SAL INSTITUTE OF TECHNOLOGY AND ENGINEERING RESEARCH



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Student's Weekly Report of Internship

Student Name:	Anshul Patel				
Enrollment Number:	210670107047				
Week Duration:	5 Days				
Name Of Organization:	OPL Innovate				
External Guide Name:	Deepak Vishwakarma				
External Guide Contact details:	Email: Deepak.vishwakarma@oplinnovate.com Mob No: 9827375391				
Internal Faculty Guide Name:	Dr. Krishna Hingrajiya				

Work done in last Week with description (Attach supporting Documents Like Diagram, Screen Shot of each Work):

1. Service Layer Design

Date:

2. Data Transfer & Validation

3. CRUD Op	perations	11					
Plans for next week:							
1.Develop API controllers to expose service functionalities for frontend interactions.							
2. Optimize business logic to improve execution efficiency.							
3.Introduce structured error-handling mechanisms.							
Total Working Hrs: 40 Signature of Student:							
The above entries are correct, and the grading of work done by Trainee is							
Excellent	Very Good	Good	Fair	Below Average	Poor		
Signature of External Guide with Company Seal: Signature of Internal Guide:							

Date:

Service Layer Implementation

Work Completed:

Service Layer Design:

Developed modular services to handle business logic separately from controllers.

Ensured the service layer acts as an intermediary between controllers and repositories.

CRUD Operations:

Implemented create, read, update, and delete functionality for all major entities.

Designed services to handle edge cases and prevent invalid operation

Data Transfer & Validation:

Created DTOs to manage input/output consistency and reduce security risks.

Implemented request validation to prevent incorrect data submission.

Transaction Management:

Enabled transactional processing for order management and multi-step operations.

Ensured rollback mechanisms to maintain data consistency in case of failures.

Testing & Debugging:

Performed unit tests on all service methods.

Used logs and breakpoints to debug business logic issues.

Future Plans:

Develop API controllers to expose service functionalities for frontend interactions.

Optimize business logic to improve execution efficiency.

Introduce structured error-handling mechanisms.

Example:

UserDto Class

```
package com.example.app.dto;
import jakarta.validation.constraints.NotBlank;
import lombok.Data;

@Data
public class UserDto {
    @NotBlank(message = "Username is required")
    private String username;

@NotBlank(message = "Password is required")
    private String password;
}
```