

LoadSave
fromString(String data): LoadSave toString(): String

Project:LoadSave
name: String description: String listOfTasks: List<Task> listOfTaskLogs: List<TaskLog> leader: Employee

EmpType:LoadSave
name: String isManager: boolean

Request:LoadSave
employee: Employee reason: String approval: enum(pending, rejected, approved)

TaskLog:LoadSave
fromTime: DateTime toTime: DateTime assignedEmployee: Employee task: Task
calculateTime(): double

Task:LoadSave
code: String title: String description: String assignedEmployee: Employee taskPhase: TaskPhase project: Project priority: enum(high, normal, low) creator: Employee startDate: Date endDate: Date EST: double

LeaveRequest:Request
duration: int leaveType: enum(sickleave, vacation, urgent)

User:LoadSave
-uname: String -password: String -utype: enum(admin, employee)
canlogin(String uname, String password): boolean

TaskPhase:LoadSave
phase: String

TimeCard:LoadSave
employee: Employee attendance: DateTime departure: DateTime

Employee: User
empType: EmpType missionRequests: List<Request> permissionRequests: List<Request> leaveRequests: List<LeaveRequest>

Application
<u>+userDataHandler: DataHandler<User></u> <u>+employeeDataHandler: DataHandler<Employee></u> <u>+taskDataHandler: DataHandler<Task></u> <u>+leaveRequestDataHandler: DataHandler<LeaveRequest></u> <u>+empTypeDataHandler: DataHandler<EmpType></u> <u>+taskPhaseDataHandler: DataHandler<TaskPhase></u> <u>+requestDataHandler: DataHandler<Request></u> <u>+timeCardDataHandler: DataHandler<TimeCard></u> <u>+taskLogDataHandler: DataHandler<TaskLog></u> <u>+projectDataHandler: DataHandler<Project></u> <u>+user: User</u> <u>+currentmodule: Module</u>
<u>+main(): void</u> <u>+initializeData(): void</u> <u>+login(): void</u> <u>+startModule(): void</u>

DataHandler<T extends LoadSave>
filePath: String file: File fileWriter: FileWriter fileReader: Scanner list: List<T>
save(): void update(int index, T object) add(T object): int delete (int index): void get(int index): T getLength(): int

Module
currentUser: User
startModule(): void

EmployeeModule: Module
currentEmployee: Employee
viewTimeCards(): void createTimeCard(TimeCard timeCard): void viewRequests(): void makeRequest(Request request): void makeLeaveRequest(LeaveRequest leaveRequest): void manageRequests(): void manageRequest(Request request): void

TaskModule: Module
currentEmployee: Employee project: Project
viewTasks(): void viewTask(Task task): void viewTasklogs(Task task): void viewTasklog(TaskLog taskLog): void manageTasks(): void createTaskLog(Task task, DateTime fromTime, DateTime toTime):TaskLog

AdminModule: Module
manageUsers(): void manageEmployees(): void mangeProjects(): void mangeEmpType(): void manageTaskPhases(): void