API Documentation for Amazon Clone Backend (GoLang)

General Information

- Base URL: '/'
- Authentication: Some routes require authentication via a middleware.
- Content-Type: All requests and responses use application/json unless otherwise specified.

1. Home

- Check Prime Membership
 - o Endpoint: /customerId={id}
 - o Method: GET
 - Description: Checks if a customer is a Prime member.
 - If the Customer's Prime membership expires it make "isPrime" = false
 - Else "isPrime" remains true
 - Authentication: None
 - Parameters:
 - id (path): The customer's ID.
 - Response:
 - **200 OK**: Returns the customer's Prime membership status.
 - Example:

```
Prime Membership : False
{
    "MatchedCount": 1,
    "ModifiedCount": 0,
    "UpsertedCount": 0,
    "UpsertedID": null
}
```

2. User Management

Get All Users

Endpoint: /users

Method: GET

Description: Retrieves a list of all users.

Authentication: None

o Response:

■ 200 OK: Returns a list of users.

■ Example:

```
" id": "66a8be438b66d10a2315cf2e",
      "firstName": "Dhyey",
      "lastName": "Mistri",
      "email": "dhyey@gmail.com",
       "password":
"8a5d92205be0c2b95df533290bc82237b452dc93f81f7b6c87ce9d332ee768c2daa0db5477",
       "mobileNumber": "0987654321",
       "dateOfBirth": "18/12/2001",
       "role": "seller",
      "isPrime": false
  },
      "_id": "66ab331d97d120b6a67da9f3",
      "firstName": "Shiva",
       "lastName": "Gupta",
       "email": "shiva@gmail.com",
       "password":
"76eedce0787f23a4924e897cdf7e6e20254b04f61a5f2a71875a5448477fc4586188f2394a",
       "mobileNumber": "8982511209",
      "dateOfBirth": "18/12/2000",
      "role": "customer",
      "isPrime": false
  },
       "_id": "66b4537d0208bbd82ee589aa",
       "firstName": "Ram",
      "lastName": "Gupta",
       "email": "ram@gmail.com",
       "password":
"12a51cb9090c1c11dd35d8dc78a856cf6672df13dbbef16bd788ba0a6750df8cf62dc5da",
       "mobileNumber": "8982511208",
       "dateOfBirth": "18/12/2000",
       "role": "customer",
      "isPrime": false
```

• Get Single User

o Endpoint: /user/userId={id}

Method: GET

Description: Retrieves details of a specific user by their ID.

Authentication: None

Parameters:

■ id (path): The user's ID.

Response:

■ 200 OK: Returns the user's details.

Example:

```
{
    "_id": "66b4537d0208bbd82ee589aa",
    "firstName": "Ram",
    "lastName": "Gupta",
    "email": "ram@gmail.com",
    "password": "12a51cb9090c1c11dd35d8dc78a856cf6672df13dbbef16bd788ba0a6750df8cf62dc5da",
    "mobileNumber": "8982511208",
    "dateOfBirth": "18/12/2000",
    "role": "customer",
    "isPrime": false
}
```

Create a User

Endpoint: /addUser

Method: POST

Description: Creates a new user.

- Get the user detail
- Find all the exiting users and verify weather the current user's email or mobile number is used before or not
- Validate the entered password as length ≥8 and should contain at least one super character
- Validate the entered mobile number as length == 10
- Validate the date of birth as it should be less than the present date
- Validate the email id
- Encrypt the password
- Insert the user in MongoDB
- If role == customer
 - Created a new Cart for new customer
 - Created a new Wishlist for new customer
 - Created a new Search history for new customer
 - Created a new Product recommendation for new customer

- Created a new Recently view product for new customer
- Else if role ==seller
 - Creating a new report for the new seller
- Authentication: None
- Request Body:

```
"firstName": "Shiva",
    "lastName": "Gupta",
    "email": "shiva@gmail.com",
    "password": "Shiva@123",
    "mobileNumber": "999999999",
    "dateOfBirth": "18/12/2000",
    "role": "customer",
    "isPrime": false
}
```

Response:

- **201 Created**: Returns the created user's ID.
- Example:

```
{
    "InsertedID": "66c222ed56fe9801831cd73c"
}
{
    "InsertedID": "66c222ed56fe9801831cd73e"
}
{
    "InsertedID": "66c222ed56fe9801831cd740"
}
{
    "InsertedID": "66c222f856fe9801831cd742"
}
{
    "InsertedID": "66c222f956fe9801831cd744"
}
{
    "InsertedID": "66c222f956fe9801831cd744"
}
{
    "InsertedID": "66c222f956fe9801831cd746"
}
{
    "InsertedID": "66c222ed56fe9801831cd73c"
}
```

o Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "firstName": "Som", "lastName": "Gupta", "email": "som", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004", "role": "customer" }</pre>	"Invalid Email!!"	409 Conflict	Pass
2	<pre>"firstName": "Som", "lastName": "Gupta", "email": "somgmail.com", "password": "Som@123", "mobileNumber": "666666", "dateOfBirth": "18/12/2004", "role": "customer" }</pre>	"Invalid Email!!"	409 Conflict	Pass
3	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail", "password": "Som@123", "mobileNumber": "666666", "dateOfBirth": "18/12/2004", "role": "customer" }</pre>	"Invalid Email!!"	409 Conflict	Pass
4	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som@123", "mobileNumber": "6666666",</pre>	"Password should be more than 7 characters!!"	409 Conflict	Pass

```
"dateOfBirth": "18/12/2004",
               "role": "customer"
                                                 "Password should contain
                                                                              409 Conflict
5
                                                                                               Pass
               "firstName": "Som",
                                                 atleast one super
               "lastName": "Gupta",
                                                 characters!!"
               "email": "som@gmail.com",
               "password": "Som12345",
               "mobileNumber": "666666",
               "dateOfBirth": "18/12/2004",
               "role": "customer"
                                                 "Your Mobile number must
                                                                              409 Conflict
6
                                                                                               Pass
               "firstName": "Som",
                                                 be of 10 digits!!"
               "lastName": "Gupta",
               "email": "som@gmail.com",
               "password": "Som@1234",
               "mobileNumber": "666666",
               "dateOfBirth": "18/12/2004",
               "role": "customer"
                                                 "Invalid DOB: Date is in
                                                                              409 Conflict
7
                                                                                               Pass
               "firstName": "Som",
                                                 the future!"
               "lastName": "Gupta",
               "email": "som@gmail.com",
               "password": "Som@1234",
               "mobileNumber": "666666666",
               "dateOfBirth": "18/12/2025",
               "role": "customer"
```

• Update a User

- o Endpoint: /updateUser/userId={id}
- Method: PUT
- o Authentication: Required
- Description: Updates details of a specific user by their ID.
 - Role can not be changed while updating, role should be fixed by frontend
- Parameters:

■ id (path): The user's ID.

o Request Body:

```
{
    "firstName": "Yash",
    "lastName": "Yadav",
    "email": "yash@gmail.com",
    "password": "Yash@123",
    "mobileNumber": "9876543210",
    "dateOfBirth": "18/12/2003",
    "isPrime": false
}
```

- Response:
 - 200 OK: Returns the updated user's details.
 - **Example**:

```
{
    "_id": "66c222ed56fe9801831cd73c",
    "firstName": "Yash",
    "lastName": "Yadav",
    "email": "yash@gmail.com",
    "password": "2157c1264a8ca7280fac269bc7d3fff2b9a4793d206d4507e8ec84c723ddd55999338f94",
    "mobileNumber": "9876543210",
    "dateOfBirth": "08/12/2003",
    "role": "customer",
    "isPrime": false
}
```

o Unit Testing

•

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "firstName": "Som", "lastName": "Gupta", "email": "som", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004", "role": "customer"</pre>	"Invalid Email!!"	409 Conflict	Pass

	}			
2	<pre>"firstName": "Som", "lastName": "Gupta", "email": "somgmail.com", "password": "Som@123", "mobileNumber": "666666", "dateOfBirth": "18/12/2004", "role": "customer" }</pre>	"Invalid Email!!"	409 Conflict	Pass
3	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail", "password": "Som@123", "mobileNumber": "666666", "dateOfBirth": "18/12/2004", "role": "customer" }</pre>	"Invalid Email!!"	409 Conflict	Pass
4	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som@123", "mobileNumber": "666666", "dateOfBirth": "18/12/2004", "role": "customer" }</pre>	"Password should be more than 7 characters!!"	409 Conflict	Pass
5	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som12345", "mobileNumber": "666666", "dateOfBirth": "18/12/2004", "role": "customer" }</pre>	"Password should contain atleast one super characters!!"	409 Conflict	Pass

```
"Your Mobile number must
                                                                              409 Conflict
6
                                                                                               Pass
              "firstName": "Som",
                                                 be of 10 digits!!"
              "lastName": "Gupta",
              "email": "som@gmail.com",
              "password": "Som@1234",
              "mobileNumber": "666666",
              "dateOfBirth": "18/12/2004",
              "role": "customer"
                                                 "Invalid DOB: Date is in
                                                                              409 Conflict
7
                                                                                               Pass
              "firstName": "Som",
                                                 the future!"
              "lastName": "Gupta",
              "email": "som@gmail.com",
              "password": "Som@1234",
              "mobileNumber": "666666666",
              "dateOfBirth": "18/12/2025",
               "role": "customer"
```

Delete a User

- Endpoint: /deleteUser/userId={id}
- Method: DELETE
- Authentication: Required
- **Description**: Deletes a specific user by their ID.
 - Delete the user from user API
 - o If role is customer delete the user from customer API as well
 - Same for seller
- Parameters:
 - o id (path): The user's ID.
- Response:
 - o **200 OK**: Confirms deletion.
 - o Example:

```
{
    "DeletedID": "66c222ed56fe9801831cd73c"
}
```

3. Registration and Authentication

Register a Customer

• Endpoint: /registerCustomer

Method: POST

- **Description**: Registers a new customer.
 - Initise wallet with zero money.
 - o Role as a customer
 - o Empty Address, add addresses later.
- Authentication: None
- Request Body:

```
{
    "firstName": "Shiva",
    "lastName": "Gupta",
    "email": "shiva@gmail.com",
    "password": "Shiva@123",
    "mobileNumber": "99999999",
    "dateOfBirth": "18/12/2000"
}
```

- Response:
 - o **201 Created**: Returns the registered customer's ID.
 - Example:

```
{
    "InsertedID": "66c22829818ea8e8db645d55"
}
{
    "InsertedID": "66c22829818ea8e8db645d55"
}
{
    "InsertedID": "66c2282e818ea8e8db645d58"
}
{
    "InsertedID": "66c2282f818ea8e8db645d5a"
}
{
    "InsertedID": "66c22835818ea8e8db645d5c"
}
```

```
{
    "InsertedID": "66c22836818ea8e8db645d5e"
}
{
    "InsertedID": "66c22836818ea8e8db645d60"
}
```

• Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "firstName": "Som", "lastName": "Gupta", "email": "som", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass
2	<pre>"firstName": "Som", "lastName": "Gupta", "email": "somgmail.com", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass
3	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail", "password": "Som@123", "mobileNumber": "666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass
4	<pre>"firstName": "Som", "lastName": "Gupta",</pre>	"Password should be more than 7 characters!!"	409 Conflict	Pass

```
"email": "som@gmail.com",
               "password": "Som@123",
               "mobileNumber": "666666",
               "dateOfBirth": "18/12/2004"
                                                 "Password should contain
                                                                              409 Conflict
5
                                                                                               Pass
               "firstName": "Som",
                                                 atleast one super
               "lastName": "Gupta",
                                                 characters!!"
               "email": "som@gmail.com",
               "password": "Som12345",
               "mobileNumber": "666666",
               "dateOfBirth": "18/12/2004"
                                                 "Your Mobile number must
                                                                              409 Conflict
6
                                                                                               Pass
                                                 be of 10 digits!!"
               "firstName": "Som",
               "lastName": "Gupta",
               "email": "som@gmail.com",
               "password": "Som@1234",
               "mobileNumber": "666666",
               "dateOfBirth": "18/12/2004"
                                                 "Invalid DOB: Date is in
                                                                              409 Conflict
7
                                                                                               Pass
               "firstName": "Som",
                                                 the future!"
               "lastName": "Gupta",
               "email": "som@gmail.com",
               "password": "Som@1234",
               "mobileNumber": "666666666",
               "dateOfBirth": "18/12/2025"
```

Register a Seller

- Endpoint: /registerSeller
- Method: POST
- **Description**: Registers a new seller.
 - Role as a seller
 - Also create a new report for the seller's products
- Authentication: None

• Request Body:

```
"firstName": "Shiva",
    "lastName": "Gupta",
    "email": "shiva@gmail.com",
    "password": "Shiva@123",
    "mobileNumber": "999999999",
    "dateOfBirth": "18/12/2000"
}
```

- Response:
 - o **201 Created**: Returns the registered seller's ID.
 - o Example:

```
{
    "InsertedID": "66c22878818ea8e8db645d62"
}
{
    "InsertedID": "66c22878818ea8e8db645d62"
}
{
    "InsertedID": "66c22879818ea8e8db645d65"
}
```

Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "firstName": "Som", "lastName": "Gupta", "email": "som", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass
2	{	"Invalid Email!!"	409 Conflict	Pass

```
"firstName": "Som",
              "lastName": "Gupta",
              "email": "somgmail.com",
              "password": "Som@123",
              "mobileNumber": "666666",
               "dateOfBirth": "18/12/2004"
                                                 "Invalid Email!!"
                                                                              409 Conflict
3
                                                                                               Pass
              "firstName": "Som",
              "lastName": "Gupta",
              "email": "som@gmail",
              "password": "Som@123",
              "mobileNumber": "666666",
              "dateOfBirth": "18/12/2004"
                                                                              409 Conflict
                                                 "Password should be more
                                                                                               Pass
4
                                                 than 7 characters!!"
              "firstName": "Som",
              "lastName": "Gupta",
              "email": "som@gmail.com",
              "password": "Som@123",
              "mobileNumber": "666666",
              "dateOfBirth": "18/12/2004"
                                                 "Password should contain
5
                                                                              409 Conflict
                                                                                               Pass
              "firstName": "Som",
                                                 atleast one super
              "lastName": "Gupta",
                                                 characters!!"
              "email": "som@gmail.com",
              "password": "Som12345",
              "mobileNumber": "666666",
              "dateOfBirth": "18/12/2004"
                                                 "Your Mobile number must
                                                                              409 Conflict
6
                                                                                               Pass
              "firstName": "Som",
                                                 be of 10 digits!!"
              "lastName": "Gupta",
              "email": "som@gmail.com",
              "password": "Som@1234",
              "mobileNumber": "666666",
```

```
"dateOfBirth": "18/12/2004"

7

{
          "firstName": "Som",
          "lastName": "Gupta",
          "email": "som@gmail.com",
          "password": "Som@1234",
          "mobileNumber": "6666666666",
          "dateOfBirth": "18/12/2025"
}

"Invalid DOB: Date is in
the future!"

### Add to Conflict

Pass

Pass
```

Login

Endpoint: /login

Method: POST

• **Description**: Authenticates a user and provides a session token.

- Get the entered email, password
- Decrypt the stored password for that entered email
- Check the stored password from the entered password
- o Set the cookie for the token generated by the user email and id
- Authentication: None
- Request Body:

```
{
    "email": "yash@gmail.com",
    "password": "Yash@123"
}
```

- Response:
 - o **200 OK**: Returns a session token.
 - Example:

```
"Welcome!!"
Yash, You have login as customer!!
```

```
Name
Value
Domain
```

```
Path
Expires
HttpOnly
Secure
token
eyJhbGciOiJIUzIINiIsInR5cCI6IkpXVCJ9.eyJlbWFpbCI6Inlhc2hAZ21haWwuY29tIiwiZXhwIjoxNzI0MDg1NjI
1LCJpZCI6IjY2YzIyMmVkNTZmZTk4MDE4MzFjZDczYyJ9.kprzhrbMjLHXrjS3D0e8ys8408GPzj_CdYUICM4D254
localhost
/
Mon, 19 Aug 2024 16:40:25 GMT
true
false
```

Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>"email": "som", "password": "Som@1234" }</pre>	"Invalid Email!!"	409 Conflict	Pass
2	<pre>{ "email": "somgmail.com", "password": "Som@1234" }</pre>	"Invalid Email!!"	409 Conflict	Pass
3	<pre>{ "email": "som@gmail", "password": "Som@1234" }</pre>	"Invalid Email!!"	409 Conflict	Pass
4	<pre>{ "email": "som@gmail", "password": "Som@123" }</pre>	"Invalid User or Wrong password!!"	401 Unauthorized	Pass

Logout

• Endpoint: /logout

• Method: POST

• **Description**: Logs out the user, invalidating the session token.

o Delete the stored token from the cookie

• Authentication: None

• Response:

o **200 OK**: Confirms logout.

o Example:

Logged out successfully

Forgot Password

• Endpoint: /forgotPassword

Method: POST

- **Description**: Initiates the password recovery process for a user.
 - o Check weather the email is available in the database or not
 - Validate the new password
 - Update the user with new password
- Authentication: None
- Request Body:

```
{
    "email": "anmol@gmail.com",
    "newPassword": "Anmol@123"
}
```

- Response:
 - o **200 OK**: Confirms the initiation of the password recovery process.
 - Example:

Password changed successfully!!

Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>"email": "som", "newPassword": "Som@1234" }</pre>	"Invalid Email!!"	409 Conflict	Pass

2	<pre>{ "email": "somgmail.com" "newPassword": "Som@123</pre> }		409 Conflict	Pass
3	<pre>"email": "som@gmail", "newPassword": "Som@1236</pre>	"Invalid Email!!"	409 Conflict	Pass
4	<pre>{ "email": "sommm@gmail", "newPassword": "Som@123-</pre> }	"User not registered, Please Register first!!"	502 Bad Gateway	Pass
5	{	"Invalid User or Wrong	401 Unauthorized	Pass

Change Password

• Endpoint: /changePassword

Method: POST

• **Description**: Changes the user's password.

- o check weather the email is available in the database or not
- check the present password is correct or not
- Validate the new password
- o Update the user with new password
- Authentication: None
- Request Body:

```
{
    "email": "anmol@gmail.com",
    "password": "Anmol@123",
    "newPassword": "Anmol@1234"
}
```

• Response:

- o **200 OK**: Confirms the password change.
- o Example:

Password reset successfully!!

• Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>"email": "som", "password": "Som@1234", "newPassword": "Som@12345" }</pre>	"Invalid Email!!"	409 Conflict	Pass
2	<pre>"email": "somgmail.com",</pre>	"Invalid Email!!"	409 Conflict	Pass
3	<pre>"email": "som@gmail", "password": "Som@1234", "newPassword": "Som@12345" }</pre>	"Invalid Email!!"	409 Conflict	Pass
4	<pre>"email": "sommm@gmail",</pre>	"User not registered, Please Register first!!"	502 Bad Gateway	Pass
5	<pre>"email": "som@gmail", "password": "Som@123", "newPassword": "Som@12345" }</pre>	"Invalid User or Wrong password!!"	401 Unauthorized	Pass
6	<pre>"email": "som@gmail.com", "password": "Som@123",</pre>	"Incorrect Password!!"	502 Bad Gateway	Pass

```
"newPassword": "Som@12345"
}
```

4.Customer Management

Get All Customers

• Endpoint: /customers

• Method: GET

• **Description**: Retrieves a list of all customers.

• Authentication: None

• Response:

o **200 OK**: Returns a list of customers.

o **Example**:

```
" id": "66ab331d97d120b6a67da9f3",
      "firstName": "Shiva",
      "lastName": "Gupta",
       "email": "shiva@gmail.com",
       "password":
"76eedce0787f23a4924e897cdf7e6e20254b04f61a5f2a71875a5448477fc4586188f2394a",
      "mobileNumber": "8982511209",
       "dateOfBirth": "18/12/2000",
       "role": "customer",
      "isPrime": false,
       "primeExpireDate": "0001-01-01T00:00:00Z",
       "productsPurchased": [],
       "addresses": [
               "_id": "66b06aeb19b253de5b363873",
              "fullName": "Shiva Gupta",
              "mobileNumber": "8982511209",
              "pincode": "471515",
               "line1": "near old bus stand,",
              "line2": "In frotn f government hospital",
              "landmark": "RC brother",
               "city": "LavKush nagar",
              "state": "MP",
```

Get Single Customer

- Endpoint: /customer/customerId={id}
- Method: GET
- **Description**: Retrieves details of a specific customer by their ID.
- Authentication: None
- Parameters:
 - o id (path): The customer's ID.
- Response:
 - 200 OK: Returns the customer's details.
 - Example:

```
{
    "_id": "66c22829818ea8e8db645d55",
    "firstName": "Suryansh",
    "lastName": "Gupta",
    "email": "suryansh@gmail.com",
    "password":
    "f95202d1f0893f5cea42e4a17a63006672a91b364ed74908f1a57bdc13aaecc17e43485d9918555b",
    "mobileNumber": "7658934536",
    "dateOfBirth": "25/07/2000",
    "role": "customer",
    "isPrime": false,
    "primeExpireDate": "0001-01-01T00:00:00Z",
    "productsPurchased": [],
    "addresses": [],
```

```
"wallet": 0
}
```

Create a Customer

• Endpoint: /addCustomer

Method: POST

- **Description**: Creates a new customer.
 - Created a new Cart for new customer
 - Created a new Wishlist for new customer
 - Created a new Search history for new customer
 - Created a new Product recommendation for new customer
 - Created a new Recently view product for new customer
- Authentication: None
- Request Body:

```
{
    "firstName": "Ravi",
    "lastName": "Kiran",
    "email": "ravi@gmail.com",
    "password": "Ravi@123",
    "mobileNumber": "3489765678",
    "dateOfBirth": "18/12/2002"
}
```

- Response:
 - o **201 Created**: Returns the created customer's ID.
 - Example:

```
{
    "InsertedID": "66c22faf818ea8e8db645d6f"
}
{
    "InsertedID": "66c22faf818ea8e8db645d6f"
}
{
    "InsertedID": "66c22faf818ea8e8db645d71"
}
{
    "InsertedID": "66c22fb0818ea8e8db645d73"
```

```
}
{
    "InsertedID": "66c22fb0818ea8e8db645d75"
}
{
    "InsertedID": "66c22fb1818ea8e8db645d77"
}
{
    "InsertedID": "66c22fb1818ea8e8db645d79"
}
```

• Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "firstName": "Som", "lastName": "Gupta", "email": "som", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass
2	<pre>"firstName": "Som", "lastName": "Gupta", "email": "somgmail.com", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass
3	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass

```
"Password should be more
                                                                              409 Conflict
                                                                                               Pass
               "firstName": "Som",
                                                 than 7 characters!!"
               "lastName": "Gupta",
               "email": "som@gmail.com",
               "password": "Som@123",
               "mobileNumber": "666666",
               "dateOfBirth": "18/12/2004"
                                                 "Password should contain
                                                                              409 Conflict
5
                                                                                               Pass
               "firstName": "Som",
                                                 atleast one super
               "lastName": "Gupta",
                                                 characters!!"
               "email": "som@gmail.com",
               "password": "Som12345",
               "mobileNumber": "666666",
               "dateOfBirth": "18/12/2004"
                                                 "Your Mobile number must
                                                                              409 Conflict
                                                                                               Pass
6
               "firstName": "Som",
                                                 be of 10 digits!!"
               "lastName": "Gupta",
               "email": "som@gmail.com",
               "password": "Som@1234",
               "mobileNumber": "666666",
               "dateOfBirth": "18/12/2004"
7
                                                 "Invalid DOB: Date is in
                                                                              409 Conflict
                                                                                               Pass
               "firstName": "Som",
                                                 the future!"
               "lastName": "Gupta",
               "email": "som@gmail.com",
               "password": "Som@1234",
               "mobileNumber": "666666666",
               "dateOfBirth": "18/12/2025"
```

Update a Customer

- **Endpoint**: /updateCustomer/customerId={id}
- Method: PUT
- Authentication: Required

- **Description**: Updates details of a specific customer by their ID.
- Parameters:
 - o id (path): The customer's ID.
- Request Body:

```
{
    "firstName": "Ravi",
    "lastName": "Kiran",
    "email": "ravi@gmail.com",
    "password": "Ravi@123",
    "mobileNumber": "6789768978",
    "dateOfBirth": "18/12/2002"
}
```

- Response:
 - o **200 OK**: Returns the updated customer's details.
 - o 405 Method not found: Invalid url or method
 - o Example:

```
{
    "_id": "66c22faf818ea8e8db645d6f",
    "firstName": "Ravi",
    "lastName": "Kiran",
    "email": "ravi@gmail.com",
    "password": "8dcd48c9a9fad927c8358a7e7e3b9ebe3b639d9827be73d4129794d716d2f2cb01c21452",
    "mobileNumber": "6789768978",
    "dateOfBirth": "18/12/2002",
    "role": "customer",
    "isPrime": false,
    "primeExpireDate": "0001-01-01T00:00:00Z",
    "productsPurchased": [],
    "addresses": [],
    "wallet": 0
}
```

Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	{ "firstName": "Som",	"Invalid Email!!"	409 Conflict	Pass

```
"lastName": "Gupta",
               "email": "som",
               "password": "Som@123",
               "mobileNumber": "666666",
               "dateOfBirth":
       "18/12/2004"
                                                "Invalid Email!!"
                                                                             409 Conflict
2
                                                                                             Pass
              "firstName": "Som",
              "lastName": "Gupta",
              "email": "somgmail.com",
              "password": "Som@123",
              "mobileNumber": "666666",
              "dateOfBirth": "18/12/2004"
                                                "Invalid Email!!"
                                                                             409 Conflict
3
                                                                                             Pass
              "firstName": "Som",
              "lastName": "Gupta",
              "email": "som@gmail",
              "password": "Som@123",
              "mobileNumber": "666666",
              "dateOfBirth": "18/12/2004"
                                                "Password should be more
                                                                             409 Conflict
4
                                                                                             Pass
              "firstName": "Som",
                                                than 7 characters!!"
              "lastName": "Gupta",
              "email": "som@gmail.com",
              "password": "Som@123",
              "mobileNumber": "666666",
              "dateOfBirth": "18/12/2004"
                                                                             409 Conflict
                                                "Password should contain
                                                                                             Pass
5
              "firstName": "Som",
                                                atleast one super
              "lastName": "Gupta",
                                                characters!!"
              "email": "som@gmail.com",
              "password": "Som12345",
              "mobileNumber": "666666",
```

	"dateOfBirth": "18/12/2004" }			
6	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som@1234", "mobileNumber": "666666", "dateOfBirth": "18/12/2004" }</pre>	"Your Mobile number must be of 10 digits!!"	409 Conflict	Pass
7	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som@1234", "mobileNumber": "6666666666", "dateOfBirth": "18/12/2025" }</pre>	"Invalid DOB: Date is in the future!"	409 Conflict	Pass

Delete a Customer

- **Endpoint**: /deleteCustomer/customerId={id}
- Method: DELETE
- Authentication: Required
- **Description**: Deletes a specific customer by their ID.
 - o Delete the customer from customer API
 - o Delete the customer from user API as well
- Parameters:
 - o id (path): The customer's ID.
- Response:
 - o **200 OK**: Confirms deletion.
 - o Example:

```
{
    "DeletedID": "66c22faf818ea8e8db645d6f"
}
```

5.Wallet Management

Add Money to Wallet

• **Endpoint**: /addMoneyInWallet/customerId={id}

Method: POST

• Authentication: Required

• **Description**: Adds money to the customer's wallet.

• Parameters:

o id (path): The customer's ID.

• Request Body:

```
{
    "money": 12000
}
```

- Response:
 - o **200 OK**: Confirms the addition of money to the wallet.
 - o Example:

```
"MatchedCount": 1,
   "ModifiedCount": 1,
   "UpsertedCount": 0,
   "UpsertedID": null
}
{
   "_id": "66c22faf818ea8e8db645d6f",
   "firstName": "Ravi",
   "lastName": "Kiran",
   "email": "ravi@gmail.com",
   "password":
"1227391d5995e97a0766e55226d3777f29b1d26238c3a74be38e2fef58c7d633d5de6840",
   "mobileNumber": "6789768978",
   "dateOfBirth": "18/12/2002",
   "role": "customer",
   "isPrime": false,
   "primeExpireDate": "0001-01-01T00:00:00Z",
```

```
"productsPurchased": null,
    "addresses": null,
    "wallet": 12000
}
```

• Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	{ "money": 12000 }	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	{ "moneys": 12000 }	Not give response	_	Pass
3	{ "money": -12000 }	Can't be add negative money in the wallet!!	400 Bad Request	Pass

Withdraw Money from Wallet

- **Endpoint**: /withdrawMoneyFromWallet/customerId={id}
- Method: POST
- Authentication: Required
- **Description**: Withdraws money from the customer's wallet.
 - o If withdrawAll is true, then money in wallet becomes zero
- Parameters:
 - o id (path): The customer's ID.
- Request Body:

```
{
    "money": 1000,
    "withdrawAll": false
}
```

• Response:

- o **200 OK**: Confirms the withdrawal of money from the wallet.
- Example:

```
"MatchedCount": 1,
   "ModifiedCount": 1,
   "UpsertedCount": 0,
   "UpsertedID": null
}
{
   " id": "66c22faf818ea8e8db645d6f",
   "firstName": "Ravi",
   "lastName": "Kiran",
   "email": "ravi@gmail.com",
   "password":
"1227391d5995e97a0766e55226d3777f29b1d26238c3a74be38e2fef58c7d633d5de6840",
   "mobileNumber": "6789768978",
   "dateOfBirth": "18/12/2002",
   "role": "customer",
   "isPrime": false,
   "primeExpireDate": "0001-01-01T00:00:00Z",
   "productsPurchased": null,
   "addresses": null,
   "wallet": 11000
```

Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "money": 12000, "withdrawAll": false }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "moneys": 12000, "withdrawAlls": false }</pre>	Not give response	-	Pass
	{ "money": 12000000,	Not enough Money in Wallet!!	400 Bad Request	Pass

```
"withdrawAll": false
}
```

Buy Prime Membership

• **Endpoint**: /buyPrimeMembership/customerId={id}

Method: POST

• Authentication: Required

• **Description**: Buys a Prime membership for the customer.

- It has 4 subscriptions, 1 month(299), 3 months(599), 6 months(899) and 1 year(1099)
- o Features of Prime memberships are
 - Free delivery charge
 - Customer change change the delivery date according to availability
 - Only one day delivery
- Parameters:
 - o id (path): The customer's ID.
- Request Body:

```
{
    "months":12
}
```

- Response:
 - o **200 OK**: Confirms the purchase of the Prime membership.
 - Example:

```
{
   "MatchedCount": 1,
   "ModifiedCount": 0,
   "UpsertedCount": 0,
   "UpsertedID": null
}
{
   "_id": "66c22faf818ea8e8db645d6f",
   "firstName": "Ravi",
```

```
"lastName": "Kiran",
    "email": "ravi@gmail.com",
    "password":
"1227391d5995e97a0766e55226d3777f29b1d26238c3a74be38e2fef58c7d633d5de6840",
    "mobileNumber": "6789768978",
    "dateOfBirth": "18/12/2002",
    "role": "customer",
    "isPrime": true,
    "primeExpireDate": "2025-08-18T23:19:35.150990413+05:30",
    "productsPurchased": null,
    "addresses": null,
    "wallet": 10901
}
```

• Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "month": 6 }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	{ "months": 12000 }	Not give response	-	Pass
3	{ "month": 12 }	Not enough Money in Wallet!!	400 Bad Request	Pass

6.Seller Management

Get All Sellers

• Endpoint: /sellers

• Method: GET

• Description: Retrieves a list of all sellers.

- Authentication: None
- Response:
 - o **200 OK**: Returns a list of sellers.
 - o Example:

```
" id": "66a8be438b66d10a2315cf2e",
       "firstName": "Dhyey",
       "lastName": "Mistri",
       "email": "dhyey@gmail.com",
       "password":
"8a5d92205be0c2b95df533290bc82237b452dc93f81f7b6c87ce9d332ee768c2daa0db5477
       "mobileNumber": "0987654321",
       "dateOfBirth": "18/12/2001",
       "role": "seller",
       "isPrime": false,
       "productsListedIds": [
           "66b499c97dd2d413f5399ee9",
           "66a8d9c2697de17b2285d258",
           "66a9e09b63831c9fba7f84a2",
           "66a9e0ec63831c9fba7f84a5",
           "66aa0d90c9440c136263d090",
           "66aa320d5270e6700c8c94d1",
           "66ab273b03aa2deac83093e2",
           "66bca49f58a66a6eb4953126"
       "productsSoldIds": null
  },
       " id": "66c22878818ea8e8db645d62",
       "firstName": "Anmol",
       "lastName": "Gupta",
       "email": "anmol@gmail.com",
       "password":
"c8d907bf70b2813a1616cf82f6f7ef4861afb5a2599ad98eacf1e90cae47daafc4c2ca128c
9b",
       "mobileNumber": "9897678945",
       "dateOfBirth": "18/07/2000",
       "role": "seller",
       "isPrime": false,
       "productsListedIds": null,
```

```
"productsSoldIds": null
}
```

Get Single Seller

• Endpoint: /seller/sellerId={id}

Method: GET

• **Description**: Retrieves details of a specific seller by their ID.

• Authentication: None

Parameters:

o id (path): The seller's ID.

• Response:

o **200 OK**: Returns the seller's details.

o Example:

```
{
    "_id": "66c22878818ea8e8db645d62",
    "firstName": "Anmol",
    "lastName": "Gupta",
    "email": "anmol@gmail.com",
    "password":
"c8d907bf70b2813a1616cf82f6f7ef4861afb5a2599ad98eacf1e90cae47daafc4c2ca128c
9b",
    "mobileNumber": "9897678945",
    "dateOfBirth": "18/07/2000",
    "role": "seller",
    "isPrime": false,
    "productsListedIds": null,
    "productsSoldIds": null
}
```

Create a Seller

• Endpoint: /addSeller

Method: POST

• **Description**: Creates a new seller.

o New seller is added in seller API

New user is added in user API as a role seller

- o Creating a new report for the new seller
- Authentication: None
- Request Body:

```
{
    "firstName": "Dev",
    "lastName": "Gupta",
    "email": "dev@gmail.com",
    "password": "Dev@1234",
    "mobileNumber": "7654321234",
    "dateOfBirth": "26/03/2003"
}
```

- Response:
 - o **201 Created**: Returns the created seller's ID.
 - o Example:

```
{
    "InsertedID": "66c2355b818ea8e8db645d8d"
}
{
    "InsertedID": "66c2355b818ea8e8db645d8d"
}
{
    "InsertedID": "66c2355c818ea8e8db645d8f"
}
```

Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "firstName": "Som", "lastName": "Gupta", "email": "som", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass

2	<pre>"firstName": "Som", "lastName": "Gupta", "email": "somgmail.com", "password": "Som@123", "mobileNumber": "666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass
3	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass
4	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Password should be more than 7 characters!!"	409 Conflict	Pass
5	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som12345", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Password should contain atleast one super characters!!"	409 Conflict	Pass
6	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som@1234",</pre>	"Your Mobile number must be of 10 digits!!"	409 Conflict	Pass

```
"mobileNumber": "666666",
    "dateOfBirth": "18/12/2004"

7

{
        "firstName": "Som",
        "lastName": "Gupta",
        "email": "som@gmail.com",
        "password": "Som@1234",
        "mobileNumber": "6666666666",
        "dateOfBirth": "18/12/2025"
}

"Invalid DOB: Date is in
the future!"

409 Conflict

Pass
```

Update a Seller

- Endpoint: /updateSeller/sellerId={id}
- Method: PUT
- Authentication: Required
- **Description**: Updates details of a specific seller by their ID.
- Parameters:
 - o id (path): The seller's ID.
- Request Body:

```
{
    "firstName": "Dev",
    "lastName": "Gupta",
    "email": "dev@gmail.com",
    "password": "Dev@1234",
    "mobileNumber": "7654321234",
    "dateOfBirth": "26/03/2003"
}
```

- Response:
 - o **200 OK**: Returns the updated seller's details.
 - Example:

```
{
    "_id": "66c2355b818ea8e8db645d8d",
```

```
"firstName": "Dev",
    "lastName": "Gupta",
    "email": "dev@gmail.com",
    "password":
"c8a8501682059cc9ca65ee47b501294268f257ca79da2cf654ecea32edb769c161c6802e",
    "mobileNumber": "7654321234",
    "dateOfBirth": "26/03/2003",
    "role": "seller",
    "isPrime": false,
    "productsListedIds": null,
    "productsSoldIds": null
}
```

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "firstName": "Som", "lastName": "Gupta", "email": "som", "password": "Som@123", "mobileNumber": "666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass
2	<pre>"firstName": "Som", "lastName": "Gupta", "email": "somgmail.com", "password": "Som@123", "mobileNumber": "6666666", "dateOfBirth": "18/12/2004" }</pre>	"Invalid Email!!"	409 Conflict	Pass
3	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail", "password": "Som@123",</pre>	"Invalid Email!!"	409 Conflict	Pass

4	<pre>"mobileNumber": "666666", "dateOfBirth": "18/12/2004" } { "firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som@123", "mobileNumber": "666666", "dateOfBirth": "18/12/2004"</pre>	"Password should be more than 7 characters!!"	409 Conflict	Pass
5	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som12345", "mobileNumber": "666666", "dateOfBirth": "18/12/2004" }</pre>	"Password should contain atleast one super characters!!"	409 Conflict	Pass
6	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som@1234", "mobileNumber": "666666", "dateOfBirth": "18/12/2004" }</pre>	"Your Mobile number must be of 10 digits!!"	409 Conflict	Pass
7	<pre>"firstName": "Som", "lastName": "Gupta", "email": "som@gmail.com", "password": "Som@1234", "mobileNumber": "6666666666", "dateOfBirth": "18/12/2025" }</pre>	"Invalid DOB: Date is in the future!"	409 Conflict	Pass

Delete a Seller

- Endpoint: /deleteSeller/sellerId={id}
- Method: DELETE
- Authentication: Required
- **Description**: Deletes a specific seller by their ID.
 - o Also deleting the user from user API
- Parameters:
 - o id (path): The seller's ID.
- Response:
 - o 200 OK: Confirms deletion.
 - Example:

```
{
    "DeletedId": "66c2355b818ea8e8db645d8d"
}
```

7.Product Management

Get All Products

- Endpoint: /products/page={pageNumber}
- Method: GET
- **Description**: Retrieves a paginated list of all products.
 - Limit of product is 2 per page
- Authentication: None
- Parameters:
 - o pageNumber (path): The page number for pagination.
- Response:
 - o **200 OK**: Returns a list of products.
 - Example:

```
"sellerId": "66a8be438b66d10a2315cf2e",
       "brand": "Apple",
       "color": "",
       "releaseDate": "2024-07-30T00:00:00Z",
       "bestSeller": false,
       "newRelease": false,
       "replacePolicy": false,
       "returnPolicy": false,
       "maxRetailPrice": 79900,
       "sellingPrice": 70900,
       "discount": 11.26,
       "quantity": 3,
       "unitsSold": ∅,
       "productCategories": [
           "Mobile",
           "Electronic"
       "averageRating": ∅,
       "productImages": [
           "/assets/photos/iphone15.png"
       ],
       "productProperties": {
           "Memory Storage": "128 GB",
           "Model Name": "iPhone 15",
           "Operating System": "IOS",
           "Screen Size": "6.1 inches"
       },
       "numberOfReviews": 0
  },
       " id": "66a9e09b63831c9fba7f84a2",
       "productName": "iPhone 16",
       "aboutProduct": "DYNAMIC ISLAND COMES TO IPHONE 15 -- Dynamic Island
bubbles up alerts and Live Activities -- so you don't miss them while
you're doing something else. You can see who's calling, track your next
ride, check your flight status, and so much more.",
       "sellerId": "66a8be438b66d10a2315cf2e",
       "brand": "Apple",
       "color": "",
       "releaseDate": "2024-07-31T00:00:00Z",
       "bestSeller": true,
       "newRelease": true,
       "replacePolicy": false,
```

```
"returnPolicy": false,
"maxRetailPrice": 99900,
"sellingPrice": 80900,
"discount": 19.02,
"quantity": 4,
"unitsSold": 6,
"productCategories": [
    "Mobile",
    "Electronic"
],
"averageRating": 0,
"productImages": [
    "/assets/photos/iphone16.png"
],
"productProperties": {
    "Memory Storage": "528 GB",
    "Model Name": "iPhone 16",
    "Operating System": "IOS",
    "Screen Size": "6.1 inches"
},
"numberOfReviews": 0
```

Get Single Product for Authenticated Customer

- Endpoint: /product/productId={productId}&customerId={id}
- Method: GET
- Authentication: Required
- **Description**: Retrieves details of a specific product by its ID for a specific authenticated customer.
 - Update the customer's recommended product API
 - Also add that product in the top 10 recently view product API for that customer
- Parameters:
 - o productId (path): The product's ID.
 - o id (path): The customer's ID.
- Response:
 - o **200 OK**: Returns the product's details.
 - o Example:

```
"MatchedCount": 1,
   "ModifiedCount": 1,
   "UpsertedCount": 0,
   "UpsertedID": null
}
   "MatchedCount": 1,
   "ModifiedCount": 1,
   "UpsertedCount": 0,
   "UpsertedID": null
   " id": "66a8d9c2697de17b2285d258",
   "productName": "IPhone 15",
   "aboutProduct": "DYNAMIC ISLAND COMES TO IPHONE 15 -- Dynamic Island bubbles up alerts
and Live Activities -- so you don't miss them while you're doing something else. You can see
who's calling, track your next ride, check your flight status, and so much more.",
   "sellerId": "66a8be438b66d10a2315cf2e",
   "brand": "Apple",
   "color": "",
   "releaseDate": "2024-07-30T00:00:00Z",
   "bestSeller": false,
   "newRelease": false,
   "replacePolicy": false,
   "returnPolicy": false,
   "maxRetailPrice": 79900,
   "sellingPrice": 70900,
   "discount": 11.26,
   "quantity": 3,
   "unitsSold": 0,
   "productCategories": [
       "Mobile",
       "Electronic"
   "averageRating": 0,
   "productImages": [
       "/assets/photos/iphone15.png"
   "productProperties": {
       "Memory Storage": "128 GB",
       "Model Name": "iPhone 15",
       "Operating System": "IOS",
       "Screen Size": "6.1 inches"
   "numberOfReviews": 0
```

Create a Product

- Endpoint: /addProduct/sellerId={id}
- Method: POST
- Authentication: Required
- **Description**: Creates a new product under a specific seller.
- Parameters:
 - o id (path): The seller's ID.
- Request Body:

```
"productName": "Sony i7 5G",
        "aboutProduct": "DYNAMIC ISLAND COMES TO sony pixel 9A -- Dynamic
Island bubbles up alerts and Live Activities -- so you don't miss them
while you're doing something else. You can see who's calling, track your
next ride, check your flight status, and so much more.",
        "brand": "Sony",
        "color": "Black",
        "bestSeller" : true,
        "maxRetailPrice": 15900,
        "sellingPrice": 14990,
        "quantity": 2,
        "productCategories": ["Mobile", "Electronic"],
        "productImages": ["assets/photos/sony.png"],
        "productProperties": {
            "Operating System": "Android",
            "Memory Storage": "256 GB",
            "Screen Size" : "6.1 inches",
            "Model Name" : "Sony i7 5G"
        },
        "replacePolicy": true,
        "returnPolicy": true
```

- Response:
 - o **201 Created**: Returns the created product's ID.
 - Example:

```
{
   "InsertedID": "66c2499f4d1bd49184234263"
}
```

```
{
   "MatchedCount": 1,
   "ModifiedCount": 1,
   "UpsertedCount": 0,
   "UpsertedID": null
}
```

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
	},			

```
"replacePolicy": true,
    "returnPolicy": true
}
```

Update a Product

- **Endpoint**: /updateProduct/productId={productId}&sellerId={id}
- Method: PUT
- Authentication: Required
- **Description**: Updates details of a specific product by its ID under a specific seller.
 - Update the quantity of that product
- Parameters:
 - productId (path): The product's ID.
 - o id (path): The seller's ID.
- Request Body:

```
"productName": "Sony i7 5G",
        "aboutProduct": "DYNAMIC ISLAND COMES TO sony pixel 9A -- Dynamic
Island bubbles up alerts and Live Activities -- so you don't miss them
while you're doing something else. You can see who's calling, track your
next ride, check your flight status, and so much more.",
        "brand": "Sony",
        "color": "Black",
        "bestSeller" : true,
        "maxRetailPrice": 15900,
        "sellingPrice": 14990,
        "quantity": 2,
        "productCategories": ["Mobile","Electronic"],
        "productImages": ["assets/photos/sony.png"],
        "productProperties": {
            "Operating System": "Android",
            "Memory Storage": "256 GB",
            "Screen Size" : "6.1 inches",
            "Model Name" : "Sony i7 5G"
        },
        "replacePolicy": true,
        "returnPolicy": true
```

Response:

- 200 OK: Returns the updated product's details.
- o Example:

```
" id": "66c2499f4d1bd49184234263",
"productName": "BMW GT Model",
"aboutProduct": "A toy for plaing, real model of BMW.",
"sellerId": "66c2355b818ea8e8db645d8d",
"brand": "HotWheels",
"color": "White",
"releaseDate": "2024-08-18T19:21:03.267Z",
"bestSeller": true,
"newRelease": true,
"replacePolicy": true,
"returnPolicy": true,
"maxRetailPrice": 1299,
"sellingPrice": 1199,
"discount": 7.7,
"quantity": 4,
"unitsSold": 0,
"productCategories": [
    "Toy"
"averageRating": 0,
"productImages": [
    "assets/photos/farrari.png"
"productProperties": {
    "Body": "Metal",
    "Color": "Red",
    "Model Name": "BMW GT",
    "Screen Size": "4 inches"
"numberOfReviews": 0
```

Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	{ "productName": "Sony i7 5G",	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass

```
"aboutProduct": "DYNAMIC
ISLAND COMES TO sony pixel 9A --
Dynamic Island bubbles up alerts
and Live Activities -- so you
don't miss them while you're
doing something else. You can see
who's calling, track your next
ride, check your flight status,
and so much more.",
        "brand": "Sony",
        "color": "Black",
        "bestSeller" : true,
        "maxRetailPrice": 15900,
        "sellingPrice": 14990,
        "quantity": 2,
        "productCategories":
["Mobile", "Electronic"],
        "productImages":
["assets/photos/sony.png"],
        "productProperties": {
            "Operating System":
"Android",
            "Memory Storage" :
"256 GB",
            "Screen Size" : "6.1
inches",
            "Model Name" : "Sony
i7 5G"
        "replacePolicy": true,
        "returnPolicy": true
}
```

Delete a Product

- **Endpoint**: /deleteProduct/productId={productId}&sellerId={id}
- Method: DELETE
- Authentication: Required
- **Description**: Deletes a specific product by its ID under a specific seller.
- Parameters:
 - productId (path): The product's ID.

- o id (path): The seller's ID.
- Response:
 - o 200 OK: Confirms deletion.
 - o Example:

```
{
    "DeletedId": "66c2355b818ea8e8db645d8d"
}
```

S.No.	Request	Response	Status	Pass/F ail
1		"Unauthorized User!!"	401 Unauthorized	Pass
		(if customer is not logged in)		

Search Products

- Endpoint: /products/search/page={pageNumber}&customerId={id}
- Method: GET
- **Description**: Searches for products based on query parameters and returns paginated results for a specific customer.
 - Update the search history (store 10 recent search for the customer)
- Authentication: None
- Parameters:
 - o pageNumber (path): The page number for pagination.
 - o id (path): The customer's ID.
- Request Body:

```
{
    "Search_str" : "iphone"
}
```

- Response:
 - o **200 OK**: Returns a list of matching products.
 - o Example:

```
" id": "66a8d9c2697de17b2285d258",
       "productName": "IPhone 15",
       "aboutProduct": "DYNAMIC ISLAND COMES TO IPHONE 15 -- Dynamic Island bubbles up
alerts and Live Activities -- so you don't miss them while you're doing something else. You
can see who's calling, track your next ride, check your flight status, and so much more.",
       "sellerId": "66a8be438b66d10a2315cf2e",
       "brand": "Apple",
       "color": "",
       "releaseDate": "2024-07-30T00:00:00Z",
       "bestSeller": false,
       "newRelease": false,
       "replacePolicy": false,
       "returnPolicy": false,
       "maxRetailPrice": 79900,
       "sellingPrice": 70900,
       "discount": 11.26,
       "quantity": 3,
       "unitsSold": 0,
       "productCategories": [
          "Mobile",
          "Electronic"
       "averageRating": 0,
       "productImages": [
           "/assets/photos/iphone15.png"
       "productProperties": {
          "Memory Storage": "128 GB",
           "Model Name": "iPhone 15",
          "Operating System": "IOS",
           "Screen Size": "6.1 inches"
       },
       "numberOfReviews": 0
  },
       " id": "66a9e09b63831c9fba7f84a2",
       "productName": "iPhone 16",
       "aboutProduct": "DYNAMIC ISLAND COMES TO IPHONE 15 -- Dynamic Island bubbles up
alerts and Live Activities -- so you don't miss them while you're doing something else. You
can see who's calling, track your next ride, check your flight status, and so much more.",
       "sellerId": "66a8be438b66d10a2315cf2e",
       "brand": "Apple",
       "color": "",
       "releaseDate": "2024-07-31T00:00:00Z",
       "bestSeller": true,
       "newRelease": true,
       "replacePolicy": false,
       "returnPolicy": false,
       "maxRetailPrice": 99900,
       "sellingPrice": 80900,
       "discount": 19.02,
```

```
"quantity": 4,
    "unitsSold": 6,
    "productCategories": [
        "Mobile",
        "Electronic"
    "averageRating": 0,
    "productImages": [
       "/assets/photos/iphone16.png"
    "productProperties": {
        "Memory Storage": "528 GB",
        "Model Name": "iPhone 16",
       "Operating System": "IOS",
       "Screen Size": "6.1 inches"
    "numberOfReviews": 0
"MatchedCount": 1,
"ModifiedCount": 1,
"UpsertedCount": 0,
"UpsertedID": null
```

S.No.	Request	Response	Status	Pass/F ail
1	{ "Search_str" : "iphone"	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass

Filter Products by Category

- Endpoint: /products/categoryFilter/page={pageNumber}
- Method: GET
- **Description**: Filters products by category and returns paginated results.
- Authentication: None
- Parameters:
 - o pageNumber (path): The page number for pagination.
- Request Body:

```
{
    "categoryName" : "Car",
    "sortPriceAcending" : false,
    "sortPriceDecending" : true,
    "brand" : "HotWheels",
    "minPrice" : 0,
    "maxPrice" : 10000,
    "color" : "Red"
}
```

Response:

- o **200 OK**: Returns a list of products filtered by category.
- Example:

```
" id": "66bca49f58a66a6eb4953126",
"productName": "Farrari 296 GTB Model",
"aboutProduct": "A toy for plaing, real model of farrari.",
"sellerId": "66a8be438b66d10a2315cf2e",
"brand": "HotWheels",
"color": "Red",
"releaseDate": "2024-08-14T12:35:43.235Z",
"bestSeller": true,
"newRelease": true,
"replacePolicy": true,
"returnPolicy": true,
"maxRetailPrice": 1299,
"sellingPrice": 1199,
"discount": 7.7,
"quantity": 4,
"unitsSold": 0,
"productCategories": [
    "Car",
    "Toy"
"averageRating": 0,
"productImages": [
    "assets/photos/farrari.png"
"productProperties": {
    "Body": "Metal",
    "Color": "Red",
    "Model Name": "Farrari 296 GTB",
    "Screen Size": "4 inches"
"numberOfReviews": 0
```

Filter Products by Best Seller

- Endpoint: /products/categoryFilter/bestSeller/page={pageNumber}
- Method: GET
- **Description**: Filters products by best seller status and returns paginated results.
- Authentication: None
- Parameters:
 - o pageNumber (path): The page number for pagination.
- Response:
 - o **200 OK**: Returns a list of best-selling products.
 - Example:

```
"_id": "66a9e09b63831c9fba7f84a2",
       "productName": "iPhone 16",
       "aboutProduct": "DYNAMIC ISLAND COMES TO IPHONE 15 -- Dynamic Island bubbles up
alerts and Live Activities -- so you don't miss them while you're doing something else. You
can see who's calling, track your next ride, check your flight status, and so much more.",
       "sellerId": "66a8be438b66d10a2315cf2e",
       "brand": "Apple",
       "color": "",
       "releaseDate": "2024-07-31T00:00:00Z",
       "bestSeller": true,
       "newRelease": true,
       "replacePolicy": false,
       "returnPolicy": false,
       "maxRetailPrice": 99900,
       "sellingPrice": 80900,
       "discount": 19.02,
       "quantity": 4,
       "unitsSold": 6,
       "productCategories": [
           "Mobile",
           "Electronic"
       ],
       "averageRating": 0,
       "productImages": [
           "/assets/photos/iphone16.png"
       "productProperties": {
           "Memory Storage": "528 GB",
           "Model Name": "iPhone 16",
           "Operating System": "IOS",
           "Screen Size": "6.1 inches"
```

```
"numberOfReviews": 0
  },
       " id": "66aa320d5270e6700c8c94d1",
       "productName": "Google Pixel",
       "aboutProduct": "DYNAMIC ISLAND COMES TO google pixel -- Dynamic Island bubbles up
alerts and Live Activities -- so you don't miss them while you're doing something else. You
can see who's calling, track your next ride, check your flight status, and so much more.",
       "sellerId": "66a8be438b66d10a2315cf2e",
       "brand": "Google",
       "color": "White",
       "releaseDate": "2024-07-31T06:12:11.391Z",
       "bestSeller": true,
       "newRelease": true,
       "replacePolicy": true,
       "returnPolicy": true,
       "maxRetailPrice": 34900,
       "sellingPrice": 32990,
       "discount": 5.47,
       "quantity": 3,
       "unitsSold": 0,
       "productCategories": [
          "Mobile",
           "Electronic"
       ],
       "averageRating": 0,
       "productImages": [
           "/assets/photos/google.png"
       "productProperties": {
           "Memory Storage": "64 GB",
           "Model Name": "Google Pixel 7A 5G",
          "Operating System": "Android",
          "Screen Size": "6.1 inches"
       "numberOfReviews": 0
```

Filter Products by New Release

- **Endpoint**: /products/categoryFilter/newRelease/page={pageNumber}
- Method: GET
- **Description**: Filters products by new release status and returns paginated results.
- Authentication: None
- Parameters:
 - o pageNumber (path): The page number for pagination.

• Response:

- o **200 OK**: Returns a list of newly released products.
- o Example:

```
" id": "66c2499f4d1bd49184234263",
"productName": "BMW GT Model",
"aboutProduct": "A toy for plaing, real model of BMW.",
"sellerId": "66c2355b818ea8e8db645d8d",
"brand": "HotWheels",
"color": "White",
"releaseDate": "2024-08-18T19:21:03.267Z",
"bestSeller": true,
"newRelease": true,
"replacePolicy": true,
"returnPolicy": true,
"maxRetailPrice": 1299,
"sellingPrice": 1199,
"discount": 7.7,
"quantity": 4,
"unitsSold": 0,
"productCategories": [
    "Car",
    "Toy"
"averageRating": 0,
"productImages": [
    "assets/photos/farrari.png"
"productProperties": {
    "Body": "Metal",
    "Color": "Red",
    "Model Name": "BMW GT",
    "Screen Size": "4 inches"
"numberOfReviews": 0
" id": "66bca49f58a66a6eb4953126",
"productName": "Farrari 296 GTB Model",
"aboutProduct": "A toy for plaing, real model of farrari.",
"sellerId": "66a8be438b66d10a2315cf2e",
"brand": "HotWheels",
"color": "Red",
"releaseDate": "2024-08-14T12:35:43.235Z",
"bestSeller": true,
"newRelease": true,
"replacePolicy": true,
"returnPolicy": true,
"maxRetailPrice": 1299,
"sellingPrice": 1199,
```

8. Category Management

Get All Categories

- Endpoint: /categories
- Method: GET
- Description: Retrieves a list of all categories.
 - Only for the frontend to display all the categories available
- Authentication: None
- Response:
 - o 200 OK: Returns a list of categories.
 - o Example:

```
[
{
    "_id": "66a9ca3133ee621888eb1acd",
    "categoryName": "Mobile",
    "brands": [
```

```
"iPhone",
    "One Plus",
    "Red me",
   "Realme",
    "Google Pixel",
    "Poco",
   "Samsung",
   "Sony"
],
"colors": [
   "Black",
   "White",
   "Gray",
   "Green"
"priceRanges": {
   "0": "9999",
   "10000": "19999",
   "20000": "29999",
   "30000": "59999",
   "60000": "200000"
```

Get Single Category

- Endpoint: /category/categoryId={categoryId}
- Method: GET
- Description: Retrieves details of a specific category by its ID.
- Authentication: None
- Parameters:
 - o categoryId (path): The category's ID.
- Response:
 - o **200 OK**: Returns the category's details.
 - o Example:

```
{
    "_id": "66a9ca3133ee621888eb1acd",
    "categoryName": "Mobile",
    "brands": [
        "iPhone",
        "One Plus",
```

```
"Red me",
   "Realme",
    "Google Pixel",
    "Poco",
    "Samsung",
    "Sony"
],
"colors": [
   "Black",
    "White",
   "Gray",
   "Green"
"priceRanges": {
   "0": "9999",
    "10000": "19999",
   "20000": "29999",
   "30000": "59999",
   "60000": "200000"
```

Create a Category

• Endpoint: /addCategory

• Method: POST

• Authentication: None

• Description: Creates a new category.

• Request Body:

```
{
        "colors":["Black","White","Gray","Green"],
"priceRanges":{"0":"9999","10000":"19999","200000":"29999","300000":"59999","
60000":"200000"},
        "categoryName":"Mobile",
        "brands":["iPhone","One Plus","Red me","Realme","Google
Pixel","Poco","Samsung","Sony"]
}
```

• Response:

o **201 Created**: Returns the created category's ID.

o Example:

```
{
    "InsertedID": "66c24e274d1bd4918423427a"
}
```

Delete a Category

• **Endpoint**: /deleteCategory/categoryId={categoryId}

• Method: DELETE

• Authentication: None

• Description: Deletes a specific category by its ID.

• Parameters:

o categoryId (path): The category's ID.

• Response:

○ **200 OK**: Confirms deletion.

o Example:

```
{
    "DeletedId": "66c24e274d1bd4918423427a"
}
```

9.Cart Management

Get All Carts

• Endpoint: /carts

Method: GET

• **Description**: Retrieves a list of all carts.

• Authentication: None

Response:

o **200 OK**: Returns a list of carts.

o Example:

```
"cartItems": [
            "productId": "66aa0d90c9440c136263d090",
            "productName": "Redmi",
            "productPrice": 12999,
            "quantityInCart": 4,
            "selectedForBuying": false,
            "productImage": "/assets/photos/redmi.png",
            "productInStock": true
            "productId": "66a8d9c2697de17b2285d258",
            "productName": "IPhone 15",
            "productPrice": 70900,
            "quantityInCart": 1,
            "selectedForBuying": false,
            "productImage": "/assets/photos/iphone15.png",
            "productInStock": true
    "numberOfProduct": 0,
    "totalAmount": 0
},
    "_id": "66b4537d0208bbd82ee589ac",
    "customerId": "66b4537d0208bbd82ee589aa",
    "cartItems": [],
    "numberOfProduct": 0,
    "totalAmount": 0
},
    " id": "66c222ed56fe9801831cd73e",
    "customerId": "66c222ed56fe9801831cd73c",
    "cartItems": null,
    "numberOfProduct": 0,
    "totalAmount": ∅
},
    "_id": "66c2282e818ea8e8db645d58",
    "customerId": "66c22829818ea8e8db645d55",
    "cartItems": [],
    "numberOfProduct": 0,
    "totalAmount": 0
    " id": "66c22faf818ea8e8db645d71",
    "customerId": "66c22faf818ea8e8db645d6f",
    "cartItems": [],
    "numberOfProduct": 0,
    "totalAmount": 0
```

Get Cart by Customer ID

- Endpoint: /cart/customerId={id}
- Method: GET
- Authentication: Required
- **Description**: Retrieves the cart for a specific customer by their ID.
 - Initially that product is checked for buying
 - Customer can toggle check in their cart weather that product is added in the buying list or not
 - Also check that each product is out of stock or not
- Parameters:
 - id (path): The customer's ID.
- Response:
 - o **200 OK**: Returns the customer's cart.
 - Example:

```
{
   "_id": "66c22faf818ea8e8db645d71",
   "customerId": "66c22faf818ea8e8db645d6f",
   "cartItems": [],
   "numberOfProduct": 0,
   "totalAmount": 0
}
```

Add Item to Cart

- **Endpoint**: /addToCart/customerId={id}
- Method: POST
- Authentication: Required
- **Description**: Adds an item to the customer's cart.
 - Customer can not add any out of stock product in their cart
- Parameters:
 - o id (path): The customer's ID.
- Request Body:

```
{
    "customerId" : "66c22faf818ea8e8db645d6f",
    "productId" : "66c2499f4d1bd49184234263"
    "quantity" : 2
}
```

• Response:

- o **201 Created**: Returns the updated cart.
- o Example:

• Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "customerId": "66ab331d97d120b6a67da9f3", "productId": "66aa0d90c9440c136263d090", "quantity": 2 }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "customerId": "66ab331d97d120b6a67da9f3", "productId": "66aa0d90c9440c136263d090", "quantity": 2 }</pre>	"Out of Stock or Less Quantity Available!!" (If that product is out of stock)	400 Bad Request	Pass

Remove All Items from Cart

• **Endpoint**: /removeAllItemsFromCart/customerId={id}

Method: POST

• Authentication: Required

• **Description**: Removes all items from the customer's cart.

• Parameters:

o id (path): The customer's ID.

• Response:

o **200 OK**: Confirms removal of all items.

o Example:

```
{
   "MatchedCount": 1,
   "ModifiedCount": 1,
   "UpsertedCount": 0,
   "UpsertedID": null
}
```

Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1		"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2		"Cart is already empty!!" (If no product is in the cart)	400 Bad Request	Pass

Toggle Product to Buy

• **Endpoint**: /cart/toggleProductToBuy/customerId={id}

Method: POST

• Authentication: Required

• **Description**: Toggles the purchase status of a product in the cart.

• Parameters:

o id (path): The customer's ID.

• Request Body:

```
{
    "customerId" : "66c22faf818ea8e8db645d6f",
    "productId" : "66c2499f4d1bd49184234263"
}
```

• Response:

- o **200 OK**: Returns the updated cart.
- o **Example**:

• Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "customerId": "66c22faf818ea8e8db645d6f", "productId": "66c2499f4d1bd49184234263" }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2		"Product Out of Stock, Unable to toggle to Buy!!"	400 Bad Request	Pass

Increase Product Quantity in Cart

- **Endpoint**: /cart/increasingProductQuantity/customerId={id}
- Method: POST
- Authentication: Required
- **Description**: Increases the quantity of a product in the customer's cart.
 - Only if that product's quantity is available in the inventory
 - Not decreasing the quantity from inventory, it will when order placed / payment initiated
- Parameters:
 - o id (path): The customer's ID.
- Request Body:

```
{
    "customerId" : "66c22faf818ea8e8db645d6f",
    "productId" : "66c2499f4d1bd49184234263"
}
```

- Response:
 - o **200 OK**: Returns the updated cart.
 - Example:

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "customerId": "66c22faf818ea8e8db645d6f", "productId": "66c2499f4d1bd49184234263" }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "customerId" : "66c22faf818ea8e8db645d6f", "productId" : "66c2499f4d1bd49184234263" }</pre>	"Out of Stock or Less Quantity Available in Inventory!!"	400 Bad Request	Pass

Decrease Product Quantity in Cart

- **Endpoint**: /cart/decreasingProductQuantity/customerId={id}
- Method: POST
- Authentication: Required
- **Description**: Decreases the quantity of a product in the customer's cart.
 - o If it decreases to zero product will be removed from the customer's cart
- Parameters:
 - o id (path): The customer's ID.
- Request Body:

```
{
    "customerId" : "66ab331d97d120b6a67da9f3",
    "productId" : "66aa0d90c9440c136263d090"
}
```

- Response:
 - o **200 OK**: Returns the updated cart.
 - o Example:

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "customerId" : "66c22faf818ea8e8db645d6f", "productId" : "66c2499f4d1bd49184234263" }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass

10.Wishlist Management

Get All Wishlists

• Endpoint: /wishlists

Method: GET

• **Description**: Retrieves all wishlists in the system.

• Authentication: None

• Response:

o 200 OK: A list of wishlists.

o **500 Internal Server Error**: If there is a server error.

Example Response:

```
" id": "66acb02c3fb43d5d8661a83c",
   "customerId": "66ab331d97d120b6a67da9f3",
    "wishlistItems": [
            "productId": "66aa0d90c9440c136263d090",
            "productName": "Redmi",
            "productImage": "/assets/photos/redmi.png",
            "productPrice": 12999,
            "productInStock": true
        },
            "productId": "66a8d9c2697de17b2285d258",
            "productName": "IPhone 15",
            "productImage": "/assets/photos/iphone15.png",
            "productPrice": 70900,
            "productInStock": true
            "productId": "66ab273b03aa2deac83093e2",
            "productName": "Google Pixel",
            "productImage": "/assets/photos/google.png",
            "productPrice": 42990,
            "productInStock": false
    "numberOfProduct": 3
}
```

Get Wishlist by Customer ID

- **Endpoint**: /wishlists/customerId={id}
- Method: GET
- **Description**: Retrieves the wishlist for a specific customer.
- Authentication: Required.
- Parameters:
 - o id (path): The customer's ID.
- Response:
 - o **200 OK**: The wishlist for the given customer ID.
 - o **404 Not Found**: If no wishlist is found for the customer.
 - o **500 Internal Server Error**: If there is a server error.
 - o Example

```
(
```

```
"_id": "66c22fb0818ea8e8db645d73",
   "customerId": "66c22faf818ea8e8db645d6f",
   "wishlistItems": [],
   "numberOfProduct": 0
}
```

S.No.	Request	Response	Status	Pass/F ail
1		"Unauthorized User!!"	401 Unauthorized	Pass
		(if customer is not logged in)		

Add Product to Wishlist

- **Endpoint**: /addToWishlist/customerId={id}
- Method: POST
- **Description**: Adds a product to the wishlist of a specific customer.
 - o If the product is out of stock, then also it will add in wishlist
- Authentication: Required.
- Parameters:
 - o id (path): The customer's ID.
- Request Body:

```
{
    "customerId" : "66c22faf818ea8e8db645d6f",
    "productId" : "66c2499f4d1bd49184234263"
}
```

- Response:
 - o 201 Created: Product added to wishlist successfully.
 - 400 Bad Request: If the request body is invalid.
 - o **500 Internal Server Error**: If there is a server error.
 - o Example

```
{
```

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "customerId" : "66c22faf818ea8e8db645d6f", "productId" : "66c2499f4d1bd49184234263" }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "customerId" : "66c22faf818ea8e8db645d6f", "productId" : "66c2499f4d1bd49184234263" }</pre>	"Product is already in your Wishlist!!"	409 Conflict	Pass

Remove All Items from Wishlist

- **Endpoint**: /RemoveAllItemsFromWishlist/customerId={id}
- Method: POST
- **Description**: Removes all products from the wishlist of a specific customer.
- Authentication: Required.
- Parameters:
 - o id (path): The customer's ID.
- Response:
 - o 200 OK: All items removed from wishlist successfully.
 - 404 Not Found: If no wishlist is found for the customer.

- o **500 Internal Server Error**: If there is a server error.
- o Example

```
{
    "MatchedCount": 1,
    "ModifiedCount": 1,
    "UpsertedCount": 0,
    "UpsertedID": null
}
```

S.No.	Request	Response	Status	Pass/F ail
1		"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2		"Wishlist is already empty!!"	400 Bad Request	Pass

Remove a Product from Wishlist

- **Endpoint**: /wishlists/removeProductFromWishlist/customerId={id}
- Method: POST
- **Description**: Removes a specific product from the wishlist of a specific customer.
- Authentication: Required.
- Parameters:
 - o id (path): The customer's ID.
- Request Body:

```
{
    "customerId" : "66c22faf818ea8e8db645d6f",
    "productId" : "66c2499f4d1bd49184234263"
}
```

- Response:
 - o **200 OK**: Product removed from wishlist successfully.
 - **404 Not Found**: If the product is not found in the wishlist.
 - o **500 Internal Server Error**: If there is a server error.

o Example

Unit Testing

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "customerId" : "66c22faf818ea8e8db645d6f", "productId" : "66c2499f4d1bd49184234263" }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass

11. Address Management

Get All Addresses

• Endpoint: /addresses

Method: GET

• **Description:** Retrieves all addresses stored in the system.

• Authentication: None

• Response:

200 OK: A list of addresses.

o **500 Internal Server Error:** If there is a server error.

Example

```
"_id": "66b06aeb19b253de5b363873",
   "fullName": "Shiva Gupta",
    "mobileNumber": "8982511209",
    "pincode": "471515",
   "line1": "near old bus stand,",
    "line2": "In frotn f government hospital",
    "landmark": "RC brother",
    "city": "LavKush nagar",
    "state": "MP",
    "country": "India",
    "isDefault": true
    "_id": "66b0748bf4c5a5864f10e7b5",
   "fullName": "Shiva Gupta",
    "mobileNumber": "9893792209",
    "pincode": "560000",
    "line1": "Stanza living lobito house,",
    "line2": "Mathikere",
    "landmark": "Devasandra bus stop",
    "city": "Bangalore",
    "state": "Karnataka",
    "country": "India",
    "isDefault": false
},
    "_id": "66b9a11ec046307c7abca648",
    "fullName": "Ram Gupta",
    "mobileNumber": "1234567890",
    "pincode": "560000",
    "line1": "....,",
    "line2": "...",
    "landmark": "...",
    "city": "Bangalore",
    "state": "Karnataka",
    "country": "India",
    "isDefault": false
```

Add Address

- Endpoint: /addAddress/customerId={id}
- Method: POST
- **Description:** Adds a new address for a specified customer.
 - Address will be added in the customer API

- Initially the most recent added address will be set is default and rest will be uncheck from the default automatically
- All the validation for the required field is applied
- Customer can set the new address as default, then all previous default address will be false
- Authentication: Required
- Parameters:
 - o id (path): The customer's ID.
- Request Body:

```
{
    "fullName" : "Shiva Gupta",
    "mobileNumber" : "1234567890",
    "pincode" : "560000",
    "line1" : "...",
    "line2" : "...",
    "landmark" : "...",
    "city" : "Bangalore",
    "state" : "Karnataka",
    "country" : "India",
    "isDefault" : true
}
```

- Response:
 - o **201 Created:** Address successfully added.
 - o 400 Bad Request: If the request is invalid.
 - 500 Internal Server Error: If there is a server error.
 - Example:

```
{
    "InsertedID": "66c253c8522685bb6b7f75c6"
}
{
    "MatchedCount": 1,
    "ModifiedCount": 1,
    "UpsertedCount": 0,
    "UpsertedID": null
}
```

S.No.	Request	Response	Status	Pass/F	
-------	---------	----------	--------	--------	--

				ail
1	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : ",", "line2" : "", "landmark" : "", "city" : "Bangalore", "state" : "Karnataka", "country" : "India", "isDefault" : true }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "fullName" : "", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : ", "line2" : "", "landmark" : "", "city" : "Bangalore", "state" : "Karnataka", "country" : "India", "isDefault" : true }</pre>	"Full name is empty!!"	409 Conflict	Pass
3	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "", "line1" : ", "line2" : "", "landmark" : "", "city" : "Bangalore", "state" : "Karnataka", "country" : "India", "isDefault" : true }</pre>	"Pincode is empty!!"	409 Conflict	Pass

4	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : ",", "line2" : "", "city" : "Bangalore", "state" : "Karnataka", "country" : "India", "isDefault" : true }</pre>	"Line 1 is empty!!"	409 Conflict	Pass
5	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : "stanza living", "line2" : "", "landmark" : "", "city" : "Bangalore", "state" : "Karnataka", "country" : "India", "isDefault" : true }</pre>	"Landmark is empty!!"	409 Conflict	Pass
6	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : "stanza living", "line2" : "", "landmark" : "rostok house", "city" : "", "state" : "Karnataka", "country" : "India", "isDefault" : true }</pre>	"City is empty!!"	409 Conflict	Pass

7	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : "stanza living", "line2" : "", "landmark" : "rostok house", "city" : "Bangalore", "state" : "", "country" : "India", "isDefault" : true }</pre>	"State is empty!!"	409 Conflict	Pass
8	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : "stanza living", "line2" : "", "landmark" : "rostok house", "city" : "Bangalore", "state" : "Karnataka", "country" : "", "isDefault" : true }</pre>	"Country is empty!!"	409 Conflict	Pass
9	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "12345", "pincode" : "560000", "line1" : "stanza living", "line2" : "", "landmark" : "rostok house", "city" : "Bangalore", "state" : "Karnataka", "country" : "India", "isDefault" : true }</pre>	"Your Mobile number must be of 10 digits!!"	409 Conflict	Pass

Update Address

- Endpoint: /updateAddress/addressId={addressId}&customerId={id}
- Method: PUT
- **Description:** Updates an existing address for a specified customer.
 - Any field can't be empty
 - All the validation for the required field is applied
 - o Address will also be updated in the customer's API
- Authentication: Required
- Parameters:
 - o addressId (path): The address ID.
 - o id (path): The customer's ID.

Request Body

```
{
    "fullName" : "Shiva Gupta",
    "mobileNumber" : "1234567890",
    "pincode" : "560000",
    "line1" : "...,",
    "line2" : "...",
    "city" : "Bangalore",
    "state" : "Karnataka",
    "country" : "India"
}
```

- Response:
 - 200 OK: Address successfully updated.
 - 400 Bad Request: If the request is invalid.
 - o **404 Not Found:** If the address or customer is not found.
 - 500 Internal Server Error: If there is a server error.
 - Example:

```
{
    "MatchedCount": 1,
    "ModifiedCount": 1,
    "UpsertedCount": 0,
    "UpsertedID": null
}
{
    "MatchedCount": 1,
```

```
"ModifiedCount": 1,
  "UpsertedCount": 0,
  "UpsertedID": null
}
```

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : ",", "line2" : "", "city" : "Bangalore", "state" : "Karnataka", "country" : "India", "isDefault" : true }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "fullName" : "", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : ",", "line2" : "", "city" : "Bangalore", "state" : "Karnataka", "country" : "India", "isDefault" : true }</pre>	"Full name is empty!!"	409 Conflict	Pass
3	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "", "line1" : ",",</pre>	"Pincode is empty!!"	409 Conflict	Pass

```
"line2" : "...",
           "landmark" : "...",
           "city": "Bangalore",
          "state" : "Karnataka",
           "country": "India",
         "isDefault" : true
      }
4
      {
                                           "Line 1 is empty!!"
                                                                     409 Conflict
                                                                                    Pass
           "fullName" : "Shiva Gupta",
           "mobileNumber" :
       "1234567890",
           "pincode" : "560000",
           "line1" : "....,",
          "line2" : "...",
           "landmark" : "...",
           "city": "Bangalore",
          "state": "Karnataka",
          "country": "India",
         "isDefault" : true
      }
                                           "Landmark is empty!!"
                                                                     409 Conflict
5
                                                                                    Pass
      {
           "fullName" : "Shiva Gupta",
           "mobileNumber" :
      "1234567890",
           "pincode": "560000",
           "line1" : "stanza living",
          "line2" : "...",
          "landmark" : "...",
          "city": "Bangalore",
          "state": "Karnataka",
          "country": "India",
         "isDefault" : true
      }
6
                                           "City is empty!!"
                                                                     409 Conflict
                                                                                    Pass
           "fullName" : "Shiva Gupta",
           "mobileNumber" :
      "1234567890",
           "pincode" : "560000",
          "line1" : "stanza living",
```

	<pre>"line2" : "", "landmark" : "rostok house", "city" : "", "state" : "Karnataka", "country" : "India", "isDefault" : true }</pre>			
7	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : "stanza living", "line2" : "", "landmark" : "rostok house", "city" : "Bangalore", "state" : "", "country" : "India", "isDefault" : true }</pre>	"State is empty!!"	409 Conflict	Pass
8	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : "stanza living", "line2" : "", "landmark" : "rostok house", "city" : "Bangalore", "state" : "Karnataka", "country" : "", "isDefault" : true }</pre>	"Country is empty!!"	409 Conflict	Pass
9	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "12345", "pincode" : "560000", "line1" : "stanza living", "line2" : "", "landmark" : "rostok house",</pre>	"Your Mobile number must be of 10 digits!!"	409 Conflict	Pass

```
"city" : "Bangalore",
    "state" : "Karnataka",
    "country" : "India",
    "isDefault" : true
}
```

Delete Address

- Endpoint: /deleteAddress/addressId={addressId}&customerId={id}
- Method: DELETE
- Description: Deletes an existing address for a specified customer and addressld.
- Authentication: Required
- Parameters:
 - o addressId (path): The address ID.
 - o id (path): The customer's ID.
- Response:
 - o **200 OK:** Address successfully deleted.
 - **404 Not Found:** If the address or customer is not found.
 - o **500 Internal Server Error:** If there is a server error.
 - Example :

```
{
    "DeletedCount": 1
}
{
    "MatchedCount": 1,
    "ModifiedCount": 1,
    "UpsertedCount": 0,
    "UpsertedID": null
}
```

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "fullName" : "Shiva Gupta", "mobileNumber" : "1234567890", "pincode" : "560000", "line1" : ",",</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass

```
"line2" : "...",
    "landmark" : "...",
    "city" : "Bangalore",
    "state" : "Karnataka",
    "country" : "India",
    "isDefault" : true
}
```

12. Order Management

Get All Orders

• Endpoint: /orders

• Method: GET

• Description: Retrieves all orders in the system.

• Authentication: None

• Response:

o 200 OK: A list of orders.

o **500 Internal Server Error:** If there is a server error.

o Example

```
"2024-08-12T07:28:12.397Z",
        "2024-08-12T08:28:53.161Z",
        "2024-08-12T08:31:17.71Z",
       "2024-08-12T08:31:55.966Z",
        "2024-08-12T08:33:56.911Z",
        "2024-08-12T08:34:47.456Z"
       "2024-08-12T07:22:42.679Z",
       "2024-08-16T07:22:42.679Z"
"status": [
       "Order Confirmed",
        "Order Delivered",
       "Replace Confirmed",
        "Cancelled",
        "Return Confirmed",
        "Cancelled",
       "Return Confirmed",
       "Refunded"
   ],
        "Order Confirmed"
"shippingAddress": {
   "_id": "66b9a11ec046307c7abca648",
   "fullName": "Ram Gupta",
   "mobileNumber": "1234567890",
    "pincode": "560000",
    "line1": "....,",
   "line2": "...",
   "landmark": "...",
    "city": "Bangalore",
   "state": "Karnataka",
   "country": "India",
   "isDefault": false
},
"paymentDetails": {
    "_id": "66b9b841e2932a90221014a3",
   "paymentMethod": "Wallet",
   "totalAmount": 106898,
    "userId": "66b4537d0208bbd82ee589aa",
   "cardNumber": "",
    "cardExpiryDate": "",
   "nameOnCard": "",
   "upiId": ""
},
"priceDetail": {
    "listPrice": 129900,
```

```
"sellingPrice": 106898,
    "deliveryCharge": 0,
    "totalAmount": 106898
},
    "totalAmount": 106898
}
```

Get Orders by Customer ID

- Endpoint: /orders/customerId={id}
- Method: GET
- **Description:** Retrieves all orders for a specified customer.
 - o Used for the order history for the customer's profile
- Authentication: Required
- Parameters:
 - o id (path): The customer's ID.
- Response:
 - o **200 OK:** A list of orders for the specified customer.
 - o **404 Not Found:** If no orders are found for the customer.
 - o **500 Internal Server Error:** If there is a server error.
 - Example

```
"2024-08-12T08:28:53.161Z",
        "2024-08-12T08:31:17.71Z",
        "2024-08-12T08:31:55.966Z",
        "2024-08-12T08:33:56.911Z",
        "2024-08-12T08:34:47.456Z"
       "2024-08-12T07:22:42.679Z",
       "2024-08-16T07:22:42.679Z"
],
"status": [
        "Order Confirmed",
        "Order Delivered",
        "Replace Confirmed",
       "Cancelled",
        "Return Confirmed",
        "Cancelled",
        "Return Confirmed",
        "Refunded"
   ],
       "Order Confirmed"
],
"shippingAddress": {
    " id": "66b9a11ec046307c7abca648",
   "fullName": "Ram Gupta",
    "mobileNumber": "1234567890",
    "pincode": "560000",
    "line1": "....,",
    "line2": "...",
   "landmark": "...",
    "city": "Bangalore",
    "state": "Karnataka",
    "country": "India",
   "isDefault": false
},
"paymentDetails": {
   " id": "66b9b841e2932a90221014a3",
   "paymentMethod": "Wallet",
    "totalAmount": 106898,
   "userId": "66b4537d0208bbd82ee589aa",
   "cardNumber": "",
    "cardExpiryDate": "",
    "nameOnCard": "",
   "upiId": ""
"priceDetail": {
   "listPrice": 129900,
    "sellingPrice": 106898,
```

```
"deliveryCharge": 0,
        "totalAmount": 106898
},
        "totalAmount": 106898
}
```

S.No.	Request	Response	Status	Pass/Fail
1		"Unauthorized User!!"	401	Pass
		(if customer is not logged in)	Unauthorized	

Buy Now

- Endpoint: /buyNow/customerId={id}
- Method: POST
- **Description:** Creates a new order for the specified customer to buy a single or multiple product immediately.
 - o It will also create the bill that is detail charges for the products
 - Later will be proceed for the payment
 - o Shipping address will be the default address of that customer
 - Order status look like:
 - Order Confirmed
 - Canceled
 - Order Delivered
 - Replace Confirmed
 - Canceled
 - Replace Order Delivered
 - Return Confirmed
 - Canceled
 - Refund Initiated / Refunded
- Authentication: Required
- Parameters:
 - o id (path): The customer's ID.
- Request Body:

```
{
    "customerId": "66ab331d97d120b6a67da9f3",
    "productIds": ["66aa320d5270e6700c8c94d1"],
```

```
"productNames" : ["Google Pixel"],
    "orderQuantitys": [1]
}
```

Response:

- o **201 Created:** Order successfully created.
- o **400 Bad Request:** If the request is invalid.
- o **500 Internal Server Error:** If there is a server error.
- Example

```
{
    "InsertedID": "66c2590a512bf19c6acef70b"
}
"66c2590a512bf19c6acef70b"
{
    "listPrice": 34900,
    "sellingPrice": 32990,
    "deliveryCharge": 0,
    "totalAmount": 32990
}
```

S.No.	Request	Response	Status	Pass/Fail
1	<pre>{ "customerId": "66ab331d97d120b6a67da9f3", "productIds": ["66aa320d5270e6700c8c94d1"], "productNames" : ["Google Pixel"], "orderQuantitys": [1] }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "customerId": "66ab331d97d120b6a67da9f3", "productIds": ["66aa320d5270e6700c8c94d1"], "productNames" : ["Google Pixel"], "orderQuantitys": [1]</pre>	"Google Pixel is Out of Stock, Please Reduce the quantity of the product!!"	409 Conflict	Pass

Continue to Payment

- Endpoint: /continueToPayment/orderId={orderId}&customerId={id}
- Method: POST
- **Description:** Proceeds with payment for an existing order.
 - Order id placed successfully
 - Order is also updated in delivery order API for the delivery agent to see all the order to be delivery with the expected delivery date and time
 - Also product quantity is decreased from the inventory
- Authentication: Required
- Parameters:
 - o orderld (path): The ID of the order.
 - o id (path): The customer's ID.
- Request Body:

```
{
    "paymentMethod" : "Wallet",
    "userId": "66ab331d97d120b6a67da9f3"
}
```

- Response:
 - 200 OK: Successfully moved to payment.
 - o 400 Bad Request: If the request is invalid.
 - **404 Not Found:** If the order or customer is not found.
 - 500 Internal Server Error: If there is a server error.
 - Example

```
"productNames": [
   "Google Pixel"
"orderQuantitys": [
],
"orderedDate": "2024-08-19T02:06:14.164837563+05:30",
"deliveredDates": [
        "2024-08-19T02:06:14.525692564+05:30",
        "2024-08-20T02:06:14.525693313+05:30"
],
"status": [
        "Order Confirmed"
],
"shippingAddress": {
    "_id": "66c253c8522685bb6b7f75c6",
    "fullName": "Ravi Kiran",
    "mobileNumber": "1234567890",
    "pincode": "18000",
    "line1": "....,",
    "line2": "...",
    "landmark": "...",
    "city": "Bangalore",
    "state": "Karnataka",
    "country": "India",
    "isDefault": true
"paymentDetails": {
    "_id": "66c25b3e25767654f5c32739",
    "paymentMethod": "Wallet",
    "totalAmount": 32990,
    "userId": "66c22faf818ea8e8db645d6f",
    "cardNumber": "",
    "cardExpiryDate": "",
    "nameOnCard": "",
    "upiId": ""
"priceDetail": {
    "listPrice": 34900,
    "sellingPrice": 32990,
    "deliveryCharge": 0,
    "totalAmount": 32990
"totalAmount": 32990
```

S.No.	Request	Response	Status	Pass/Fail
1	<pre>{ "paymentMethod" : "Wallet", "userId": "66ab331d97d120b6a67da9f3" }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "paymentMethod" : "Wallet", "userId": "66ab331d97d120b6a67da9f3" }</pre>	"Not Enough Amount in your Wallet!!"	400 Bad Request	Pass
3	<pre>{ "paymentMethod" : "UPI", "upiId": "abc", "userId": "66ab331d97d120b6a67da9f3" }</pre>	"Only Wallet Payment Available!!"	400 Bad Request	Pass

Replace Order Request

• Endpoint:

 $\label{lem:conder} $$ \operatorname{conder} d = {\operatorname{conder} d} & \operatorname{conder} d$

- Method: PUT
- **Description:** Requests a replacement for a product in an existing order.
 - o This request is from the customer side
 - Product can only be replace if the product has replacement policy and product can be replaced within 7 days of delivery date
 - Customer can replace a product once in the lifetime
 - o Status will be updated and the expected replacement date will also be updated
 - Replace order API will also be updated for the delivery agent to see all the replacement orders and track it with the expected date of replacement
 - If that product is not available in the inventory, so customer can't be replace it, customer have to place a return request or talk to customer care
 - If the product is not damage, product quantity will also be increased in the inventory
- Authentication: Required
- Parameters:
 - orderld (path): The ID of the order.

- o productld (path): The ID of the product.
- o id (path): The customer's ID.
- Request Body:

```
{
    "dontLikeDueToColorOrSize": true,
    "isDamage": false
}
```

Response:

- o **200 OK:** Replacement request successfully created.
- 400 Bad Request: If the request is invalid.
- **404 Not Found:** If the order, product, or customer is not found.
- o **500 Internal Server Error:** If there is a server error.
- o Example

```
"_id": "66c25cda25767654f5c32744",
"customerId": "66c22faf818ea8e8db645d6f",
"productIds": [
    "66aa320d5270e6700c8c94d1"
"productNames": [
    "Google Pixel"
"orderQuantitys": [
"orderedDate": "2024-08-18T20:43:31.621Z",
"deliveredDates": [
        "2024-08-18T20:43:32.099Z",
       "2024-08-18T20:45:30.97Z",
       "2024-08-19T02:16:52.783220891+05:30",
       "2024-08-22T02:16:52.783221904+05:30"
],
"status": [
        "Order Confirmed",
        "Order Delivered",
        "Replace Confirmed"
],
```

```
"shippingAddress": {
    "_id": "66c253c8522685bb6b7f75c6",
    "fullName": "Ravi Kiran",
    "mobileNumber": "1234567890",
    "pincode": "18000",
    "line1": "....,",
   "line2": "...",
    "landmark": "...",
   "city": "Bangalore",
    "state": "Karnataka",
    "country": "India",
    "isDefault": true
"paymentDetails": {
    "_id": "66c25cf325767654f5c3274a",
    "paymentMethod": "Wallet",
    "totalAmount": 32990,
    "userId": "66c22faf818ea8e8db645d6f",
    "cardNumber": "",
    "cardExpiryDate": "",
    "nameOnCard": "",
    "upiId": ""
"priceDetail": {
    "listPrice": 34900,
    "sellingPrice": 32990,
   "deliveryCharge": 0,
    "totalAmount": 32990
"totalAmount": 32990
```

S.No.	Request	Response	Status	Pass/Fail
1	<pre>{ "dontLikeDueToColorOrSize": true, "isDamage": false }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "dontLikeDueToColorOrSize": true, "isDamage": false }</pre>	"No Replace Policy for this product!!"	400 Bad Request	Pass
3	{	"Please Replace when Order	400 Bad Request	Pass

```
Delivered or Only One time
           "dontLikeDueToColorOrSize":
                                              Replace Policy!!"
       true,
           "isDamage": false
       }
4
                                              "Product Unavailable,
                                                                           400 Bad Request
       {
                                                                                         Pass
                                              Please try for Return!!"
            "dontLikeDueToColorOrSize":
       true,
           "isDamage": false
       }
                                              "Replace Expires!!"
                                                                           400 Bad Request
5
       {
                                                                                         Pass
           "dontLikeDueToColorOrSize":
       true,
           "isDamage": false
```

Return Order Request

• Endpoint:

/returnOrderRequest/orderId={orderId}&productId={productId}&custo
merId={id}

- Method: PUT
- **Description:** Requests a return for a product in an existing order.
 - o This request is from the customer side
 - Product can only be returned if the product has return policy and product can be return within 7 days of delivery date or replacement delivery date
 - Status will be updated and the expected return date will also be updated
 - Return order API will also be updated for the delivery agent to see all the return orders and track it with the expected date of return
 - If the product is not damage, product quantity will also be increased in the inventory
- Authentication: Required
- Parameters:
 - orderld (path): The ID of the order.
 - o productId (path): The ID of the product.
 - o id (path): The customer's ID.
- Request Body:

```
{
    "dontLikeDueToColorOrSize": true,
```

```
"isDamage": false
}
```

• Response:

- 200 OK: Return request successfully created.
- o 400 Bad Request: If the request is invalid.
- **404 Not Found:** If the order, product, or customer is not found.
- o **500 Internal Server Error:** If there is a server error.
- Example

```
"_id": "66c25cda25767654f5c32744",
"customerId": "66c22faf818ea8e8db645d6f",
"productIds": [
    "66aa320d5270e6700c8c94d1"
"productNames": [
   "Google Pixel"
"orderQuantitys": [
],
"orderedDate": "2024-08-18T20:43:31.621Z",
"deliveredDates": [
        "2024-08-18T20:43:32.099Z",
        "2024-08-18T20:45:30.97Z",
        "2024-08-18T20:46:52.783Z",
       "2024-08-18T20:48:11.403Z",
        "2024-08-19T02:22:23.565272434+05:30",
        "2024-08-20T02:22:23.565273173+05:30"
],
"status": [
        "Order Confirmed",
        "Order Delivered",
        "Replace Confirmed",
        "Replace Order Delivered",
        "Return Confirmed"
"shippingAddress": {
    "_id": "66c253c8522685bb6b7f75c6",
    "fullName": "Ravi Kiran",
    "mobileNumber": "1234567890",
    "pincode": "18000",
    "line1": "....,",
    "line2": "...",
    "landmark": "...",
```

```
"city": "Bangalore",
   "state": "Karnataka",
    "country": "India",
    "isDefault": true
"paymentDetails": {
   "_id": "66c25cf325767654f5c3274a",
   "paymentMethod": "Wallet",
   "totalAmount": 32990,
   "userId": "66c22faf818ea8e8db645d6f",
    "cardNumber": "",
    "cardExpiryDate": "",
    "nameOnCard": "",
   "upiId": ""
"priceDetail": {
   "listPrice": 34900,
    "sellingPrice": 32990,
    "deliveryCharge": 0,
    "totalAmount": 32990
"totalAmount": 32990
```

S.No.	Request	Response	Status	Pass/Fail
1	<pre>{ "dontLikeDueToColorOrSize": true, "isDamage": false }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "dontLikeDueToColorOrSize": true, "isDamage": false }</pre>	"No Return Policy for this product!!"	400 Bad Request	Pass
3	<pre>{ "dontLikeDueToColorOrSize": true, "isDamage": false }</pre>	"Return Expires!!"	400 Bad Request	Pass
4	₹	"Please Refund when Order	400 Bad Request	Pass

```
"dontLikeDueToColorOrSize":
true,
    "isDamage": false
}
Delivered!!"
```

Cancel Order Request

• Endpoint:

/cancelOrderRequest/orderId={orderId}&productId={productId}&custo
merId={id}

- Method: PUT
- **Description:** Cancels an order or a specific product in an existing order.
 - This request is from the customer side
 - Product can be canceled within 1 days of ordered date, replacement date or return date
 - Status will be updated and the canceled date will also be updated
- Authentication: Required
- Parameters:
 - orderld (path): The ID of the order.
 - o productId (path): The ID of the product.
 - o id (path): The customer's ID.
- Response:
 - o **200 OK:** Order or product successfully canceled.
 - o 400 Bad Request: If the request is invalid.
 - **404 Not Found:** If the order, product, or customer is not found.
 - o **500 Internal Server Error:** If there is a server error.
 - o Example

```
{
    "_id": "66c25a30512bf19c6acef710",
    "customerId": "66c22faf818ea8e8db645d6f",
    "productIds": [
        "66aa320d5270e6700c8c94d1"
],
    "productNames": [
        "Google Pixel"
],
    "orderQuantitys": [
        1
],
    "orderedDate": "2024-08-18T20:36:14.164Z",
    "deliveredDates": [
        [
```

```
"2024-08-18T20:36:14.525Z",
        "2024-08-19T02:10:29.325995695+05:30"
],
"status": [
        "Order Confirmed",
        "Cancelled"
"shippingAddress": {
    " id": "66c253c8522685bb6b7f75c6",
    "fullName": "Ravi Kiran",
   "mobileNumber": "1234567890",
    "pincode": "18000",
    "line1": "....,",
    "line2": "...",
    "landmark": "...",
    "city": "Bangalore",
    "state": "Karnataka",
    "country": "India",
    "isDefault": true
"paymentDetails": {
    "_id": "66c25b3e25767654f5c32739",
    "paymentMethod": "Wallet",
    "totalAmount": 32990,
    "userId": "66c22faf818ea8e8db645d6f",
    "cardNumber": "",
    "cardExpiryDate": "",
    "nameOnCard": "",
    "upiId": ""
},
"priceDetail": {
    "listPrice": 34900,
    "sellingPrice": 32990,
    "deliveryCharge": 0,
    "totalAmount": 32990
"totalAmount": 32990
```

S.No.	Request	Response	Status	Pass/Fail
1		"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2		"Cancel Expires!!"	400 Bad Request	Pass

Change Delivery Date

3

• Endpoint:

/changeDeliveryDate/orderId={orderId}&productId={productId}&custo
merId={id}

- Method: PUT
- **Description:** Changes the delivery date for an existing order.
 - o This feature is only available for the prime membership
 - Chance the delivery date by increasing the respected delivery date in order API as well as in delivery order API
- Authentication: Required
- Parameters:
 - o orderld (path): The ID of the order.
 - o producted (path): The ID of the product.
 - o id (path): The customer's ID.
- Request Body:

```
{
    "noOfDayToIncrease":1
}
```

- Response:
 - o **200 OK:** Delivery date successfully updated.
 - o 400 Bad Request: If the request is invalid.
 - o **404 Not Found:** If the order, product, or customer is not found.
 - o **500 Internal Server Error:** If there is a server error.
 - Example

```
{
    "MatchedCount": 1,
    "ModifiedCount": 1,
    "UpsertedCount": 0,
    "UpsertedID": null
}
{
    "_id": "66c25a30512bf19c6acef710",
```

```
"customerId": "66c22faf818ea8e8db645d6f",
"productIds": [
   "66aa320d5270e6700c8c94d1"
"productNames": [
   "Google Pixel"
"orderQuantitys": [
"orderedDate": "2024-08-19T02:06:14.164837563+05:30",
"deliveredDates": [
       "2024-08-19T02:06:14.525692564+05:30",
       "2024-08-21T02:06:14.525693313+05:30"
"status": [
        "Order Confirmed"
"shippingAddress": {
    " id": "66c253c8522685bb6b7f75c6",
    "fullName": "Ravi Kiran",
    "mobileNumber": "1234567890",
    "pincode": "18000",
    "line1": "....,",
    "line2": "...",
    "landmark": "...",
    "city": "Bangalore",
    "state": "Karnataka",
    "country": "India",
    "isDefault": true
"paymentDetails": {
    " id": "66c25b3e25767654f5c32739",
    "paymentMethod": "Wallet",
    "totalAmount": 32990,
    "userId": "66c22faf818ea8e8db645d6f",
    "cardNumber": "",
    "cardExpiryDate": "",
    "nameOnCard": "",
    "upiId": ""
},
"priceDetail": {
    "listPrice": 34900,
    "sellingPrice": 32990,
    "deliveryCharge": 0,
    "totalAmount": 32990
"totalAmount": 32990
```

S.No.	Request	Response	Status	Pass/Fail
1	<pre>{ "noOfDayToIncrease":1 }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass
2	<pre>{ "noOfDayToIncrease":1 }</pre>	"You can't change the Delivery date after the expected delivery date!!"	400 Bad Request	Pass
3	<pre>{ "noOfDayToIncrease":1 }</pre>	"You can't change the Delivery date after the order been delivered!!"	400 Bad Request	Pass
4	<pre>{ "noOfDayToIncrease":1 }</pre>	"You are not a prime member, kindly buy prime membership to change the delivery date!!"	400 Bad Request	Pass

13. Delivery Partner Management

Get All Deliver Orders

• Endpoint: /deliverOrders

Method: GET

• **Description:** Retrieves all orders that are ready to be delivered by delivery partners.

• Authentication: None

• Response:

o **200 OK:** A list of orders to be delivered.

o **500 Internal Server Error:** If there is a server error.

Example

```
"productId": "66aa0d90c9440c136263d090",
"orderId": "66b5a10cbfdff59f57914eb7",
"customerName": "Shiva Gupta",
"customerAddress": {
    " id": "66b06aeb19b253de5b363873",
    "fullName": "Shiva Gupta",
    "mobileNumber": "8982511209",
    "pincode": "471515",
    "line1": "near old bus stand,",
    "line2": "In frotn f government hospital",
    "landmark": "RC brother",
    "city": "LavKush nagar",
    "state": "MP",
    "country": "India",
    "isDefault": false
"expectedDeliveryDate": "2024-08-12T04:54:37.7Z"
"_id": "66b9b843e2932a90221014a9",
"customerId": "66b4537d0208bbd82ee589aa",
"productId": "66a9e09b63831c9fba7f84a2",
"orderId": "66b9b7ffe2932a902210149f",
"customerName": "Ram Gupta",
"customerAddress": {
    "_id": "66b9a11ec046307c7abca648",
    "fullName": "Ram Gupta",
    "mobileNumber": "1234567890",
    "pincode": "560000",
    "line1": "....,",
    "line2": "...",
    "landmark": "...",
    "city": "Bangalore",
    "state": "Karnataka",
    "country": "India",
    "isDefault": false
"expectedDeliveryDate": "2024-08-16T07:22:42.679Z"
```

Get All Replace Orders

• Endpoint: /replaceOrders

Method: GET

• **Description:** Retrieves all orders that are ready to be replaced by delivery partners.

• Authentication: None

• Response:

- o **200 OK:** A list of orders to be replaced.
- o **500 Internal Server Error:** If there is a server error.
- Example

null

Get All Return Orders

- Endpoint: /returnOrders
- Method: GET
- **Description:** Retrieves all orders that are ready to be returned by delivery partners.
- Authentication: None
- Response:
 - o **200 OK:** A list of orders to be returned.
 - o **500 Internal Server Error:** If there is a server error.
 - Example

null

Deliver Order by Delivery Partner

• Endpoint:

/deliverOrderByDeliveryPartner/orderId={orderId}&productId={productId}&customerId={customerId}

- Method: POST
- **Description:** Marks an order as delivered by the delivery partner.
 - Updated the status of the product along with the delivery date
 - Delete the order from the delivery order API
 - Also update the report of the seller's product
- Authentication: None
- Parameters:
 - orderld (path): The ID of the order.
 - o producted (path): The ID of the product.
 - o customerId (path): The ID of the customer.
- Response:
 - o **200 OK:** Order marked as delivered.
 - 400 Bad Request: If the request is invalid.
 - o **404 Not Found:** If the order, product, or customer is not found.
 - 500 Internal Server Error: If there is a server error.
 - Example

```
{
    "MatchedCount": 1,
    "ModifiedCount": 1,
    "UpsertedCount": 0,
    "UpsertedID": null
```

```
"MatchedCount": 1,
  "ModifiedCount": 1,
  "UpsertedCount": 0,
  "UpsertedID": null
}
  "DeletedCount": 1
}
  " id": "66c25cda25767654f5c32744",
  "customerId": "66c22faf818ea8e8db645d6f",
  "productIds": [
      "66aa320d5270e6700c8c94d1"
  "productNames": [
      "Google Pixel"
   "orderQuantitys": [
  "orderedDate": "2024-08-18T20:43:31.621Z",
  "deliveredDates": [
           "2024-08-18T20:43:32.099Z",
          "2024-08-19T02:15:30.970447879+05:30"
  ],
  "status": [
           "Order Confirmed",
           "Order Delivered"
  ],
   "shippingAddress": {
       " id": "66c253c8522685bb6b7f75c6",
      "fullName": "Ravi Kiran",
       "mobileNumber": "1234567890",
       "pincode": "18000",
      "line1": "....,",
       "line2": "...",
       "landmark": "...",
      "city": "Bangalore",
       "state": "Karnataka",
       "country": "India",
       "isDefault": true
  },
   "paymentDetails": {
       "_id": "66c25cf325767654f5c3274a",
      "paymentMethod": "Wallet",
       "totalAmount": 32990,
```

```
"userId": "66c22faf818ea8e8db645d6f",
    "cardNumber": "",
    "cardExpiryDate": "",
    "nameOnCard": "",
    "upiId": ""
},
    "priceDetail": {
        "listPrice": 34900,
        "sellingPrice": 32990,
        "deliveryCharge": 0,
        "totalAmount": 32990
},
    "totalAmount": 32990
}
```

S.No.	Request	Response	Status	Pass/F ail
1		"Order is already Delivered!!"	400 Bad Request	Pass

Replace Order by Delivery Partner

• Endpoint:

/replaceOrderByDeliveryPartner/orderId={orderId}&productId={productId}&customerId={customerId}

- Method: POST
- **Description:** Marks an order as replaced by the delivery partner.
 - Updated the status of the product along with the replace date
 - Delete the order from the replace order API
- Authentication: None
- Parameters:
 - orderld (path): The ID of the order.
 - o producted (path): The ID of the product.
 - o customerId (path): The ID of the customer.
- Response:
 - o **200 OK:** Order marked as replaced.
 - 400 Bad Request: If the request is invalid.
 - o **404 Not Found:** If the order, product, or customer is not found.
 - o **500 Internal Server Error:** If there is a server error.
 - Example

```
"MatchedCount": 1,
  "ModifiedCount": 1,
  "UpsertedCount": 0,
  "UpsertedID": null
  "MatchedCount": 1,
  "ModifiedCount": 1,
  "UpsertedCount": 0,
  "UpsertedID": null
}
  "DeletedCount": 1
  "_id": "66c25cda25767654f5c32744",
  "customerId": "66c22faf818ea8e8db645d6f",
  "productIds": [
       "66aa320d5270e6700c8c94d1"
   "productNames": [
      "Google Pixel"
  "orderQuantitys": [
  "orderedDate": "2024-08-18T20:43:31.621Z",
  "deliveredDates": [
           "2024-08-18T20:43:32.099Z",
           "2024-08-18T20:45:30.97Z",
           "2024-08-18T20:46:52.783Z",
           "2024-08-19T02:18:11.403380639+05:30"
  ],
  "status": [
           "Order Confirmed",
           "Order Delivered",
           "Replace Confirmed",
           "Replace Order Delivered"
  "shippingAddress": {
       "_id": "66c253c8522685bb6b7f75c6",
       "fullName": "Ravi Kiran",
       "mobileNumber": "1234567890",
       "pincode": "18000",
       "line1": "....,",
      "line2": "...",
       "landmark": "...",
```

```
"city": "Bangalore",
    "state": "Karnataka",
    "country": "India",
    "isDefault": true
},
"paymentDetails": {
    " id": "66c25cf325767654f5c3274a",
   "paymentMethod": "Wallet",
    "totalAmount": 32990,
    "userId": "66c22faf818ea8e8db645d6f",
    "cardNumber": "",
    "cardExpiryDate": "",
    "nameOnCard": "",
    "upiId": ""
"priceDetail": {
    "listPrice": 34900,
    "sellingPrice": 32990,
    "deliveryCharge": 0,
    "totalAmount": 32990
"totalAmount": 32990
```

S.No.	Request	Response	Status	Pass/F ail
1		"Replace Order is already Delivered!!"	400 Bad Request	Pass

Return Order by Delivery Partner

• Endpoint:

/returnOrderByDeliveryPartner/orderId={orderId}&productId={produc tId}&customerId={customerId}

- Method: POST
- **Description:** Marks an order as returned by the delivery partner.
 - Updated the status of the product along with the return date
 - Delete the order from the return order API
- Authentication: None
- Parameters:
 - orderld (path): The ID of the order.
 - o producted (path): The ID of the product.

o customerId (path): The ID of the customer.

• Response:

- 200 OK: Order marked as returned.
- 400 Bad Request: If the request is invalid.
- **404 Not Found:** If the order, product, or customer is not found.
- 500 Internal Server Error: If there is a server error.
- Example

```
"MatchedCount": 1,
  "ModifiedCount": 1,
  "UpsertedCount": 0,
  "UpsertedID": null
}
  "MatchedCount": 1,
  "ModifiedCount": 1,
  "UpsertedCount": 0,
  "UpsertedID": null
}
  "DeletedCount": 1
}
  "MatchedCount": 1,
  "ModifiedCount": 1,
  "UpsertedCount": 0,
  "UpsertedID": null
}
  "_id": "66c25cda25767654f5c32744",
  "customerId": "66c22faf818ea8e8db645d6f",
  "productIds": [
      "66aa320d5270e6700c8c94d1"
  ],
   "productNames": [
       "Google Pixel"
   "orderQuantitys": [
   "orderedDate": "2024-08-18T20:43:31.621Z",
   "deliveredDates": [
           "2024-08-18T20:43:32.099Z",
           "2024-08-18T20:45:30.97Z",
           "2024-08-18T20:46:52.783Z",
           "2024-08-18T20:48:11.403Z",
           "2024-08-18T20:52:23.565Z",
           "2024-08-19T02:24:18.566789554+05:30"
```

```
"status": [
        "Order Confirmed",
        "Order Delivered",
        "Replace Confirmed",
        "Replace Order Delivered",
        "Return Confirmed",
        "Refunded"
"shippingAddress": {
    "_id": "66c253c8522685bb6b7f75c6",
   "fullName": "Ravi Kiran",
    "mobileNumber": "1234567890",
    "pincode": "18000",
    "line1": "....,",
    "line2": "...",
    "landmark": "...",
    "city": "Bangalore",
    "state": "Karnataka",
    "country": "India",
    "isDefault": true
},
"paymentDetails": {
    "_id": "66c25cf325767654f5c3274a",
    "paymentMethod": "Wallet",
    "totalAmount": 32990,
    "userId": "66c22faf818ea8e8db645d6f",
    "cardNumber": "",
    "cardExpiryDate": "",
    "nameOnCard": "",
    "upiId": ""
"priceDetail": {
    "listPrice": 34900,
    "sellingPrice": 32990,
    "deliveryCharge": 0,
    "totalAmount": 32990
"totalAmount": 32990
```

S.No.	Request	Response	Status	Pass/F ail
1		"Return Order is already Taken or Only one time you	400 Bad Request	Pass

can return the product!!"

14. Review Management

Get All Reviews

• Endpoint: /reviews

• Method: GET

• Description: Retrieves all reviews in the system.

• Authentication: None

• Response:

o 200 OK: A list of all reviews.

o 500 Internal Server Error: If there is a server error.

Example

```
"_id": "66b471f8b76055321d3c2697",
"productId": "66aa0d90c9440c136263d090",
"customerId": "66ab331d97d120b6a67da9f3",
"customerName": "Shiva",
"rating": 3,
"headline": "It is not good.",
"description": "I dont like it, but its good product.",
"reviewDate": "2024-08-08T07:21:28.552Z",
"reviewImages": []
" id": "66b472a9cb9832ff04db4189",
"productId": "66aa0d90c9440c136263d090",
"customerId": "66ab331d97d120b6a67da9f3",
"customerName": "Shiva",
"rating": 4,
"headline": "It is not good.",
"description": "I dont like it, but its good product.",
"reviewDate": "2024-08-08T07:24:25.242Z",
"reviewImages": []
```

Get Reviews by Product ID

- **Endpoint:** /reviews/productId={productId}
- Method: GET
- Description: Retrieves all reviews for a specific product.
- Authentication: None
- Parameters:
 - productId (path): The ID of the product.
- Response:
 - o 200 OK: A list of reviews for the specified product.
 - 404 Not Found: If the product is not found.
 - o 500 Internal Server Error: If there is a server error.
 - Example

```
"_id": "66b471f8b76055321d3c2697",
"productId": "66aa0d90c9440c136263d090",
"customerId": "66ab331d97d120b6a67da9f3",
"customerName": "Shiva",
"rating": 3,
"headline": "It is not good.",
"description": "I dont like it, but its good product.",
"reviewDate": "2024-08-08T07:21:28.552Z",
"reviewImages": []
" id": "66b472a9cb9832ff04db4189",
"productId": "66aa0d90c9440c136263d090",
"customerId": "66ab331d97d120b6a67da9f3",
"customerName": "Shiva",
"rating": 4,
"headline": "It is not good.",
"description": "I dont like it, but its good product.",
"reviewDate": "2024-08-08T07:24:25.242Z",
"reviewImages": []
```

Get Most Recent Reviews by Product ID

- **Endpoint:** /mostRecentReviews/productId={productId}
- Method: GET

- **Description:** Retrieves the most recent reviews for a specific product.
- Authentication: None
- Parameters:
 - productId (path): The ID of the product.
- Response:
 - 200 OK: A list of the most recent reviews for the specified product.
 - 404 Not Found: If the product is not found.
 - o **500 Internal Server Error:** If there is a server error.
 - Example

```
"_id": "66b472a9cb9832ff04db4189",
"productId": "66aa0d90c9440c136263d090",
"customerId": "66ab331d97d120b6a67da9f3",
"customerName": "Shiva",
"rating": 4,
"headline": "It is not good.",
"description": "I dont like it, but its good product.",
"reviewDate": "2024-08-08T07:24:25.242Z",
"reviewImages": []
" id": "66b471f8b76055321d3c2697",
"productId": "66aa0d90c9440c136263d090",
"customerId": "66ab331d97d120b6a67da9f3",
"customerName": "Shiva",
"rating": 3,
"headline": "It is not good.",
"description": "I dont like it, but its good product.",
"reviewDate": "2024-08-08T07:21:28.552Z",
"reviewImages": []
```

Get Top Reviews by Product ID

- **Endpoint:** /topReviews/productId={productId}
- Method: GET
- **Description:** Retrieves the top reviews (highest rated) for a specific product.
- Authentication: None

• Parameters:

productId (path): The ID of the product.

• Response:

- o 200 OK: A list of the top reviews for the specified product.
- o 404 Not Found: If the product is not found.
- o **500 Internal Server Error:** If there is a server error.
- Example

```
"_id": "66b472a9cb9832ff04db4189",
"productId": "66aa0d90c9440c136263d090",
"customerId": "66ab331d97d120b6a67da9f3",
"customerName": "Shiva",
"rating": 4,
"headline": "It is not good.",
"description": "I dont like it, but its good product.",
"reviewDate": "2024-08-08T07:24:25.242Z",
"reviewImages": []
"_id": "66b471f8b76055321d3c2697",
"productId": "66aa0d90c9440c136263d090",
"customerId": "66ab331d97d120b6a67da9f3",
"customerName": "Shiva",
"rating": 3,
"headline": "It is not good.",
"description": "I dont like it, but its good product.",
"reviewDate": "2024-08-08T07:21:28.552Z",
"reviewImages": []
```

Add Review

- Endpoint: /addReview/productId={productId}&customerId={id}
- Method: POST
- Description: Adds a review for a specific product by a customer.
- Authentication: Required
- Parameters:
 - productId (path): The ID of the product.
 - o id (path): The ID of the customer.
- Request Body:

```
{
   "customerName": "Shiva",
   "rating" : 4,
   "headline" : "It is not good.",
   "description" : "I don't like it, but it's good product.",
   "reviewImages": []
}
```

• Response:

- o **201 Created:** Review successfully added.
- o 400 Bad Request: If the request is invalid.
- o 404 Not Found: If the product or customer is not found.
- o **500 Internal Server Error:** If there is a server error.
- Example

```
{
    "MatchedCount": 1,
    "ModifiedCount": 1,
    "UpsertedCount": 0,
    "UpsertedID": null
}
{
    "InsertedID": "66c261b00ed8dcd74d10e141"
}
{
    "_id": "66c261b00ed8dcd74d10e141",
    "productId": "66c302f3e6700c8c94d1",
    "customerId": "66c22faf818ea8e8db645d6f",
    "customerName": "Ravi",
    "rating": 3,
    "headline": "It is not good.",
    "description": "...",
    "reviewDate": "2024-08-19T02:33:44.876637671+05:30",
    "reviewImages": []
}
```

15.Report Management

View Reports by Seller ID

• Endpoint: /report/sellerId={id}

- Method: GET
- **Description:** Retrieves all reports associated with a specific seller.
 - Report can be based on for last 1 year (monthly bases) for each products
 - o Or for 10 years (yearly bases) for each products
- Authentication: Required
- Parameters:
 - o id (path): The seller's ID.
- Request Body:

```
{
    "statsBasedOn": "year"
}
```

- Response:
 - o 200 OK: A list of reports for the specified seller.
 - 404 Not Found: If the seller is not found.
 - o **500 Internal Server Error:** If there is a server error.
 - Example

```
Stats Based On Year For the Last One Decade!!
   "2014": 0,
   "2015": 0,
   "2016": 0,
   "2017": 0,
   "2018": 0,
   "2019": 0,
   "2020": 0,
   "2021": 0,
   "2022": 0,
   "2023": 0,
   "2024": 2,
   "avergaePrice": 80900,
   "productImage": [
       "/assets/photos/iphone16.png"
   "productName": "iPhone 16",
   "totalUnitSold": 2
   "2014": 0,
```

```
"2015": 0,
"2016": 0,
"2017": 0,
"2018": 0,
"2019": 0,
"2020": 0,
"2021": 0,
"2022": 0,
"2023": 0,
"2024": 3,
"avergaePrice": 12999,
"productImage": [
    "/assets/photos/redmi.png"
],
"productName": "Redmi",
"totalUnitSold": 3
"2014": <mark>0</mark>,
"2015": 0,
"2016": 0,
"2017": 0,
"2018": 0,
"2019": 0,
"2020": 0,
"2021": 0,
"2022": 0,
"2023": 0,
"2024": 1,
"avergaePrice": 32990,
"productImage": [
    "/assets/photos/google.png"
"productName": "Google Pixel",
"totalUnitSold": 1
```

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "statsBasedOn": "year" }</pre>	"Unauthorized User!!" (if seller is not logged in)	401 Unauthorized	Pass

View Report by Product ID and Seller ID

- **Endpoint:** /report/productId={productId}&sellerId={id}
- Method: GET
- **Description:** Retrieves a specific report for a product associated with a seller.
 - Report can be based on for last 1 year (monthly bases)
 - Or for 10 years (yearly bases)
- Authentication: Required
- Parameters:
 - productId (path): The product ID.
 - o id (path): The seller's ID.
- Request Body:

```
{
    "statsBasedOn": "month"
}
```

- Response:
 - o **200 OK:** The report for the specified product and seller.
 - 404 Not Found: If the product or seller is not found.
 - o 500 Internal Server Error: If there is a server error.
 - Example

```
Stats Based On Month For the Last One Year for Google Pixel!!
   "productName": "Google Pixel",
   "productImage": [
       "/assets/photos/google.png"
   "totalUnitSold": 1,
   "avergaePrice": 32990,
   "january": 0,
   "february": 0,
   "march": 0,
   "april": 0,
   "may": ∅,
   "june": ∅,
   "july": 0,
   "august": 1,
   "september": 0,
   "october": 0,
   "november": 0,
```

```
"december": 0
}
```

S.No.	Request	Response	Status	Pass/F ail
1	<pre>{ "statsBasedOn": "month" }</pre>	"Unauthorized User!!" (if seller is not logged in)	401 Unauthorized	Pass

16. Search History Management

Get All Search Histories

• Endpoint: /searchHistory

• Method: GET

• **Description**: Retrieves all search histories in the system for all the customers

• Authentication: None

• Response:

o **200 OK:** A list of all search histories.

o **500 Internal Server Error:** If there is a server error.

o Example

Get Search History by Customer ID

- **Endpoint**: /searchHistory/customerId={id}
- Method: GET
- **Description:** Retrieves the search history for a specific customer by their ID.
- **Authentication:** Required
- Parameters:
 - o id (path): The customer's ID.
- Response:
 - o **200 OK:** The search history for the specified customer.
 - o **404 Not Found:** If the customer is not found.
 - o **500 Internal Server Error:** If there is a server error.
 - Example

```
[
   "iphone"
]
```

S.No.	Request	Response	Status	Pass/F ail
1		"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass

17. Customer Care Management

Chat with Customer Care

• Endpoint: /customerCare/message/customerId={id}

• Method: POST

• **Description:** Allows a customer to send a message to customer care.

• Authentication: Required

• Parameters:

o id (path): The customer's ID.

• Request Body:

```
{
    "message": ""
}
```

Response:

- o **200 OK:** The message was successfully sent to customer care.
- 400 Bad Request: If the message format is invalid.
- o **500 Internal Server Error:** If there is a server error.
- Example

```
Hi! It's Amazon's messaging assistant again.

Product Name: Redmi
Is this what you need help with?

Choose Anyone of the following...

No, Something else
Yes, that's correct
```

S.N	D. Request	Response	Status	Pass/F ail
1	<pre>{ "message": "" }</pre>	"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass

18. Product Recommendation Management

Get Recommended Products by Customer ID

- **Endpoint**: /productRecommendation/customerId={id}
- Method: GET
- **Description:** Retrieves product recommendations for a specific customer.
 - 10 products related to last search based on category stored in product recommendation API
- Authentication: Required
- Parameters:
 - o id (path): The customer's ID.
- Response:
 - o **200 OK:** A list of recommended products for the customer.
 - 404 Not Found: If no recommendations are found for the customer.
 - o **500 Internal Server Error:** If there is a server error.
 - o Example

```
"_id": "66bae957efbf2f19ef428380",
  "customerId": "66ab331d97d120b6a67da9f3",
   "productIds": [
       "66a8d9c2697de17b2285d258",
       "66a9e09b63831c9fba7f84a2",
       "66a9e0ec63831c9fba7f84a5",
       "66aa0d90c9440c136263d090",
       "66aa320d5270e6700c8c94d1",
       "66ab273b03aa2deac83093e2",
       "66b499c97dd2d413f5399ee9",
       "66a8d9c2697de17b2285d258",
       "66a9e09b63831c9fba7f84a2",
       "66a9e0ec63831c9fba7f84a5"
   "productName": [
       "IPhone 15",
       "iPhone 16",
       "Samsung",
       "Redmi",
       "Google Pixel",
       "Google Pixel",
       "Sony i7 5G",
       "IPhone 15",
       "iPhone 16",
       "Samsung"
   "aboutProduct": [
       "DYNAMIC ISLAND COMES TO IPHONE 15 -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more.",
```

```
"DYNAMIC ISLAND COMES TO IPHONE 15 -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more.",
       "DYNAMIC ISLAND COMES TO samsung -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more.",
       "DYNAMIC ISLAND COMES TO redmi -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more.",
       "DYNAMIC ISLAND COMES TO google pixel -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more.",
       "DYNAMIC ISLAND COMES TO google pixel 9A -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more.",
       "DYNAMIC ISLAND COMES TO sony pixel 9A -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more.",
       "DYNAMIC ISLAND COMES TO IPHONE 15 -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more.",
       "DYNAMIC ISLAND COMES TO IPHONE 15 -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more.",
       "DYNAMIC ISLAND COMES TO samsung -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more."
   ],
   "brand": [
       "Apple",
       "Apple",
       "Samsung",
       "Redmi",
       "Google",
       "Google",
       "Sony",
       "Apple",
       "Apple",
       "Samsung"
   ],
   "bestSeller": [
       false,
       true,
       false,
       false,
       true,
       true,
       true,
       false,
       true,
       false
   ],
```

```
"newRelease": [
    false,
    true,
    true,
    true,
    true,
    true,
    true,
    false,
    true,
    true
"maxRetailPrice": [
"sellingPrice": [
"discount": [
"averageRating": [
```

```
"productImage": [
   "/assets/photos/iphone15.png",
   "/assets/photos/iphone16.png",
   "/assets/photos/samsumg.png",
   "/assets/photos/redmi.png",
   "/assets/photos/google.png",
   "/assets/photos/google.png",
   "assets/photos/sony.png",
   "/assets/photos/iphone15.png",
   "/assets/photos/iphone16.png",
   "/assets/photos/samsumg.png"
"numberOfReviews": [
```

S.No.	Request	Response	Status	Pass/F ail
1		"Unauthorized User!!"	401 Unauthorized	Pass
		(if customer is not logged in)		

19. Recently Viewed Products Management

Get Recently Viewed Products by Customer ID

- Endpoint: /recentlyViewedProduct/customerId={id}
- Method: GET
- **Description:** Retrieves the list of products recently viewed by a specific customer.
 - Last search product stored in recently viewed product API
 - Recently viewed product API stores 10 recent product details
- Authentication: Required
- Parameters:
 - o id (path): The customer's ID.
- Response:
 - o 200 OK: A list of recently viewed products for the customer.
 - 404 Not Found: If no recently viewed products are found for the customer.
 - o 500 Internal Server Error: If there is a server error.
 - Example

```
" id": "66bafa18efbf2f19ef428382",
  "customerId": "66ab331d97d120b6a67da9f3",
  "productIds": [
       "66b499c97dd2d413f5399ee9"
   "productName": [
      "Sony i7 5G"
   "aboutProduct": [
       "DYNAMIC ISLAND COMES TO sony pixel 9A -- Dynamic Island bubbles up alerts and Live
Activities -- so you don't miss them while you're doing something else. You can see who's
calling, track your next ride, check your flight status, and so much more."
  ],
  "brand": [
      "Sony"
   "bestSeller": [
   "newRelease": [
      true
   "maxRetailPrice": [
```

```
],
"sellingPrice": [
    14990
],
"discount": [
    5.72
],
"averageRating": [
    0
],
"productImage": [
        "assets/photos/sony.png"
],
"numberOfReviews": [
    0
]
]
```

S.No.	Request	Response	Status	Pass/F ail
1		"Unauthorized User!!" (if customer is not logged in)	401 Unauthorized	Pass

Thank you