CASE STUDY DOCUMENTATION ON

Deals and Coupons Finder App

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Synopsis:

This Project allows you to receive some cash back points on all products from members and easily use those point like real money at any location. Whether it's last-minute Cleaners, beverage food, beauty, bakery, you just name it, and this project will grab the best deals for you.

Application Functions:

- 1. Register Admin details to the Database.
- 2. Authenticate Admin details in the Database.
- 3. Find the Token in Postman.
- 4.Get the Token from Postman and perform operation
- 5.Get the token from postman.
- 6. Authenticate the admin using token.
- 7. Perform the Admin operation
- 8. User directly perform get operation only no need authentication.

Software Requirement:

- 1. JDK11
- 2. MongoDB
- 3. Junit
- 4. Spring Tool Suite 4
- 5. Web Server
- 6. Postman
- 7.JaCoCo
- 8. Git

Hardware Requirement:

- 1. Processor: 1.2Ghz and above
- 2. Hard Disk: 10GB and more
- 3. RAM: Minimum 1 GB

Requirement:

- 1. User can retrieve the Deals and Coupons.
- 2. User can find the deals in particular product.
- 3. User also find deals and coupons by id.

Stories:

- 1. This Application will have 8 microservices:
 - a. Eureka Service
 - b. API Gateway
 - c. Deals Service
 - d. Product Service
 - e. Coupons Service
 - f. Deals User Service
 - g. Coupon User Service
 - h. Product User Service
- 2. The Working of Deals Service is storing all the information about customer. Like as Deal no, Name, Deal name, deal details all those details save in user data.
- 3. The product Service is storing all the information about product. Like product no, product Name, product details Websites Name all those details save in this service.
- 4. The Coupons Service is storing all the information about product. Like Coupon no, Coupon Name, Coupon details Websites Name all those details save in this service.

Admin Service:

- 1. Save Deals, Coupon, Product Data
- 2. Fetch Deals, Coupon, Product Data

Deals Service:

1. Retrieve all details Deals Service

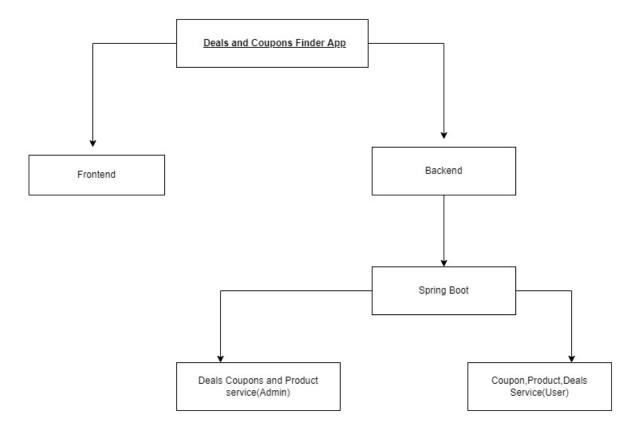
Product Service:

1. Retrieve all details Product Service

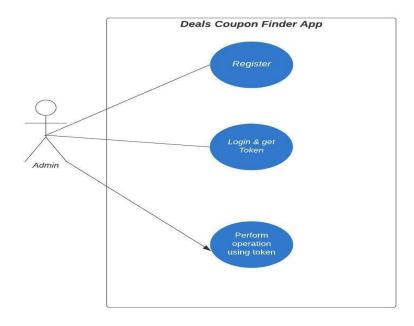
Coupon Service:

1. Retrieve all details Coupon Service

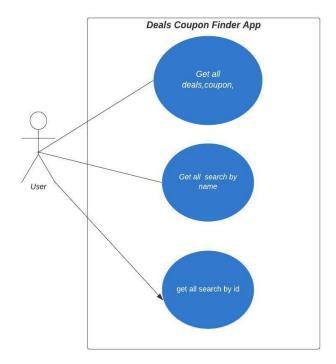
Architecture for Deals and Coupons:



UseCase Diagram for Admin:



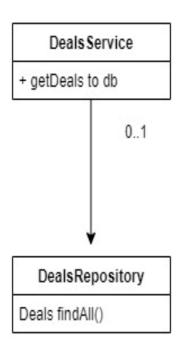
UseCase Diagram for User:



Class Diagrams:

Deals Service (User):

Deals - dealno: int - dname: String - ddetails: String Deals() - getDealno():String - setDealno():void - getDname():String - setDname():String - setDname():void - getDdetails():String - setDdetails():void



DealsServiceController

DealsService dealServ

+getAllDeals()

Deal Service User & Admin-:

User-: User only access deal Search, deal search by id, deal search by name.

Admin: - Admin can access all CRUD operation also search operation too.

Product Service:

Product Service(Admin)

Product

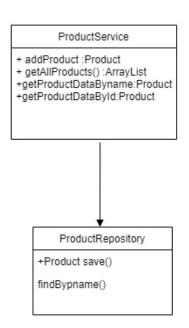
-productno: int -pname : String -pdetails : String

Product()

-getProductno(): String -setProductno(): void -getPname():String -setPname():void -getDetails():String -setDetails():void

ProductController

- + addProduct :Product + getAllProducts() :ArrayList +getProductDataByname:Product
- +getProductDataById:Product



Product Service User & Admin-:

User-: User only access deal Search, deal search by id, deal search by name.

Admin: - Admin can access all CRUD operation also search operation too.

Coupon Service:

Coupon Service(Admin)

Coupons

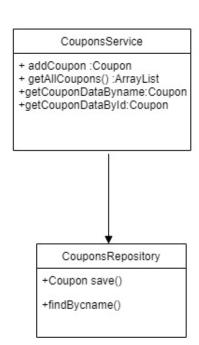
-couponno : int -cname : String -cdetails : String

Coupon()

-getCouponno(): String -setCouponno(): void -getCname():String -setCname():void -getCdetails():String -setCdetails():void

CouponsController

- + addCoupon : Product
- + getAllCoupons() :ArrayList
- +getCouponDataByname:Coupon
- +getCouponDataById:Coupon



Product Service User & Admin-:

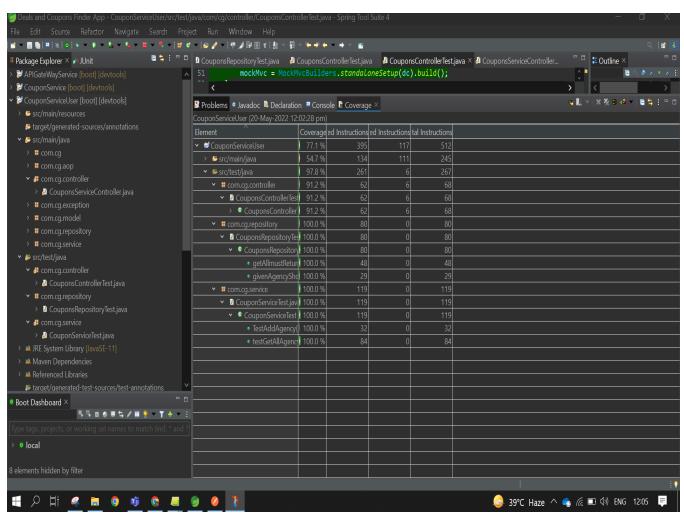
User-: user only access deal Search, deal search by id, deal search by name.

Admin: - admin can access all CRUD operation also search operation too.

Features:

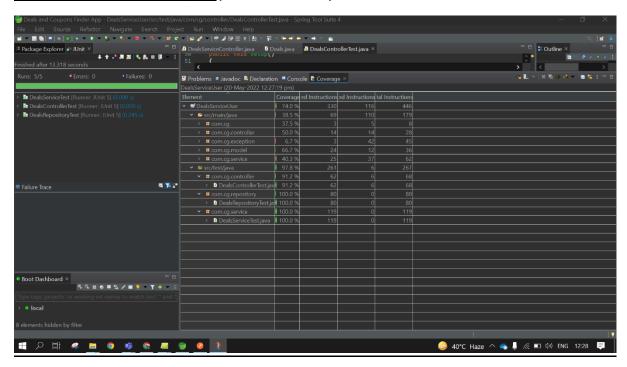
- 1. Drive more traffic to your store and increase sales.
- 2. Attract new customers by letting users share coupons with friends.
- 3. Offer exclusive app-based discounts to encourage customers and prospective customers to download my app.

Jacoco Code Courage: (Coupon Service)



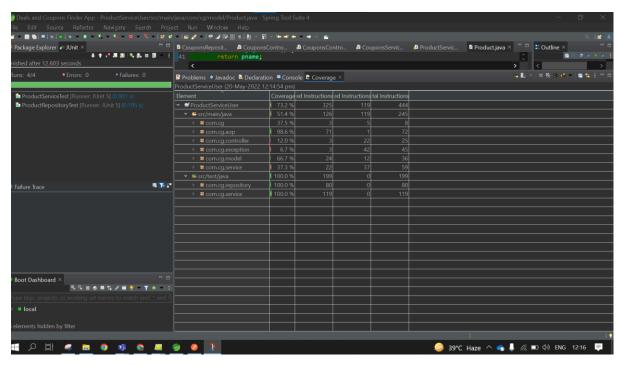
jacoco code courage is 77.1%

Jacoco Code Courage: (Deal Service)



jacoco code courage is 74.0%

Jacoco Code Courage: (Product Service)



jacoco code courage is 73.2%

Conclusion:

We have divided the project into many milestones having various stories in it. By doing this, we can calculate the average time taken and testing can be done easily.