Entity Classes

Event(abstract class)	

- Event() - Constructor method of Event contains of following attributes: - start - the start time of the event, using java.time Instant variable. - duration - the amount of time that from event start to end. - name - the name of the event - location - the name of the specific address of the event. - capacity - the maximum number of employees for the event. In the consideration of efficiency, too many employees would cause redundancy. - Getter for some attributes above.	1. Parent Class of:
	  a. Shift
	  b. Meeting

Meeting	
- Meeting() - Constructor of Meeting: - super() - Holder - the Employee to host the meeting - Participants - list of Employees who attend the meeting	1. Child class of "Event" 2. Employee

Shift	
- Constructor of Shift: - super()	1. Child class of "Event"

Employee	
- Employee() - Constructor of Employee contains of following attributes: - name - the name of an employee. Different employees might have the same name. - ID - the unique ID of the employee. - events - a list of events involved by the employee - maxHoursPerWeek - The max hours employee can work in a day - salary - hourly wage of the employee. - schedulable - a boolean variable indicating whether the employee can be assigned an event (due to leave) - Getter for some attributes above.	1. Event 2. Organization

Organization	
- Organization() - constructor method of organization. All of the Employees in this Organization are stored in a dictionary with Int of Employee's ID as key and the corresponding Employee as value. - getEmployee(int id) - based on id, return the corresponding employee. - addEmployee(int id, Employee) - add an employee - removeEmployee(Employee) - removes an employee	1. Employee

Calendar	
- Calendar() - constructor method of Calendar. - events - arraylist of all events - addEvent(Event) -- adds an event to the event's list	1. Events

Use Case Classes

Scheduler	
- Scheduler() - An abstract class which includes several abstract methods: - createEvent() - create an Event and add to the Calendar by its date - deleteEvent() -delete an existing Event from the Calendar - assign() - Assigning Event to Employee	1. Event 2. Calendar 3. Employee

ShiftScheduler	
- ShiftScheduler() - An abstract class which includes several abstract methods: - Inherit create, delete and assign method from the superclass	1. Employee 2. Event 3. Calendar 4. Subclass of Scheduler

MeetingScheduler	
- createEvent() - Override create method from parent class Scheduler. Input more information as Holder(Employee), Participants(List of Employee). - inherit delete & assign method	1. Employee 2. Event 3. Clendar 4. Subclass of Scheduler

EmployeeModifier	
- EmployeeModifier() - constructor method of EmployeeModifier contains of attribute: - organization - an Organization object - hireEmployee(): Add an employee to the organization. - fireEmployee(): Delete an employee from the organization after a certain amount of time. Within that time, mark the employee unschedulable, thus stop assigning a new Event to him. After that, delete him from the organization and Events he participated in. - SalaryEvaluation(): Calculate the Salary for the Employee based on hourly salary and workTime.	- Employee - Organization - Event

Controller

EventManager	
controller that enables HR access to create Event, delete Event and assign Event to employees	Scheduler - ShiftScheduler - MeetingScheduler

EmployeeManager

controller that enables HR access Employee Modifier to hire and fire employees	EmployeeModifier

External Interfaces:

Command / UI	
1. Implement a command line interface for exposing access to the employee roster and the calendars via their respective controllers.	EventManager EmployeeManager