

# JAVA DEVELOPER INTERNSHIP



# **Task 2: Student Record Management System**

- Objective: Create a CLI-based CRUD system for managing student records.
- Tools: Java, VS Code/IntelliJ CE.
- Deliverables: Java program with classes and menu options.

# Hints/Mini Guide:

- 1. Create a Student class with fields like ID, name, marks.
- 2. Use ArrayList to store student objects.
- 3. Implement options: Add, View, Update, Delete.

Outcome: Practice real-world data structure use.

#### **Interview Questions:**

- 1. What is encapsulation?
- 2. How are ArrayLists different from arrays?
- 3. How to sort an ArrayList?
- 4. What is constructor overloading?
- 5. How does garbage collection work in Java?
- 6. Why do we use getters and setters?
- 7. What is a static variable?
- 8. What is the use of final keyword?
- 9. Difference between compile-time and runtime errors?
- 10. What are access modifiers?

Key Concepts: Classes, Collections (ArrayList), loops, encapsulation.

# 📤 Submit Here:

After completing the task, paste your GitHub repo link and submit it using the link below:

• <u>Submission Link</u>

# ★ Task Submission Guidelines

#### • Time Window:

You can complete the task anytime between 10:00 AM to 10:00 PM on the given day. Submission link closes at 10:00 PM

#### • Self-Research Allowed:

You are free to explore, Google, or refer to tutorials to understand concepts and complete the task effectively.

### • X Debug Yourself:

Try to resolve all errors by yourself. This helps you learn problem-solving and ensures you don't face the same issues in future tasks.

#### • No Paid Tools:

If the task involves any paid software/tools, do not purchase anything. Just learn the process or find free alternatives.

#### • CitHub Submission:

Create a new GitHub repository for each task.

Add everything you used for the task — code, datasets, screenshots (if any), and a **short README.md** explaining what you did.

# **L** Submit Here:

After completing the task, paste your GitHub repo link and submit it using the link below:

• **[Submission Link]** 



