**Technologies**

Spring Boot, H2, Maven

**Steps**

Please follow the below steps

1. Do maven clean install
2. Start the application
3. Type below url in browser, this will calculate the reward points and create dataset information in H2 DB.

[http://localhost:8080/dataCreation](http://localhost:8080/createDataSet)

Sample data:

SimpleDateFormat sdf = **new** SimpleDateFormat("dd/MM/yyyy");

CustomerRewards r1 = **new** CustomerRewards();

r1.setCustomerName("c1");

r1.setPurchaseAmount(100);

r1.setCreatedDate(sdf.parse("10/07/2019"));

CustomerRewards r2 = **new** CustomerRewards();

r2.setCustomerName("c1");

r2.setPurchaseAmount(120);

r2.setCreatedDate(sdf.parse("12/08/2019"));

CustomerRewards r3 = **new** CustomerRewards();

r3.setCustomerName("c1");

r3.setPurchaseAmount(130);

r3.setCreatedDate(sdf.parse("10/09/2019"));

CustomerRewards r4 = **new** CustomerRewards();

r4.setCustomerName("c1");

r4.setPurchaseAmount(60);

r4.setCreatedDate(sdf.parse("11/09/2019"));

// 2nd Customer

CustomerRewards c1 = **new** CustomerRewards();

c1.setCustomerName("c2");

c1.setPurchaseAmount(140);

c1.setCreatedDate(sdf.parse("13/08/2019"));

CustomerRewards c2 = **new** CustomerRewards();

c2.setCustomerName("c2");

c2.setPurchaseAmount(70);

c2.setCreatedDate(sdf.parse("12/09/2019"));

List<CustomerRewards> list = **new** ArrayList<>();

list.add(r1);

list.add(r2);

list.add(r3);

list.add(r4);

list.add(c1);

list.add(c2);

1. Type below url to get the customer total earning points and monthly wise total earning points

[http://localhost:8080/getCustomerRewards?customerName=cust](http://localhost:8080/getCustomerRewardPoints?customerName=cust1)1

Sample Output:

{"totalPoints":260,"rewards":[{"month":7,"monthPoints":50},{"month":8,"monthPoints":90},{"month":9,"monthPoints":120}]}

[http://localhost:8080/getCustomerRewards?customerName=cust](http://localhost:8080/getCustomerRewardPoints?customerName=cust1)2

Sample Output:

{"totalPoints":150,"rewards":[{"month":8,"monthPoints":130},{"month":9,"monthPoints":20}]}