**Project Description**:

"**EMPLOYEE - PROJECT MANAGEMENT SYSTEM**": Goals of the project are: The employee-project management system has been designed and developed to manage the process project details{project id, project name, start date, end date, no of resources required, no of resources allocated, project status} and employee details{emp id, emp name, emp status, gender, basic salary, bonus, project details}. In the employee object, the number of projects being allocated are a maximum of three projects with allocation information {project id, allocation start date, allocation end date, role, percentage allocated).

In order to add / delete the employee, the administrator has a built-in login id and password set. There may be any number of administrators. Here, in the employee details entry, the employee id’s auto generated. All employee details should be captured. The administrator is allowed to add projects. The project id is auto generated. All project details should be captured. The end date should be at least one month after the start date.

The administrator is allowed to allocate the projects to the resource (employee). Once a resource is allocated to a project, update the count. The project status is by default active. It will be set as "closed" manually. Resources cannot be allocated to closed projects.

An employee can be allocated to a max of 3 projects. The sum of allocation percentage of all the projects should be 100. As soon as an employee is allocated to 3 projects or allocation percentage sum is 100, the employee is marked as allocated. Add Bonus allocation.

The employee is given a user id and password. The employee can login and see his/her details including employment and project.

Note: Use of C language concepts such as pointers, dynamic array using DMA(no-memory leak), advanced pointers such as double pointer, function pointer, static library, macro constant, macro function, macro operators, conditional preprocessor, binary file streams, linked list, mutli threading (threads, RACE FIX, MUTEX, COND VAR). And use effectively development tools such as make file, gcc, gdb, valgrind, gprof, splint, UML tool such as [draw.io](https://draw.io), and git/GitHub.

When we are working on the code please make sure that these points to include:

* No of projects for the employee object
* Total allocation percentage for the employee object
* Diff of start date and end date----min 1 month
* Allocation should be between project start date and project end date.

1. emp details and admin (id generation ) - sai

Structure

* Employee id -- auto generation
* Employee password
* Total Allocation percentage[100]
* Employee no of Projects
* Employee name
* Employee Gender
* Employee Basic salary
* Employee Bonus
* Employee Status

Function

* Create user()
* Add emp() --files
* Delete emp() --files
* Edit emp() --files
* Read by id() –files

Notes:-

1. Emp can see emp details and allocated projects.

2. Project details - Mounika

Structure

* project id -- auto generation
* project name
* no of employees required
* Project start date
* Project end date
* Project no of employees required
* Project Status

Note:-

1. Diff of start date and end date----min 1 month
2. Project status default active
3. Create enum for status

Function

* Create project()
* Project close()
* Add project() --files
* Delete project() --files
* Edit project() --files
* Read by id() --files

3. Project allocation -Narosh and Sharanukumar

Structure

* Employee id
* Project id
* Allocation start date
* Allocation end date
* Allocation role
* Allocation Percentage

Function

* Create allocation ()
* Add allocation () --files
* Delete allocation () --files
* Edit allocation () --files
* Read by id() –files

Note: -

1. Allocation should be between project start date and project end date.
2. No of projects for the employee object
3. Total allocation percentage for the employee object
4. If the project is closed ,don’t allocate resources to the project
5. If Sum of allocation is max is 100% or if emp allocated to 3 project, the don’t allocate resource.
6. If emp is allocated, emp status must be allocated.

4. Admin creation

Structure

* Id
* Password

Function

* Create admin()
* Add admin() --files
* Delete admin() --files
* Edit admin() --files
* Read by id() --files

Note:-

* Add project max 3 to emp
* Allocate project ,once allocated update count hence project status active