**Project Management System**

**Duration: 4 hrs**

# Instructions

1. Adhere to the design specifications mentioned
2. Use class/method names or return types as per the Coding standards
3. Please make sure that your code does not have any compilation errors while submitting your case study solution.
4. Implement the code using best design standards.
5. Do not use System out statements for logging. Use appropriate logging methods for logging statements/variable/return values.
6. Use Maven to build the project and create WAR file. Include required dependencies in POM.xml
7. Implement the code using REST API.
8. Write web service which takes input and return required details from database.
9. Associate need to upload /share War file.

**Software Requirements**

|  |  |
| --- | --- |
| Tools/APIs | JDK 1.8, SpringtoolsSuite  Spring Boot and Spring MVC  Hibernate 4.x  MySQL 5.6.11  REST WebServices  Maven 3.x |
| Server | Tomcat |

SpringBoot with application to perform CRUD operation with Rest Controller and Write testapplication isRestTemplate

Following are the details of Projects required to be captured and recorded by TSC Technologies Group..

1. Project Details: Table

Project IDint (5) primary key

Titlevar char(50),

Budget double,

Teamsize int ,

Duration int,

EndDate date ,

ManagerName varchar(30).

Design database table – ProjectDetails by using appropriate constraints.

Create classes

com.cts.Project

com.cts.ProjectController -> use RestController

com.cts.Project.ProjectService

com.cts.Project.ProjectDAO

com.cts.ProjectTest ->use RestTemplate

com.cts.SpingBootApp ->use @SpringBootApplication,SpringApplication

1. Project is a domain /entity class with required attributes
2. ProjectDAO is class with

voidaddProjectDetails(Project p) method

updateProjectDetails(intProjectId) method

deleteProjectDetails(intprojectId) method

listProjectDetails() method.

3.Implement all the above methods using @RestController

4.Test all above methods from Project Test class in using RestTemplate in main method.

->Use Chrome with Postman to test all Http methods (or)

->Write unit test cases to test service class