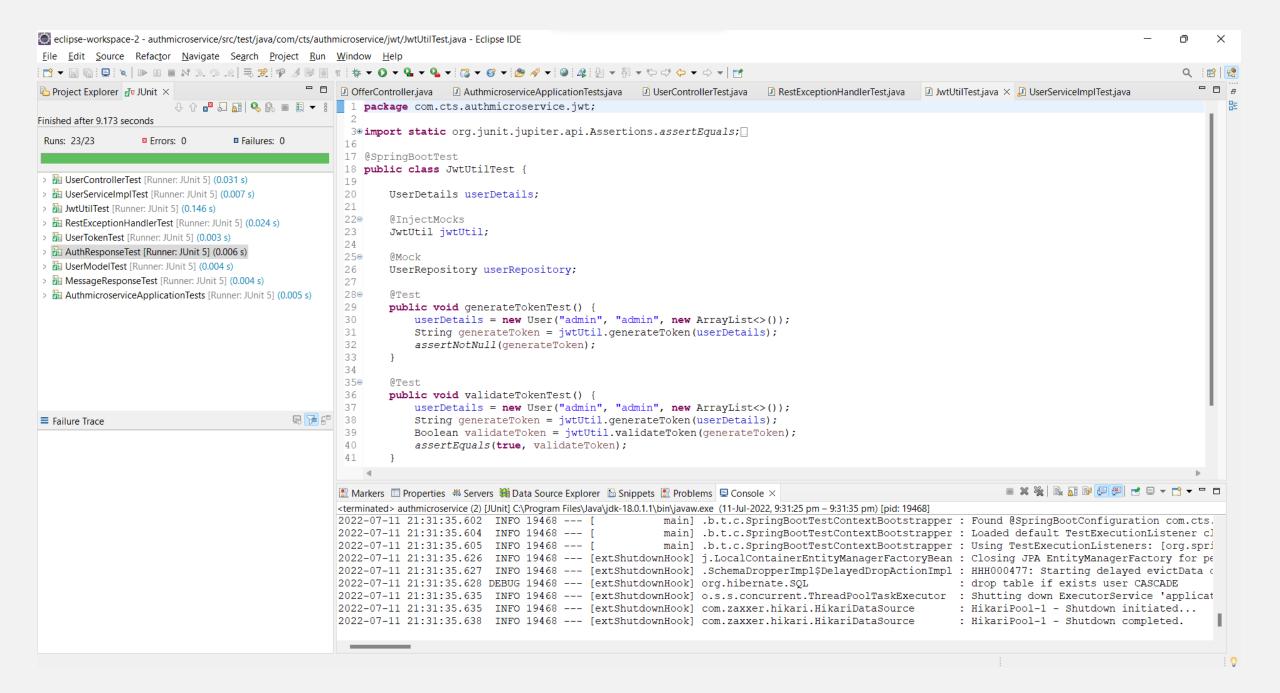
EXCEPTION HANDLING

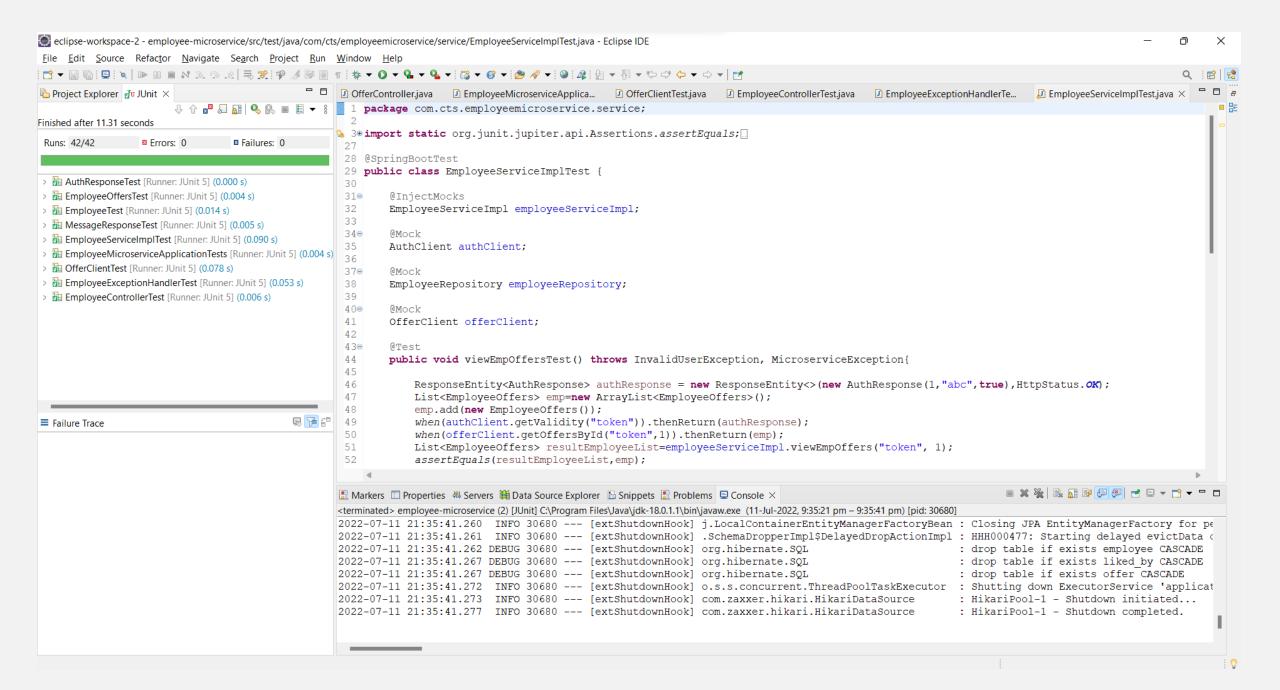
- InvalidUserException thrown when the jwt token is invalid
- MicroserviceException thrown when the communicated microservice is not working
- **PointsExceptionHandler** to handle all the exceptions thrown by the rest controller

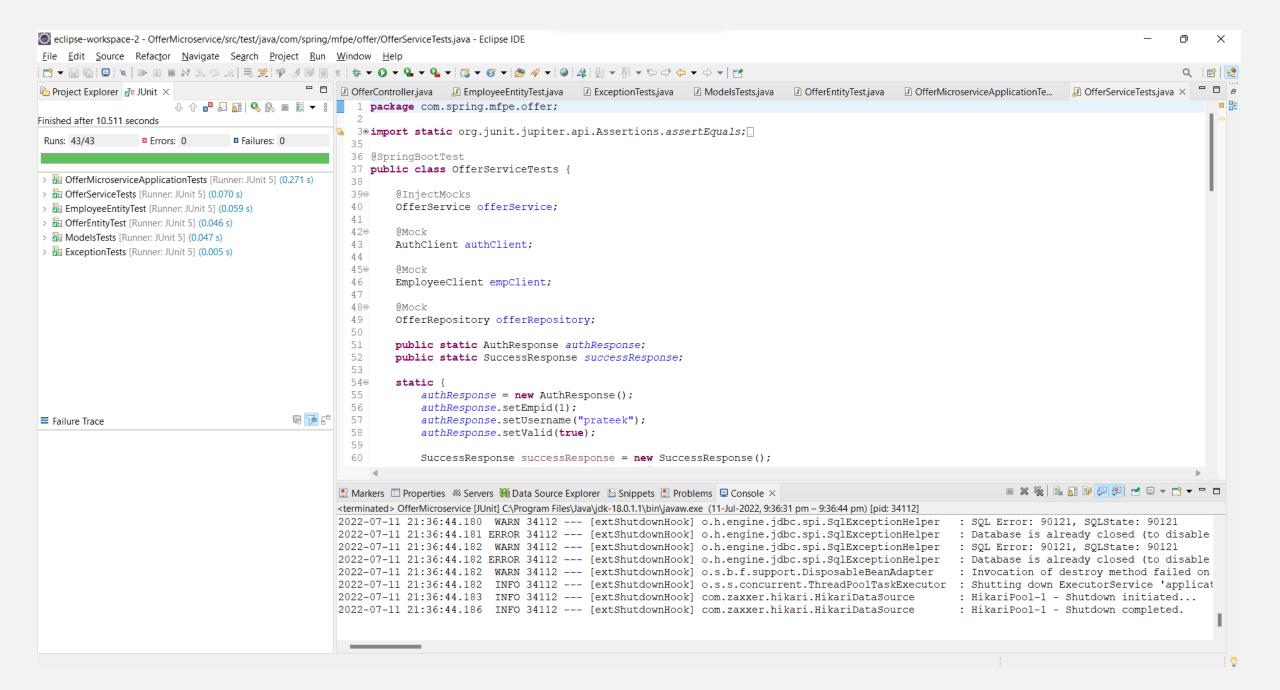
FEIGN CLIENTS

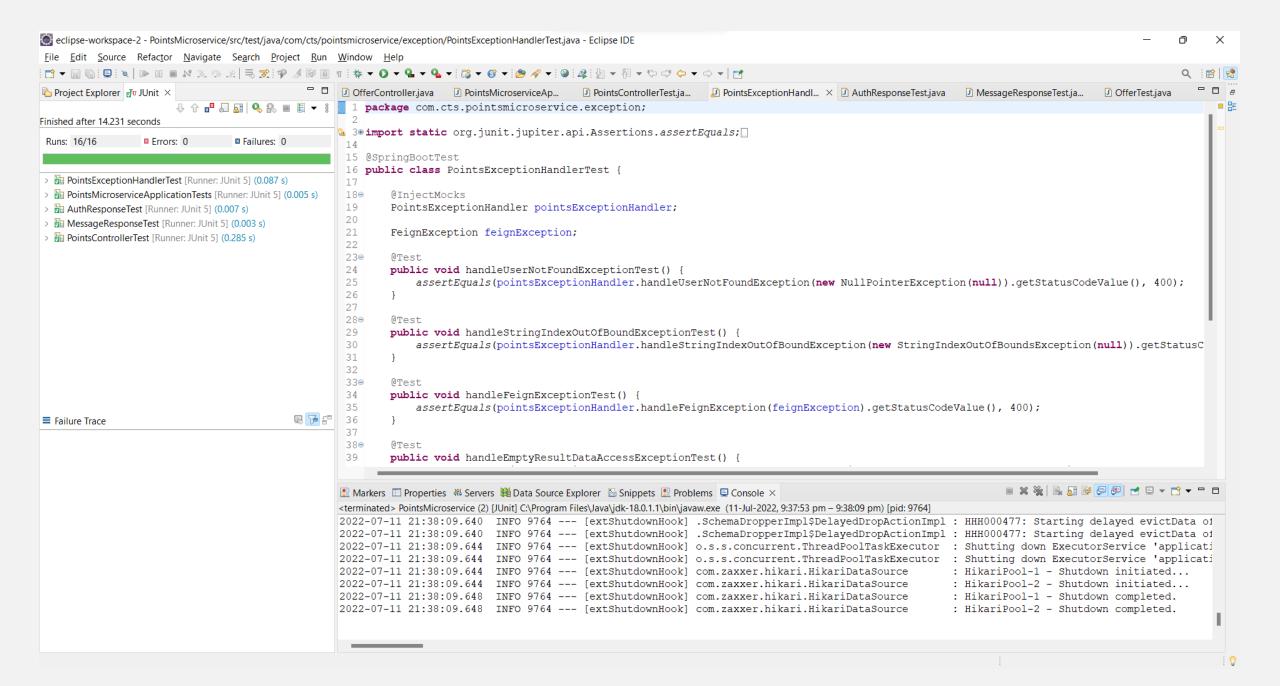
- Auth client to communicate with the authentication microservice
- Employee client to communicate with the employee microservice
- Offer client to communicate with the offer microservice

TESTING

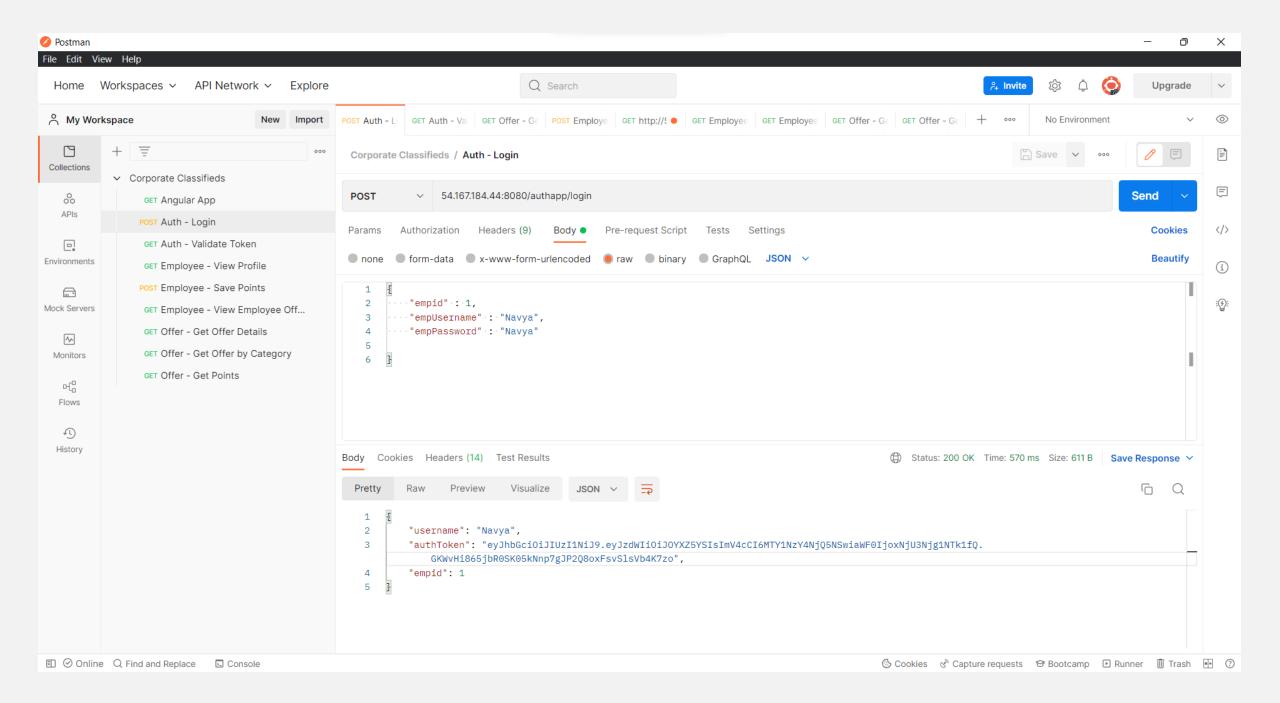


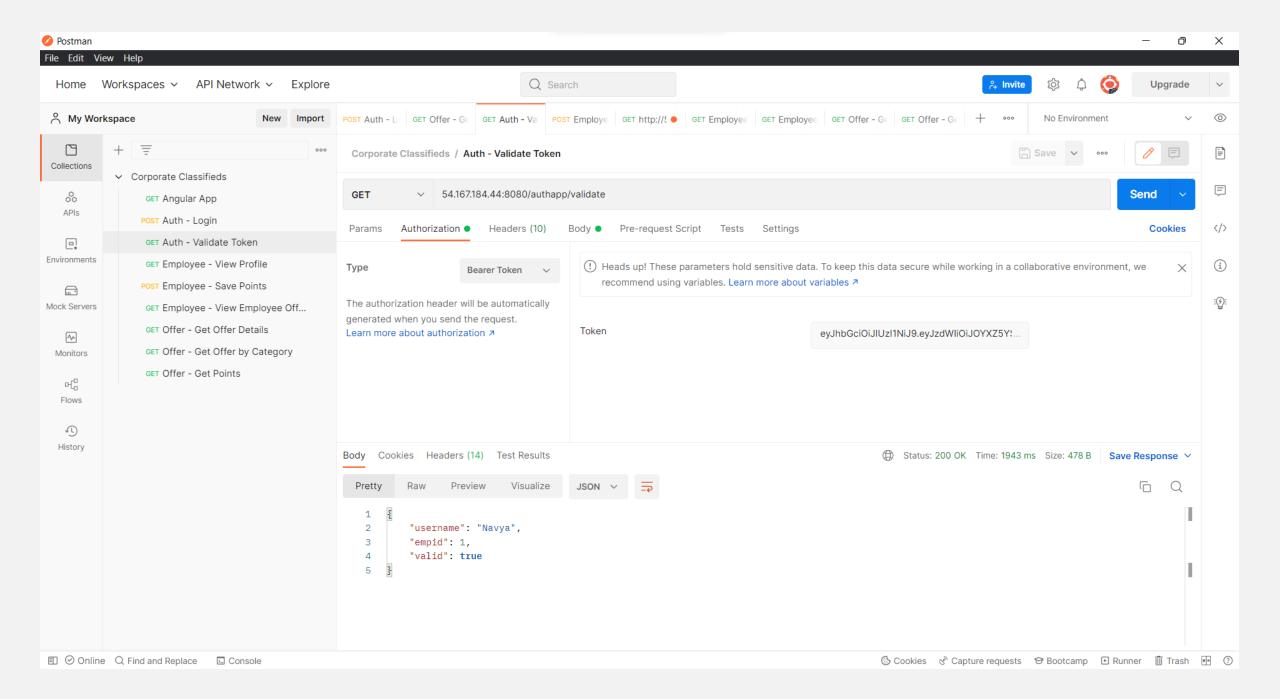


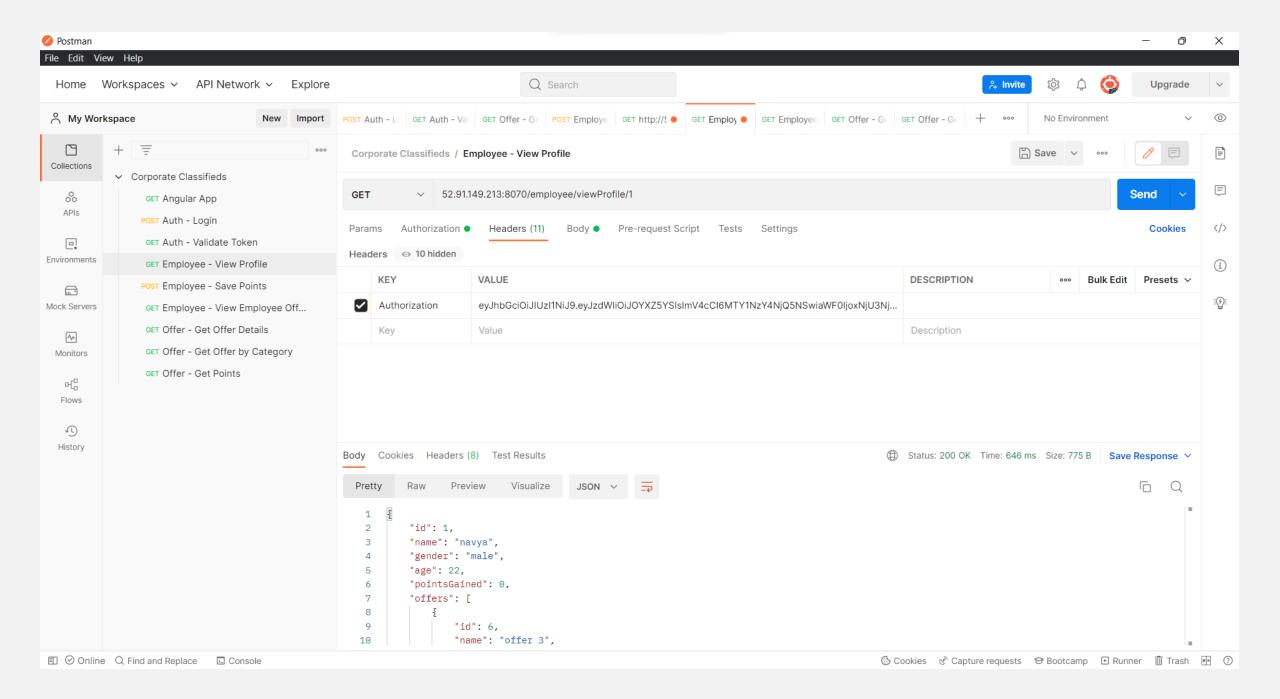


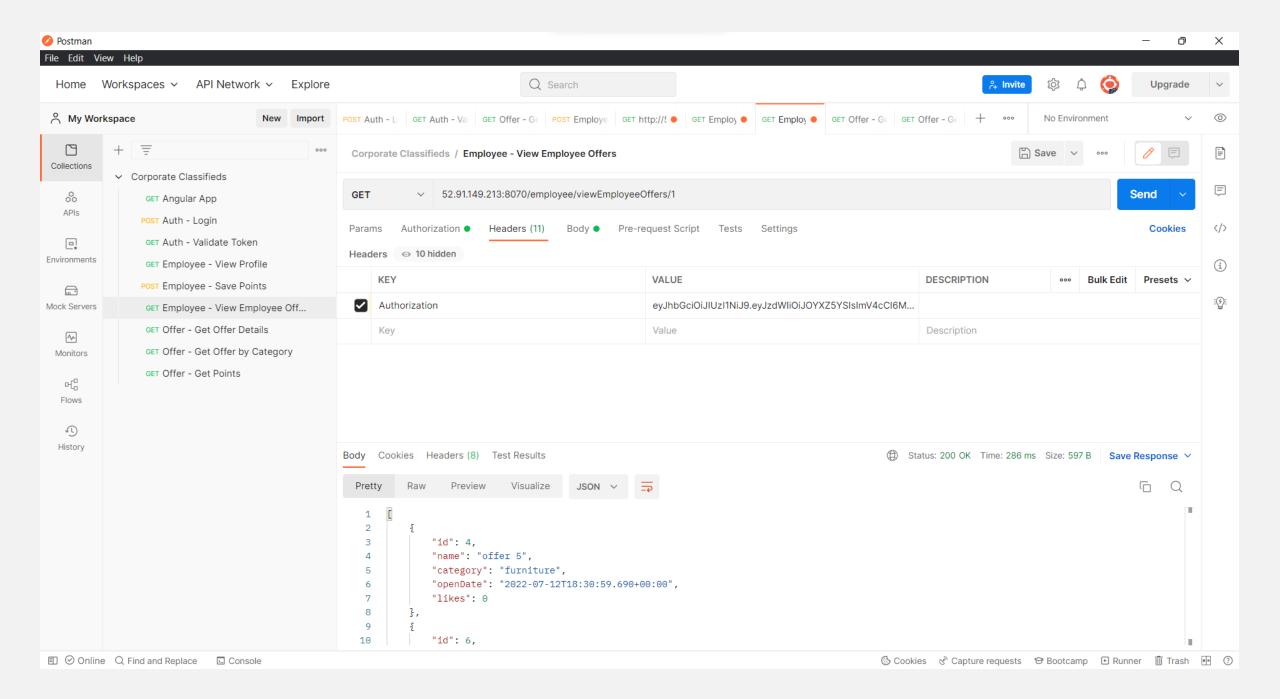


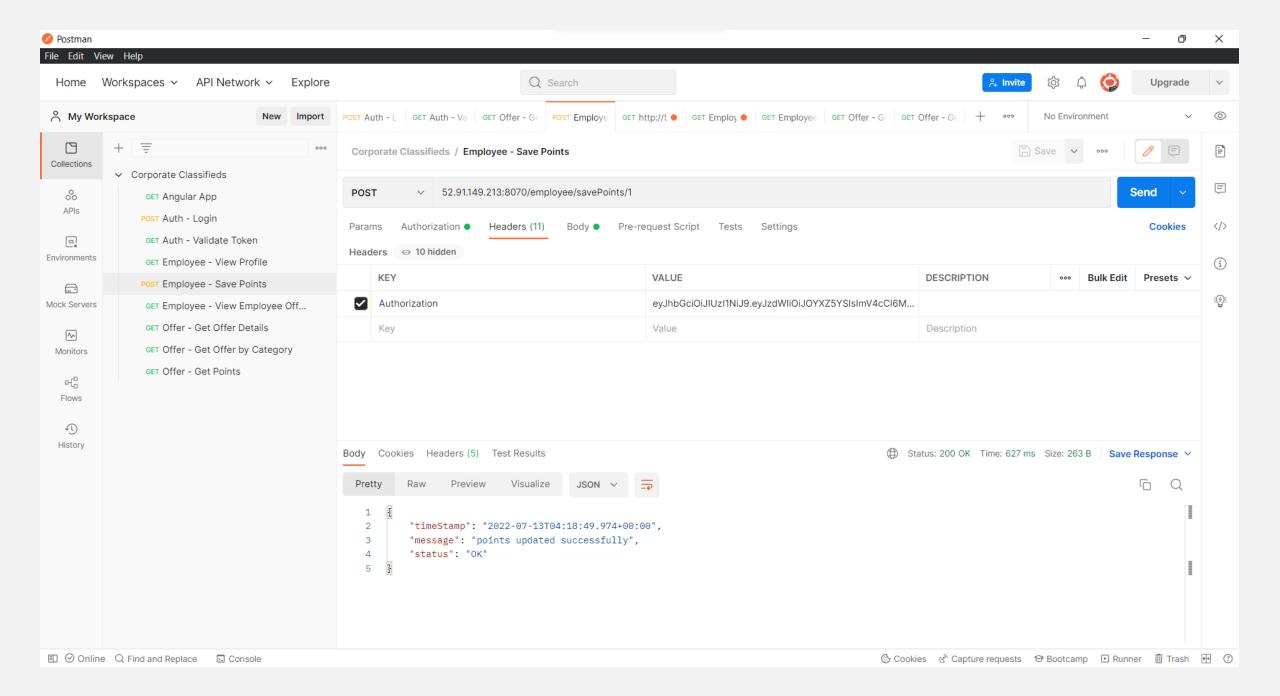
POSTMAN

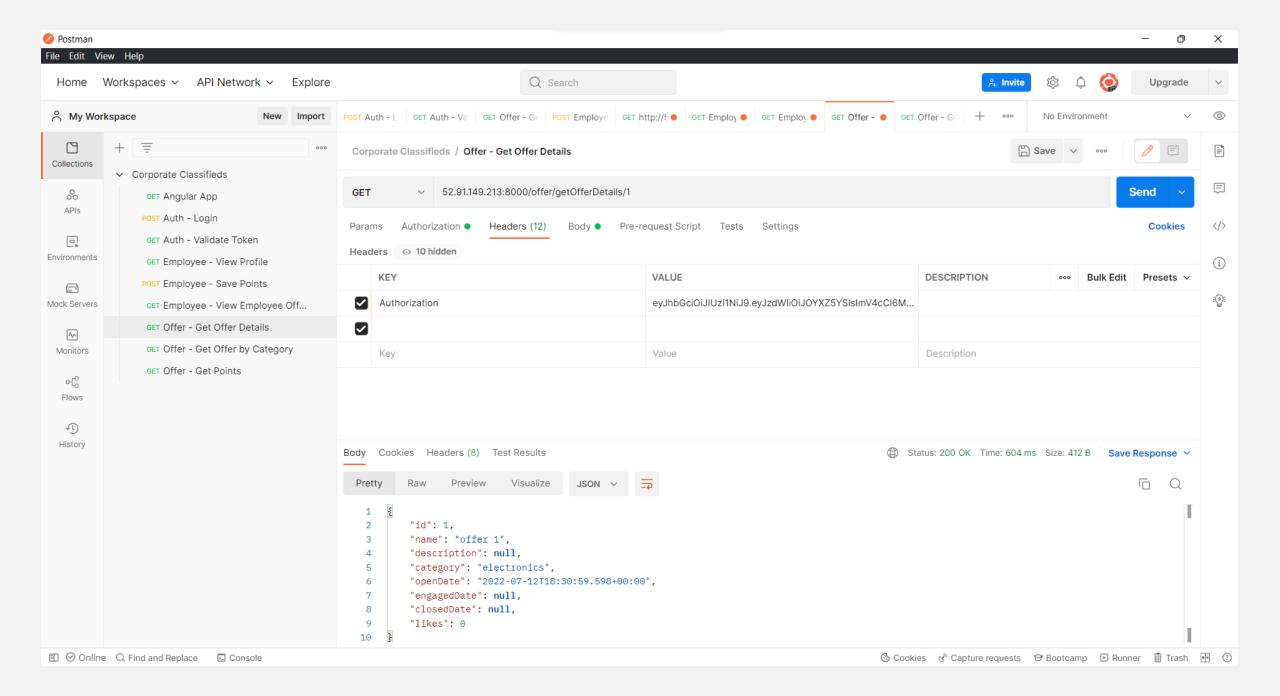


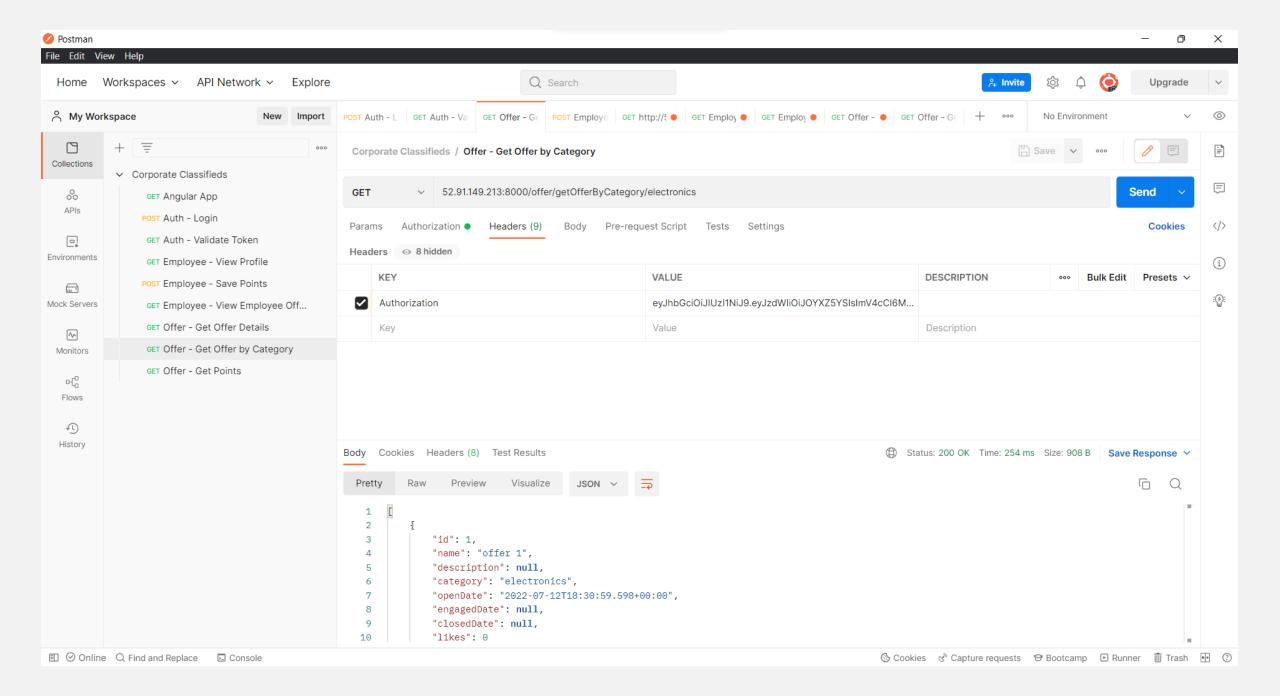


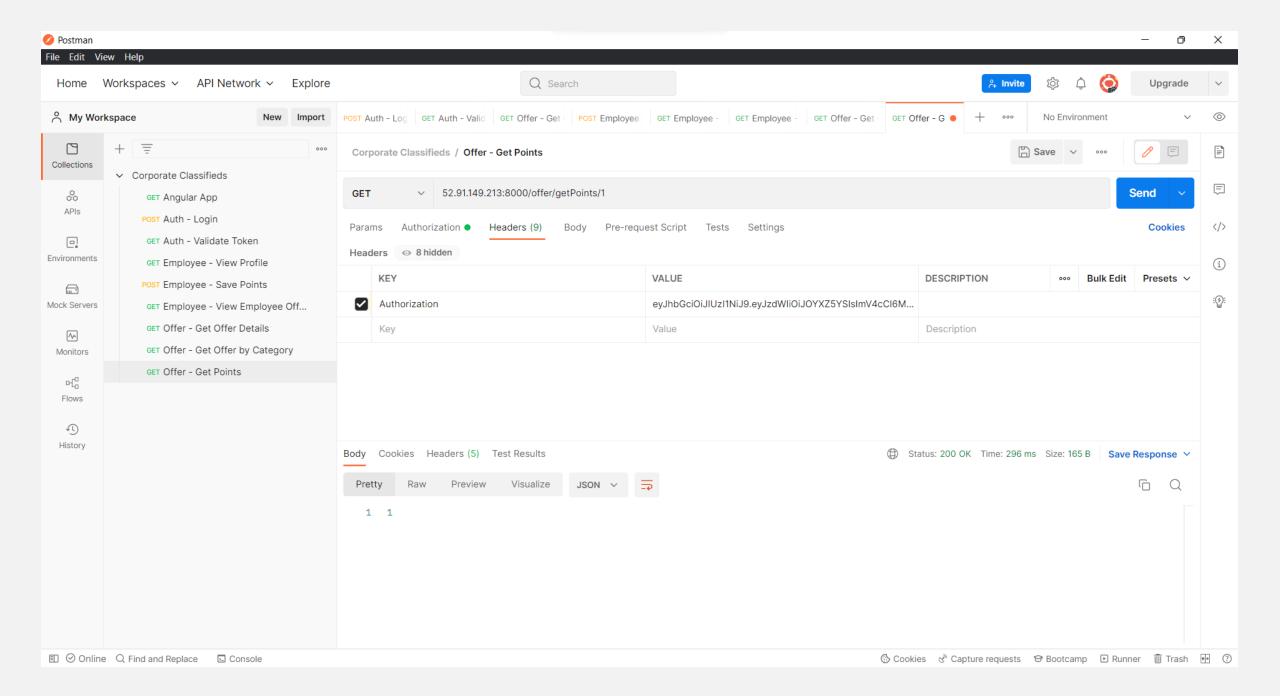


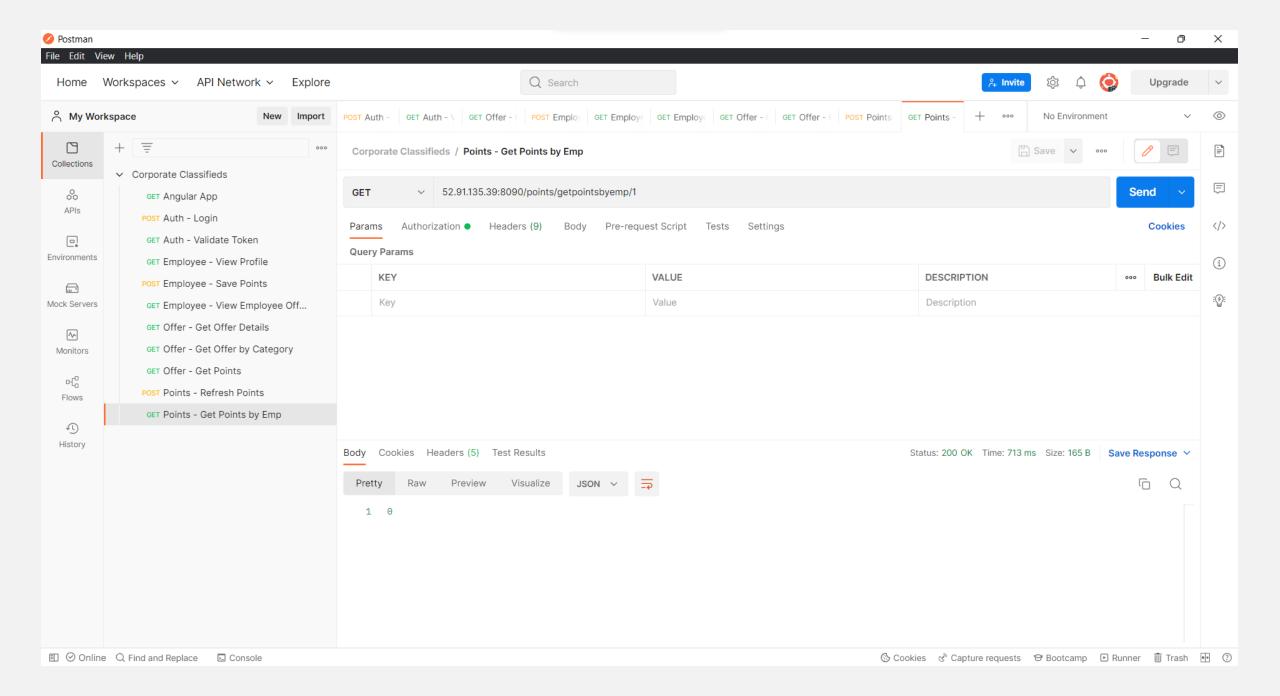


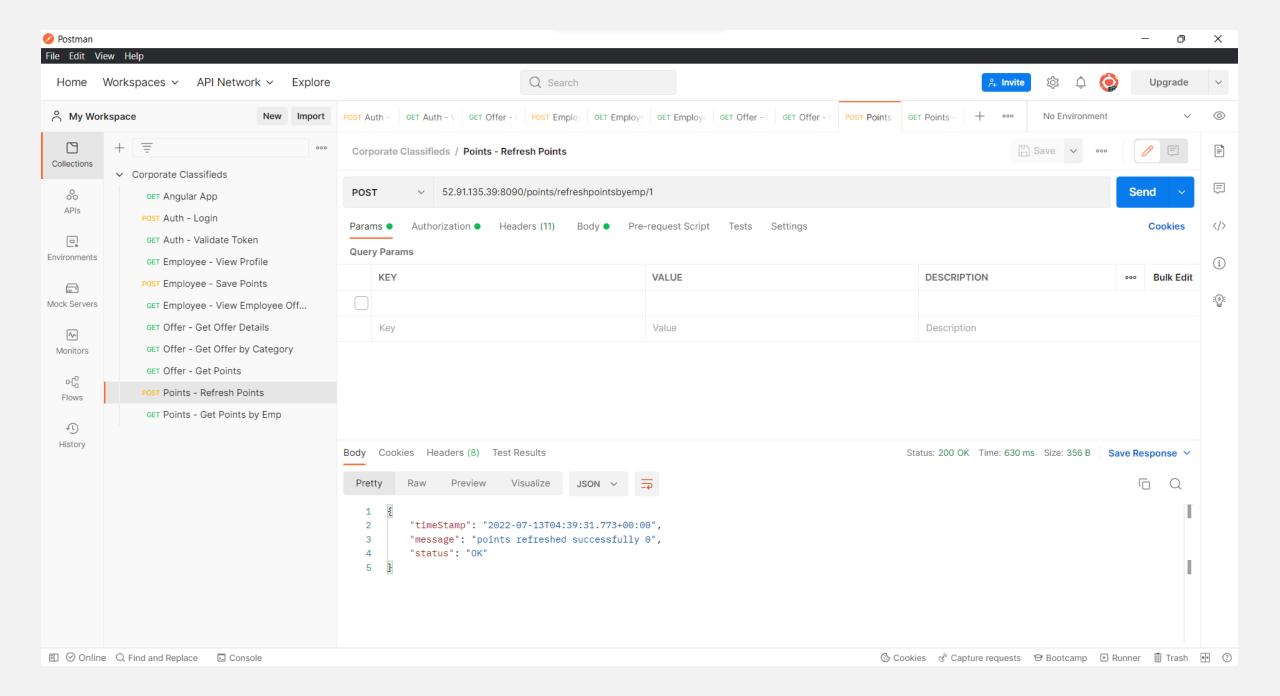


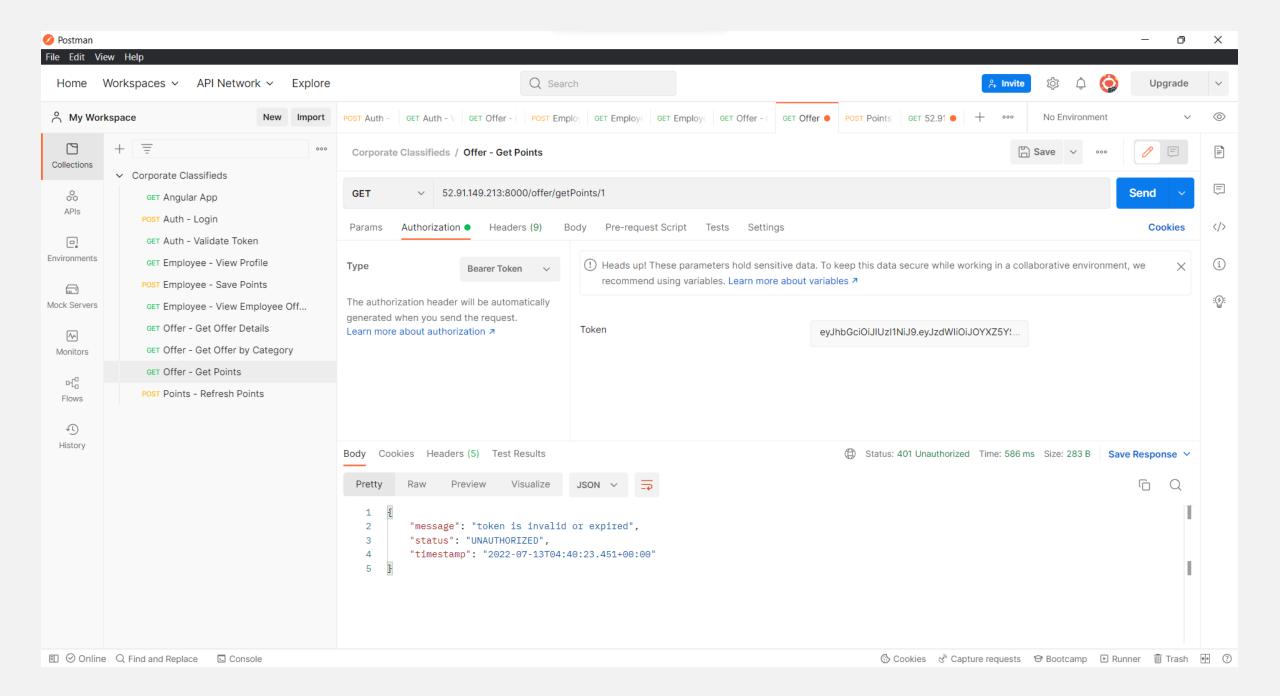


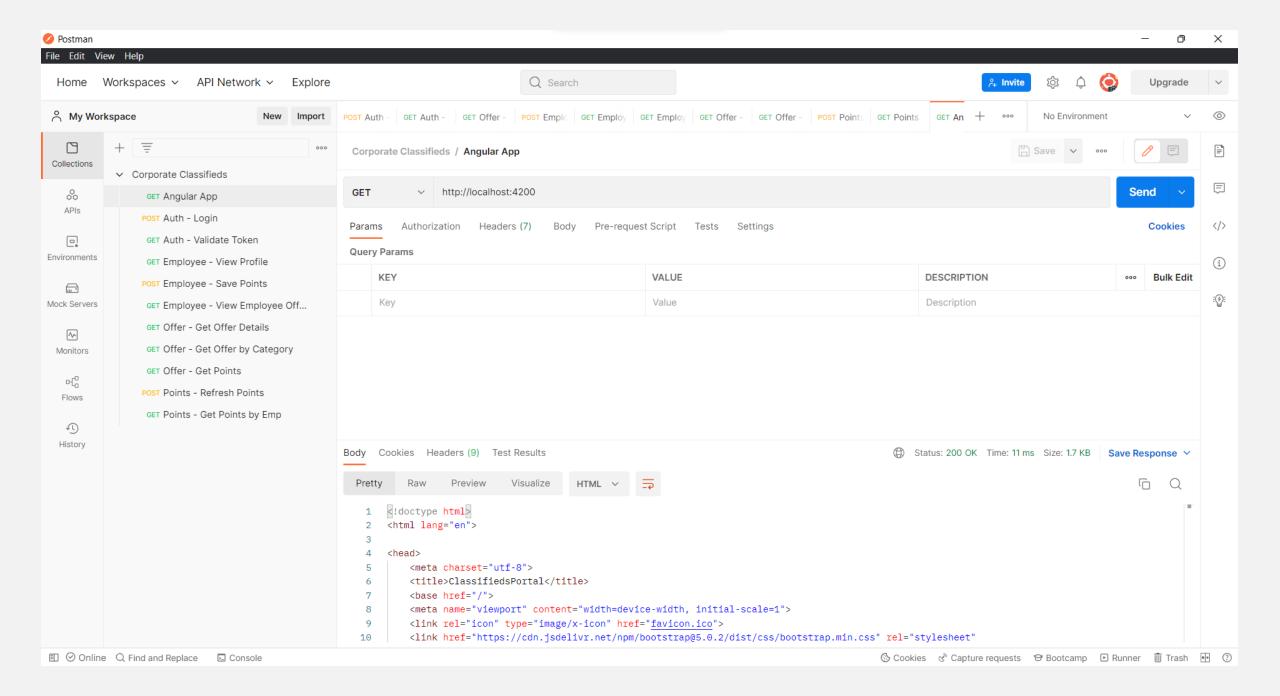






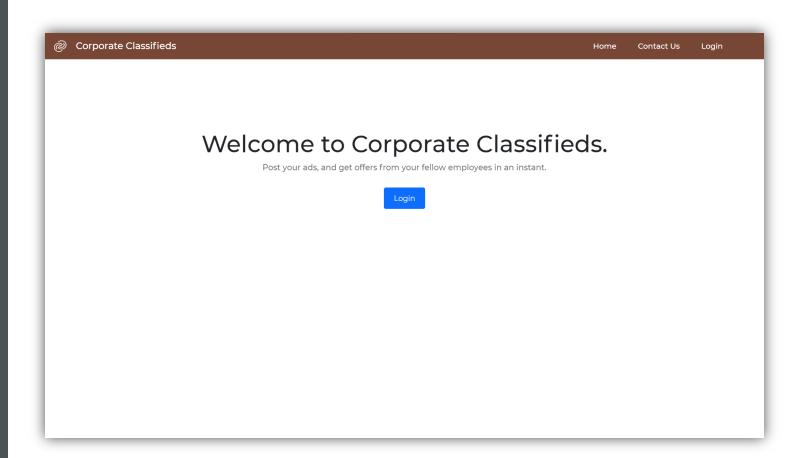




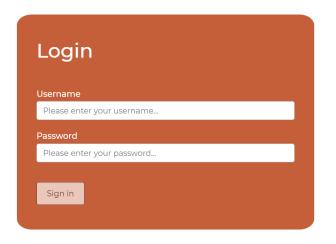


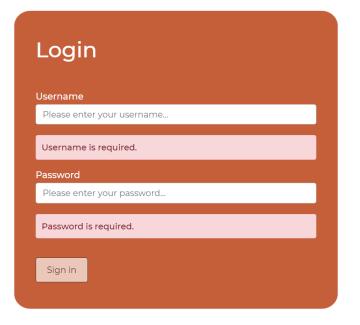
APP SCREENSHOTS

LANDING PAGE



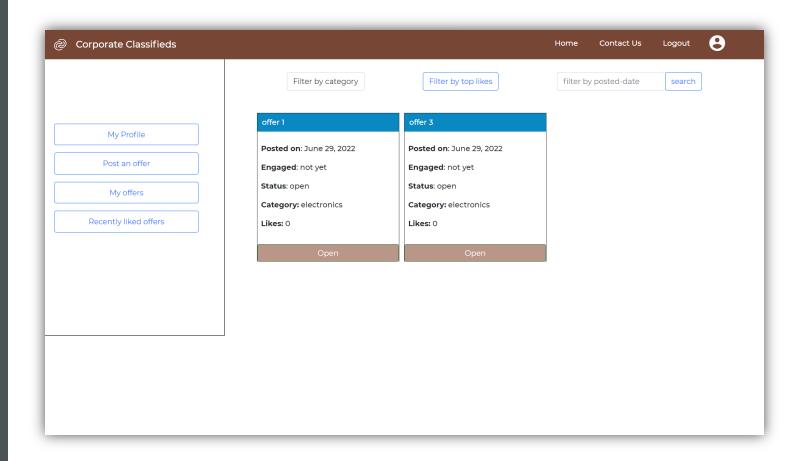
LOGIN PAGE



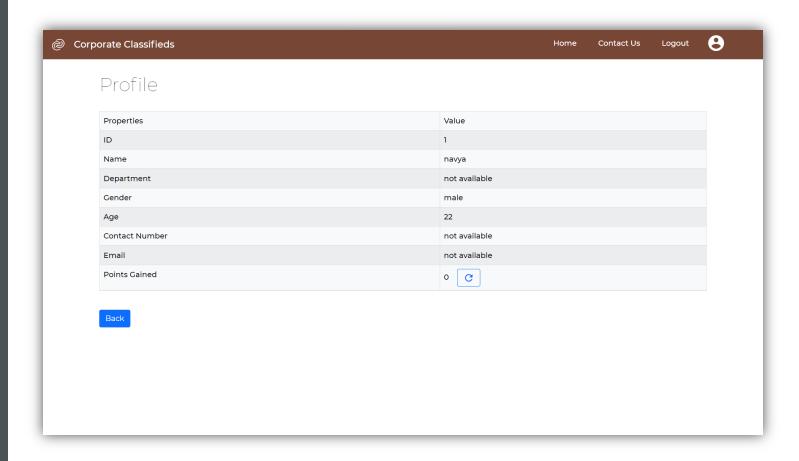


Proper validation for each field

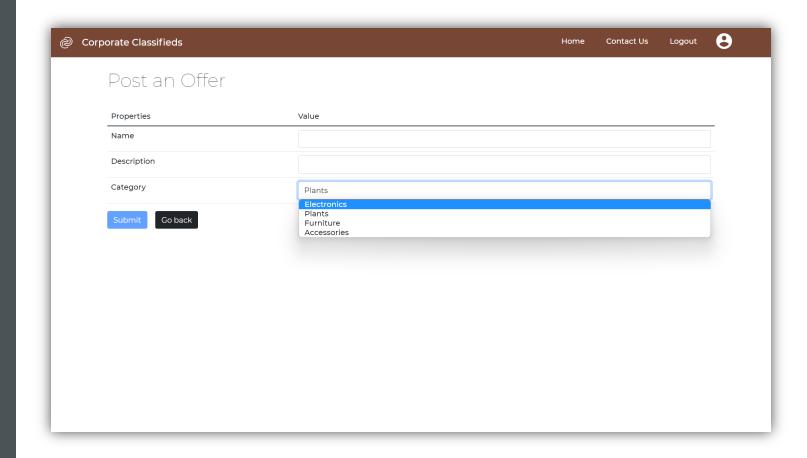
MAIN PAGE



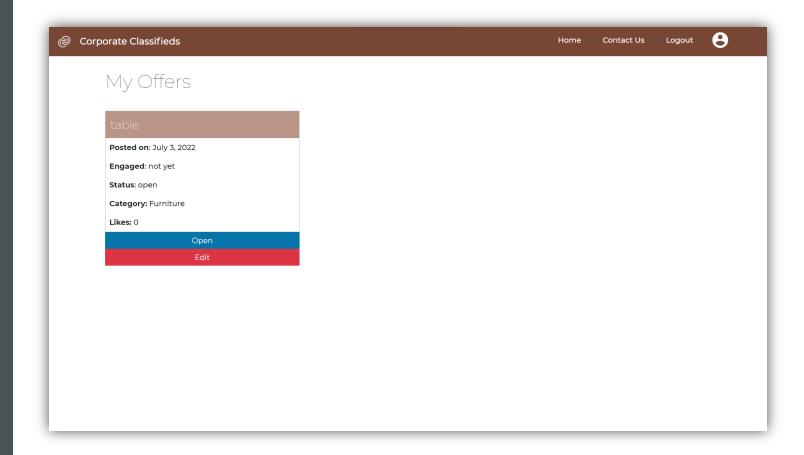
PROFILE PAGE



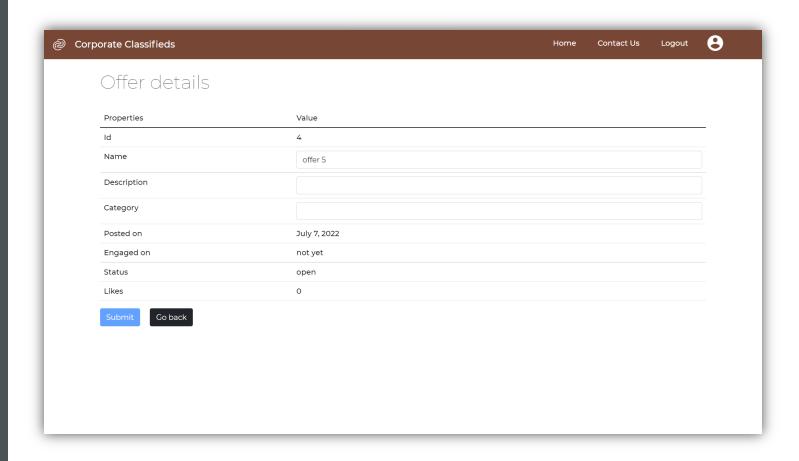
POST OFFER PAGE



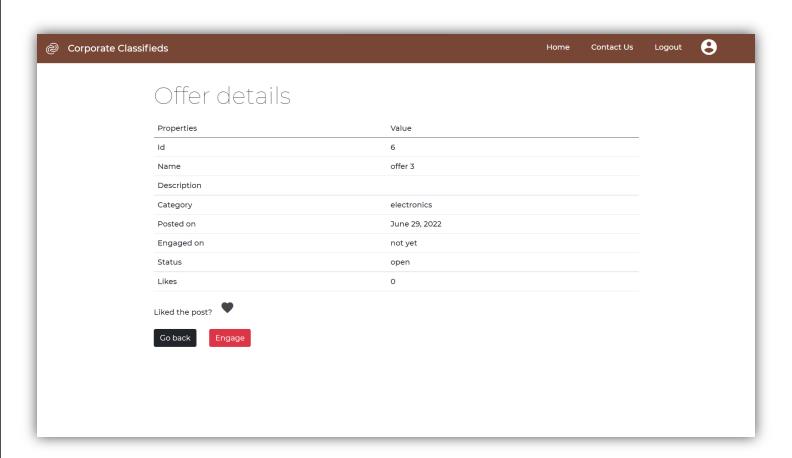
MY OFFERS PAGE



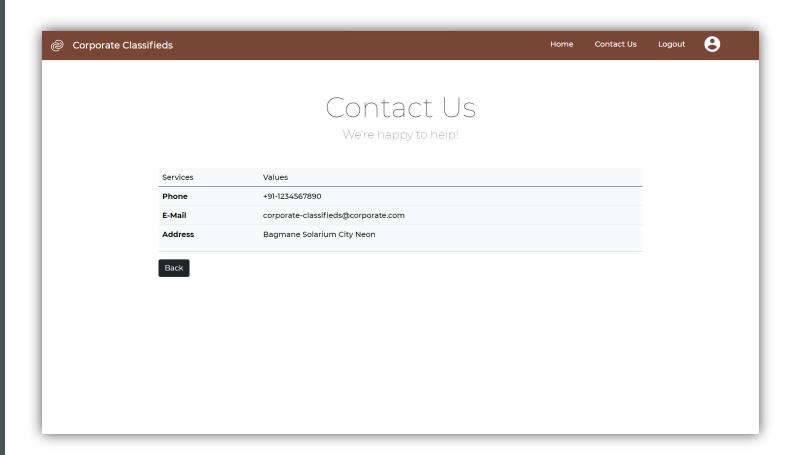
EDIT OFFER PAGE



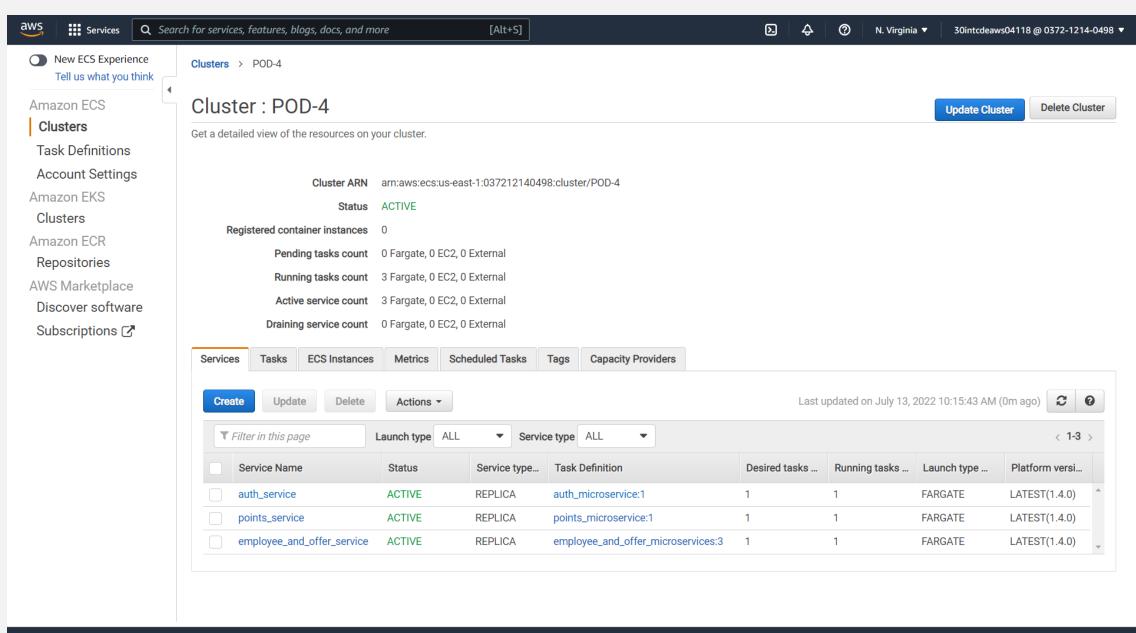
OFFER DETAILS PAGE

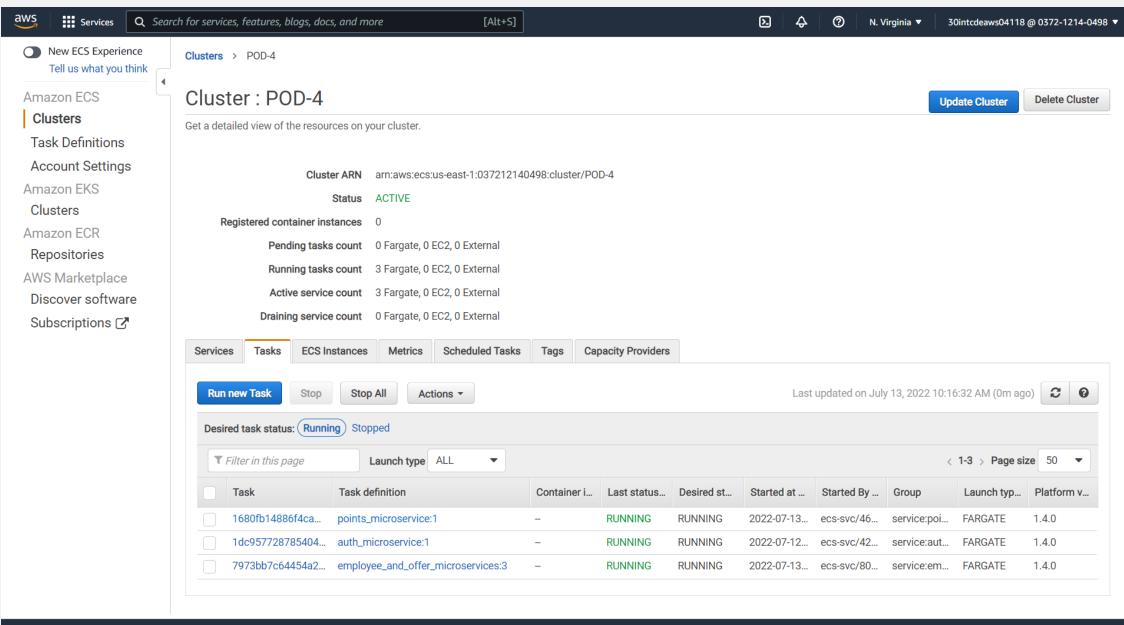


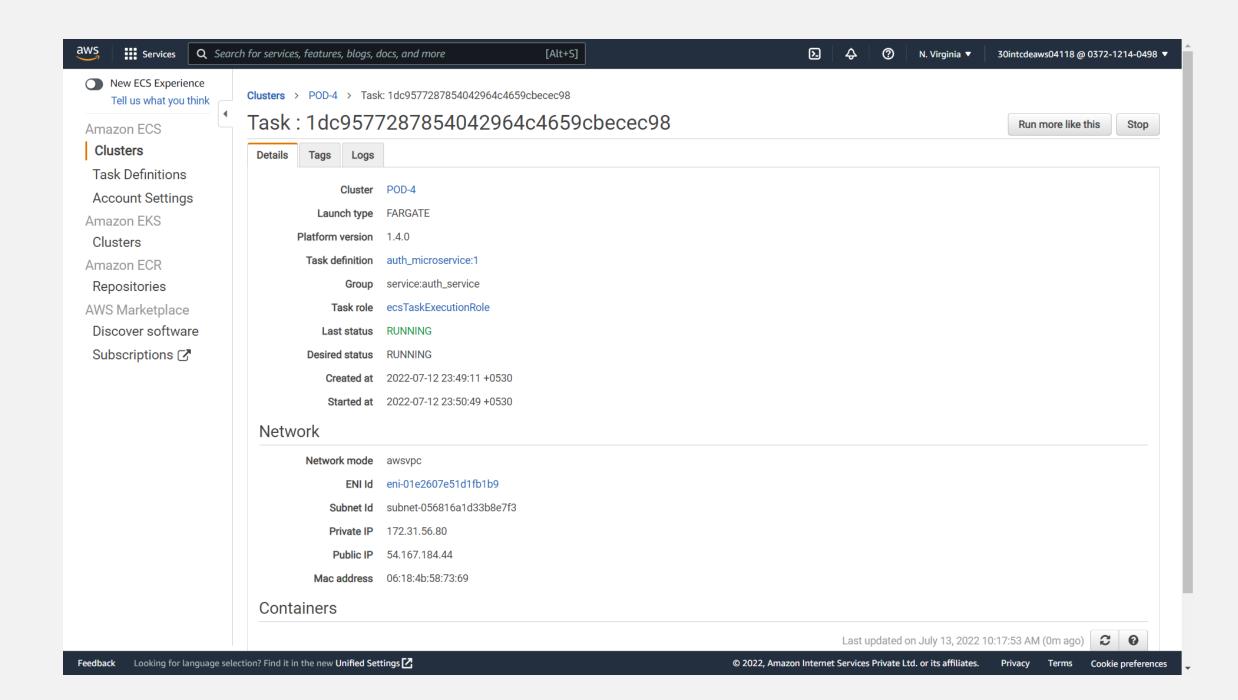
CONTACT US PAGE

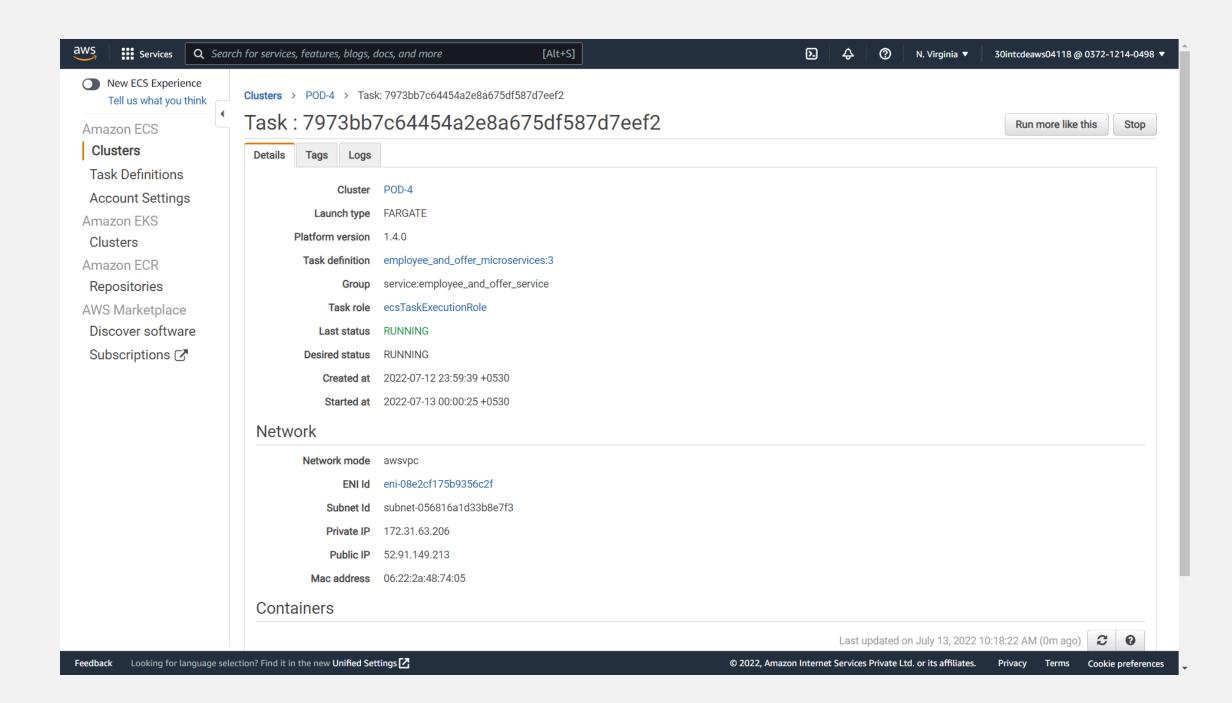


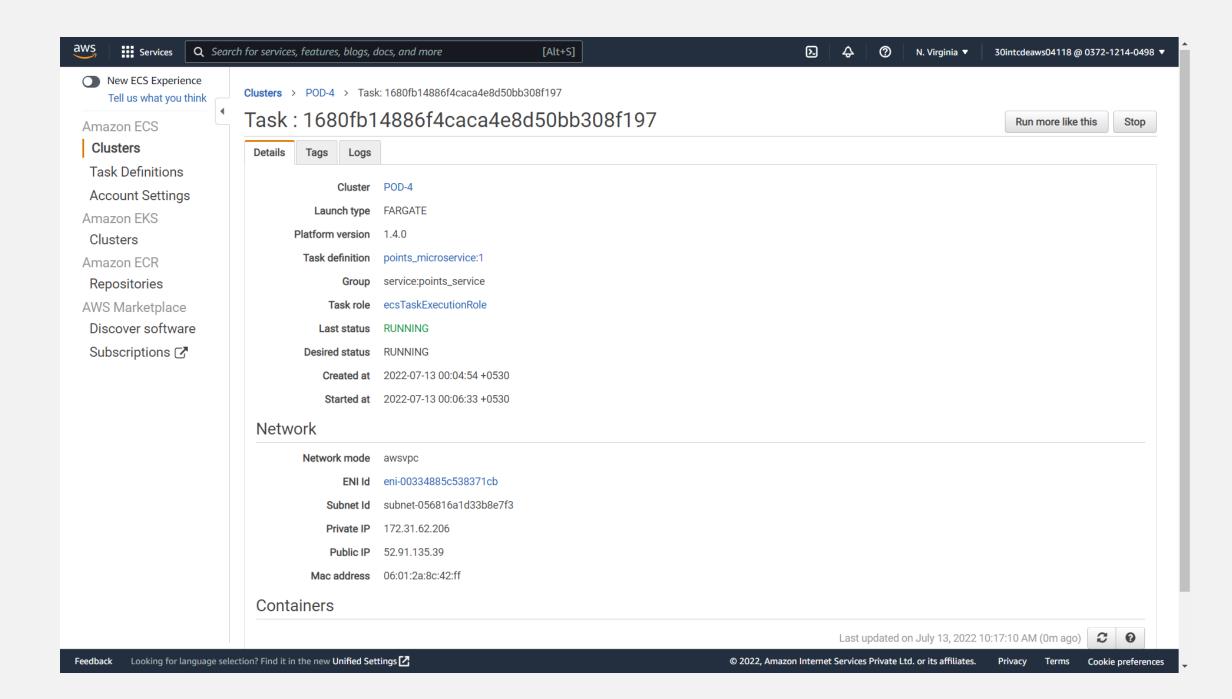
AWS











THANK YOU