

Case Study: Project Management System

Choice 2: Add Project

```
--- Project Management Menu ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 2
Enter Project Name: Sino Techno
Enter Description: Business Application
Enter Start Date (YYYY-MM-DD): 2024-10-23
Enter Status: Completed
☒ Project added successfully.

--- Project Management Menu ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 2
Enter Project Name: Inventory System
Enter Description: Manages Product stocks
Enter Start Date (YYYY-MM-DD): 2025-04-01
Enter Status: started
☒ Project added successfully.
```

```

--- Project Management Menu ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 2
Enter Project Name: CRM Platform
Enter Description: Customer Relation Management
Enter Start Date (YYYY-MM-DD): 2025-03-15
Enter Status: dev
☑ Project added successfully.

--- Project Management Menu ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 2
Enter Project Name: E-Commerce App
Enter Description: Online shopping platform
Enter Start Date (YYYY-MM-DD): 2025-02-20
Enter Status: Build
☑ Project added successfully.

```

Project Data added to the Table:

```
30 • select * from project;
```

```
31
```

Result Grid					
		Filter Rows:	Edit:		
	id	projectName	description	startDate	status
▶	1	Sino Techno	Business Application	2024-10-23	Completed
	2	Inventory System	Manages Product stocks	2025-04-01	started
	3	CRM Platform	Customer Relation Management	2025-03-15	dev
	4	E-Commerce App	Online shopping platform	2025-02-20	Build
*	NULL	NULL	NULL	NULL	NULL

Choice 1: Add Employee

```
--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 1
Enter Name: Agalya
Enter Designation: Developer
Enter Gender: Female
Enter Salary: 120000.00
Enter Project ID: 2
☑ Employee added successfully.

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 1
Enter Name: Arun
Enter Designation: Data Engineer
Enter Gender: Male
Enter Salary: 100000.00
Enter Project ID: 4
☑ Employee added successfully.
```

```

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 1
Enter Name: Sreeni
Enter Designation: Tester(Q/A)
Enter Gender: Male
Enter Salary: 95000.00
Enter Project ID: 5
☑ Employee added successfully.

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 1
Enter Name: Abinaya
Enter Designation: Backend Developer
Enter Gender: Female
Enter Salary: 130000
Enter Project ID: 1
☑ Employee added successfully.

```

Employee's Data added to the Table:

```

31 • select * from employee;
32
33

```

	id	name	designation	gender	salary	projectId
▶	1	Agalya	Developer	Female	120000	2
	2	Arun	Data Engineer	Male	100000	4
	3	Sreeni	Tester(Q/A)	Male	95000	5
	4	Abinaya	Backend Developer	Female	130000	1
✱	NULL	NULL	NULL	NULL	NULL	NULL

Choice 3: Add Task

```
--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 3
Enter Task Name: Design UI Mockup
Enter Project ID: 4
Enter Employee ID: 1
Enter Status (Assigned / Started / Completed): Assigned
☑ Task added successfully.

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 3
Enter Task Name: Backend API Dev
Enter Project ID: 4
Enter Employee ID: 4
Enter Status (Assigned / Started / Completed): Started
☑ Task added successfully.
```

```

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 3
Enter Task Name: Test Login Flow
Enter Project ID: 2
Enter Employee ID: 3
Enter Status (Assigned / Started / Completed): Completed
☑ Task added successfully.

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 3
Enter Task Name: Write Docs
Enter Project ID: 1
Enter Employee ID: 2
Enter Status (Assigned / Started / Completed): Assigned
☑ Task added successfully.

```

Task Data added to the Table:

32 • `Select * from task;`

	taskId	taskName	projectId	employeeId	status
▶	1	Design UI Mockup	4	1	Assigned
	2	Backend API Dev	4	4	Started
	3	Test Login Flow	2	3	Completed
	4	Write Docs	1	2	Assigned
*	NULL	NULL	NULL	NULL	NULL

Choice 4: Assign Project to Employees

Assign Project-1 to Employee-3

```

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 4
Enter Project ID: 1
Enter Employee ID: 3
☒ Project assigned to employee.

```

Output:

Result Grid						
	id	name	designation	gender	salary	projectId
▶	1	Agalya	Developer	Female	120000	2
	2	Arun	Data Engineer	Male	100000	4
	3	Sreeni	Tester(Q/A)	Male	95000	1
	4	Abinaya	Backend Developer	Female	130000	1
✱	NULL	NULL	NULL	NULL	NULL	NULL

Assign Project-5 to Employee-4

```

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 4
Enter Project ID: 5
Enter Employee ID: 4
☒ Project assigned to employee.

```

Output:

Result Grid						
	id	name	designation	gender	salary	projectId
▶	1	Agalya	Developer	Female	120000	2
	2	Arun	Data Engineer	Male	100000	4
	3	Sreeni	Tester(Q/A)	Male	95000	1
	4	Abinaya	Backend Developer	Female	130000	5
*	NULL	NULL	NULL	NULL	NULL	NULL

Choice 5: Assigning Task in Project to Employee***Task-3 of Project-1 is assigned to the employee-3***

```

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 5
Enter Task ID: 3
Enter Project ID: 1
Enter Employee ID: 3
☒ Task assigned in project!

```

Output:

Result Grid					
	taskId	taskName	projectId	employeeId	status
▶	1	Design UI Mockup	4	1	Assigned
	2	Backend API Dev	4	4	Started
	3	Test Login Flow	1	3	Completed
	4	Write Docs	1	2	Assigned
*	NULL	NULL	NULL	NULL	NULL

Task-1 of Project-2 is assigned to Employee-1

```

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 5
Enter Task ID: 1
Enter Project ID: 2
Enter Employee ID: 1
☒ Task assigned in project!

```

Output:

Result Grid					
Filter Rows: <input type="text"/>					
	taskId	taskName	projectId	employeeId	status
▶	1	Design UI Mockup	2	1	Assigned
	2	Backend API Dev	4	4	Started
	3	Test Login Flow	1	3	Completed
	4	Write Docs	1	2	Assigned
•	NULL	NULL	NULL	NULL	NULL

```

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 6
Enter Employee ID to delete: 3
☒ Employee deleted.

```

```

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 6
Enter Employee ID to delete: 4
☒ Employee deleted.

```

```
32 • select * from employee;
33
```

<div> <div>Result Grid</div> <div> </div> <div>Filter Rows:</div> <div></div> <div>Edit:</div> <div> </div> </div>						
	id	name	designation	gender	salary	projectId
▶	1	Agalya	Developer	Female	120000	2
	2	Arun	Data Engineer	Male	100000	4
✱	NULL	NULL	NULL	NULL	NULL	NULL

Choice 7: Delete Project

Project-1 and Project-2 has been deleted from the Project table

```

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 7
Enter Project ID to delete: 1
☑ Project deleted.

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 7
Enter Project ID to delete: 2
☑ Project deleted.

```

Output:

```

33 • select * from project;
34

```

projectId	projectName	description	startDate	status
3	CRM Platform	Customer Relation Management	2025-03-15	dev
4	E-Commerce App	Online Shopping platform	2025-02-20	Build
5	Technovate WebApplication	Web application of technovate	2025-01-02	Testing Process Pending
NULL	NULL	NULL	NULL	NULL

Choice 8: List Tasks for Employee in Project

Task of the Employee's 5 and 1 in Project's 5 and 3

```
--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 8
Enter Employee ID: 5
Enter Project ID: 5
Tasks assigned:
Task ID: 8, Name: Backend Integration, Status: Assigned

--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 8
Enter Employee ID: 1
Enter Project ID: 3
Tasks assigned:
Task ID: 6, Name: Write Documents, Status: Started
```

Task of the Employee 8 and in the project 6

```
--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 8
Enter Employee ID: 8
Enter Project ID: 6
Tasks assigned:
Task ID: 5, Name: Test Login Flow, Status: Assigned
```

Choice 9: Exiting the System

```
--- Project Management System ---
1. Add Employee
2. Add Project
3. Add Task
4. Assign Project to Employee
5. Assign Task in Project to Employee
6. Delete Employee
7. Delete Project
8. List Tasks for Employee in Project
9. Exit
Enter choice: 9
Exiting application. Goodbye!
```