

Read entire thing once

Class diag

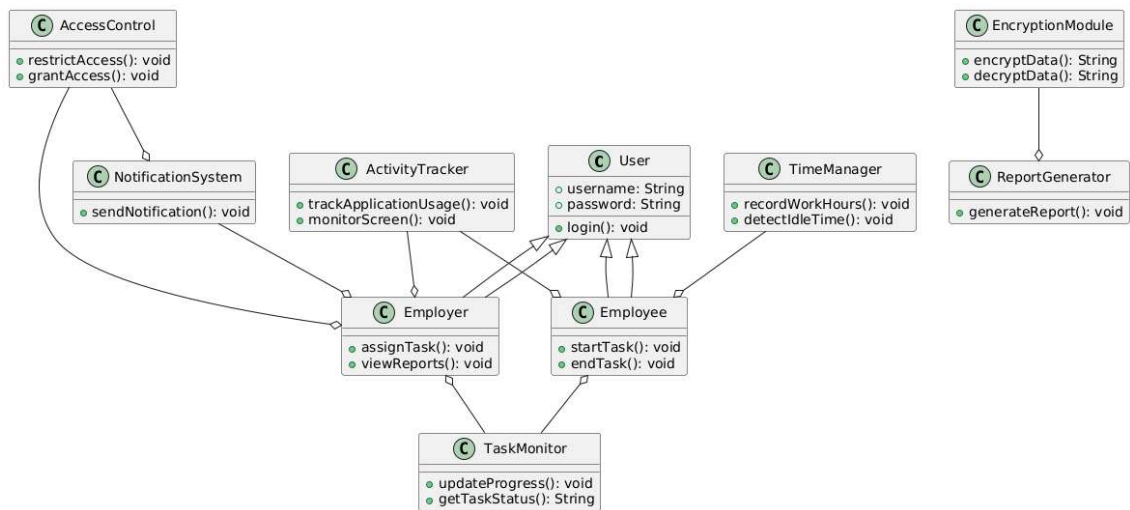
code

Sequence diag

code

Alternate diag of seq

Class diagram



@startuml

' Class Diagram

class User {

+username: String

+password: String

+login(): void

}

class Employer extends User {

+assignTask(): void

+viewReports(): void

}

```
class Employee extends User {  
    +startTask(): void  
    +endTask(): void  
}
```

```
class ActivityTracker {  
    +trackApplicationUsage(): void  
    +monitorScreen(): void  
}
```

```
class TimeManager {  
    +recordWorkHours(): void  
    +detectIdleTime(): void  
}
```

```
class TaskMonitor {  
    +updateProgress(): void  
    +getTaskStatus(): String  
}
```

```
class AccessControl {  
    +restrictAccess(): void  
    +grantAccess(): void  
}
```

```
class NotificationSystem {  
    +sendNotification(): void  
}
```

```
class EncryptionModule {
```

```
+encryptData(): String  
+decryptData(): String  
}
```

```
class ReportGenerator {  
    +generateReport(): void  
}
```

User <|-- Employer

User <|-- Employee

Employer o-- TaskMonitor

Employee o-- TaskMonitor

ActivityTracker --o Employer

ActivityTracker --o Employee

TimeManager --o Employee

AccessControl --o Employer

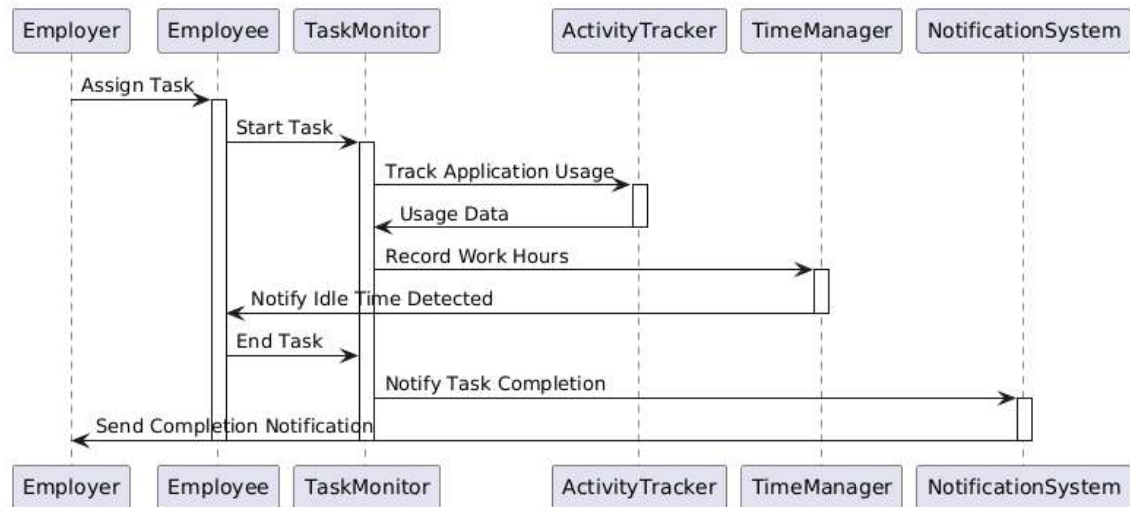
AccessControl --o NotificationSystem

NotificationSystem --o Employer

EncryptionModule --o ReportGenerator

@enduml

Sequence diagram



Code

participant Employer
 participant Employee
 participant TaskMonitor
 participant ActivityTracker
 participant TimeManager
 participant NotificationSystem

Employer -> Employee: Assign Task
 activate Employee

Employee -> TaskMonitor: Start Task
 activate TaskMonitor

TaskMonitor -> ActivityTracker: Track Application Usage
 activate ActivityTracker
 ActivityTracker -> TaskMonitor: Usage Data
 deactivate ActivityTracker

TaskMonitor -> TimeManager: Record Work Hours

activate TimeManager

TimeManager -> Employee: Notify Idle Time Detected

deactivate TimeManager

Employee -> TaskMonitor: End Task

TaskMonitor -> NotificationSystem: Notify Task Completion

activate NotificationSystem

NotificationSystem -> Employer: Send Completion Notification

deactivate NotificationSystem

deactivate TaskMonitor

deactivate Employee

alternate

without activation/deactivation

