Menu Layer

- 1. Add Department
- 2. Add Employee
- 3. Display Company
- 0. Exit

main()

Commit Layer

- addDepartment()
- addEmployee()

Storage-sub Layer

- getDepartments()
- getEmployees()
- getEmployeeDepartmentMap()

pull
assign()

Company Layer

- viewCompanyStructure()

pull
pull

Storage Layer

- departments
- employees
- employeeDepartmentMap

pull for getEmployees()

pull

High level explanation

1. Add Department choice calls addDepartment() method that calls getDepartments() method for protected HashMap list and stores: departmentID, departmentName in departments DB

2. Add Employee choice calls addEmployee() method that calls getEmployees() method for protected HashMap list and stores: employeeID, employeeName in employees DB

- getEmployees() method also calls getDepartments() method and pulls departments data from departments DB for assign() method
- assign() method stores employeeID, departmentID in protected HashMap list: employeeDepartmentMap DB

3. Display Company choice calls viewCompanyStructure() method that calls getEmployeeDepartmentMap() method for employeeDepartmentMap DB data and calls departments DB for matching purposes where it validates departments departmentsID with employeeDepartmentMap mappingDepartmentID

0. Exist system