

Module Test (Practical): Module 4 - Spring

Max Marks: 70

Duration: 210 Minutes

Mode: Open Book

Assessment Parameters

- Complete flow of the application with exception handling -70%
- Comments/best practice, coding standards- 10%
- Execution of the application (Output) – 20%
- ScreenShot should be submitted along with the solution
- The solution(Project) created by the trainee should have the name like AppName_Empid
Ex:ABCCorp_675467
- Code with compilation errors will not be considered for evaluation

Funds Bank Ltd has decided to provide a facility for customers to log a complaint online and they need an application for the same. Design a web application for the same using Spring MVC.

Create an application which will allow the customer to raise a complaint and check it's status. The basic requirement of the application will be:

1. Raise new complaint. (Complaint details has to be persisted into database.)
2. Check the status of an existing complaint based on complaint Id.

Following are the screenshot(s) and descriptions related to the requirement of an application.

Raise Complaint Page: (Home Page)

Customer Complaint Request Form

Account Id: *

Branch Code: *

Email Id: *

Complaint Category: *

Description: *

[Check Status](#)

- Navigate to check status page while clicking on Check Status link.

Perform validation for the following:

- All fields are mandatory.

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- Email should be valid email id
- Account Id should accept only 10 digits.

Use the validation support provided by HTML 5 or validation framework to implement the above requirement.

Once the complaint details has been filled by the customer, find priority of the logged complaint based on the table data given below:

| Complaint Category | Priority | Status |
|--------------------|----------|--------|
| Internet Banking | High | Open |
| General Banking | Medium | |
| Others | Low | |

After the priority has been found, generate complaint id automatically and insert all the details to the database.(While inserting data, status should always be open). When complaint has been logged successfully display the success page as shown below with generated complaint Id.

- **Mark Distribution:**

[Marks:42]

| | |
|--|----|
| Correct spring beans configuration, autowiring. | 3 |
| Page design | 10 |
| Field Validations using HTML 5 or Validator framework | 5 |
| Logic for determining priority | 4 |
| Correct controller, service and DAO layer method signatures and mapping. | 5 |
| Spring JPA logic in Dao layer to display data and its processing | 10 |
| Displaying the success page with generated complaint id | 5 |

Success Page:

Complaint Id for this request is 2893.

Thanks for raising a complaint.

[Check Status](#) [Raise Complaint](#)

Check Status

Complaint Id:

| Complaint Id | Description | Status |
|--------------|-------------------------------|--------|
| 3145 | Net banking account is locked | Closed |

[Raise Complaint](#)

Based on complaint Id entered by the user, Complaint details have to be displayed in the same page, in the format as given in the above screenshot. Navigate to Raise complaint page while clicking on Raise Complaint link.

• **Mark Distribution:**

[Marks: 28]

| | |
|--|----|
| Correct Controller, service and DAO layer method signatures and mapping | 5 |
| Spring JPA logic in Dao layer to display data and its processing | 10 |
| Displaying correct data on page | 5 |
| Package structure according to coding standard and proper layer design with interfaces | 5 |
| Service layer and Dao Layer interfaces created with proper delegation between the layers | 3 |

Table Script:

```
CREATE TABLE complaint(complaintid number primary key,accountid number,branchcode
varchar2(20),emailid varchar2(20),category varchar2(20),description varchar2(300),priority
varchar2(10),status varchar2(20));
```

```
CREATE SEQUENCE hibernate_sequence;
```

```
INSERT INTO complaint VALUES(3145,6873842,'FCFC12','tina@igate.com','Internet
Banking','Net banking account is locked','High','Closed');
```

```
INSERT INTO complaint VALUES(3146,6873845,'FCFC12','paiva@igate.com','Internet
Banking','Net banking account is locked','High','Work is in progress');
```

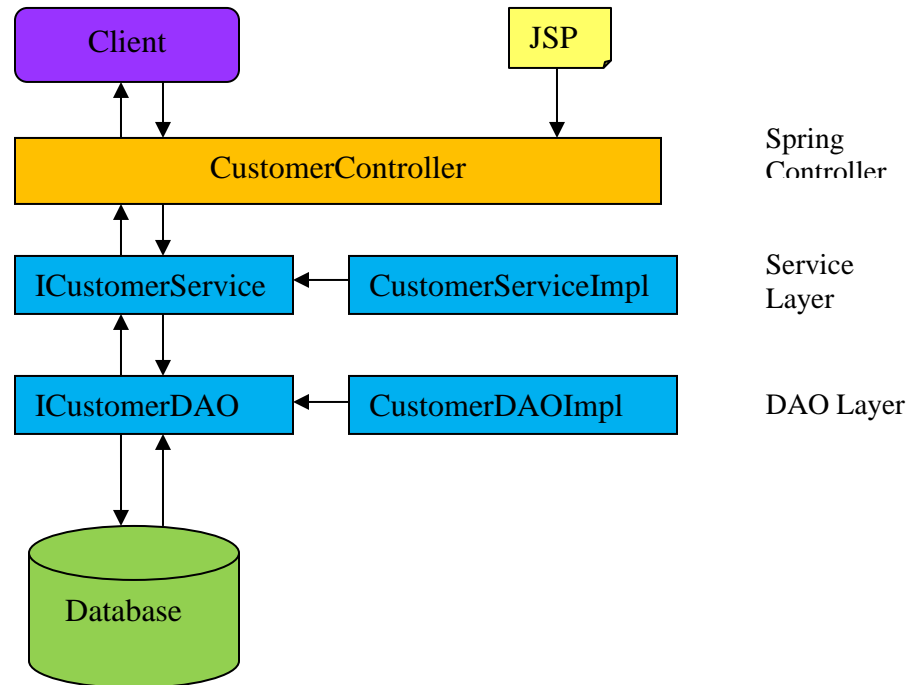
```
Commit;
```

Note: Participants are kindly requested to follow the same table & sequence structure.

Application Architecture:

[Marks:13]

- **Mark Distribution:**



Note:

- Use DAO Support classes for persisting data.
- Use appropriate package structure for each of the applications components