

MAWLANA BHASHANI SCIENCE AND TECHNOLOGY UNIVERSITY

SANTOSH, TANGAIL-1902



DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY

Lab Report

Lab Report No: 08

Lab Report on: CRUD Operations in Spring Boot using MySQL

Course Title: Software Engineering and Project Management Lab

Course Code: ICT-3108

Submitted By	Submitted To
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Date of Performance:

Date of Submission:

Lab Report 8:

A ~~crud~~ CRUD Application is used to manage data in a database. In this lab, we manage student records such as ID, name, email, and course using Spring Boot and MySQL.

Spring Boot Simplifies backend development by providing:

1. Embedded server
2. Easy database connectivity
3. JPA repository support for CRUD operations

Code:

```
import org.springframework.boot.*;  
import org.springframework.boot.autoconfigure.*;  
import org.springframework.web.bind.annotation.*;  
import org.springframework.data.jpa.repository.*;  
import java.persistence.*;  
import java.util.*;  
@SpringBootApplication
```

@RestController

public class App {

public static void main(String[] args) {

SpringApplication.run(App.class, args);

@Entity

class Student {

@Id @GeneratedValue Long id;

String name;

}

interface Repo extends JpaRepository<Student,

Long> {}

Repo r; APP (Repo r) { this.r = r; }

@PostMapping("/c") Student c (@RequestBody
Student s) { return r.save(s); }

@GetMapping("/r") List<Student> r() { return
r.findAll(); }

@PostMapping("/u/{i}") Student u (@PathVariable
Long i, @RequestBody Student s) {
Student x = r.findById(i).get(); x.name =
s.name; return r.save(x); }

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