Deliverable 2

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# Use Case Descriptions

Task Management Subsystem

Use Case: Display Current Task

-Input: Employee Logs on to mobile app.

-Output: Current task to be completed is displayed.

1. Employees log on to the app using their credentials.

2. Click on the current task allocated to the employee.

3. View status of current task (accepted, rejected, in progress, completed).

Use Case: Give Feedback on a task

-Input: A task is viewed by the employee.

-Output: Feedback is given regarding the task.

1. Employee views a certain allocated task.

2. The status of the given task is evaluated.

3. Feedback is given by the employee and notifications are sent to the employee by the administrator based on the status of the task.

Use Case: Complete Task

-Input: The employee accepts a certain task.

-Output: The employee provides evidence that the accepted task has been completed.

1. The employee receives a notification about a task that has been assigned to them.

2. The employee accepts the task.

3. The employee carries out the relevant actions required to aid the completion of the task.

4. The employee must provide evidence that the task has been completed (pictures, contractor documents etc.)

5. The task is regarded as completed.

Use Case: Request Extension

-Input: The employee requests a time extension for a task.

-Output: A notification is received detailing whether the extension has been approved or rejected.

1. The employee realises that the task cannot be completed in the agreed upon period.

2. The employee sends a notification to the administrator requesting an extension of the deadline.

3. The administrator reviews the request.

4. The administrator sends a notification back to the employee that indicates if the extension has been given or if the original deadline should be met.

Use Case: Rate Employee

-Input: Employee performance reports are viewed.

-Output: Employees are given a rating based on performance.

1. Each employee will have metrics and analytics specific to them.

2. These metrics will be in the form of tasks accepted, tasks completed, deadlines met etc.

3. These metrics will then be combined into a report.

4. The employee will receive a rating from the administrators and supervisor based on their performance.

Use Case: Resolve Extension

-Input: Extension request is received.

-Output: Extension request is either accepted or declined.

1. The administrator receives a request for an extension.

2. The administrator reviews the request.

3. The administrator decides whether the extension is necessary.

4. A notification is sent from the administrator to the employee stating whether the extension has been approved or rejected.

Use Case: Generate Report

-Input: Data is collected.

-Output: Report is generated.

1. The system keeps track of which employees accepted which tasks.

2. Employees must provide updates regarding progress on tasks.

3. Employees must send a notification and evidence that a task has been completed.

4. The updates from employees are converted into data.

5. The data is used to generate a report.

Task Creation Subsystem

Use Case: Create Task

-Input: Parameters of task.

-Output: Newly created task.

1. Administrator must create a name for the task.

2. The correct employees must be selected for the completion of the task.

3. The administrator needs to establish what materials will be needed for the task.

Use Case: View Suitable Employees

-Input: List of employees are viewed.

-Output: Specific employee recommended for a specific task.

1. The administrator will assess the employees available.

2. Recommendations will be made based on employee expertise.

Use Case: Assign Task

-Input: Employee skill set will be evaluated.

-Output: Employees will be assigned to tasks.

1. The administrator will view the skillset of the employee.

2. The employee will be assigned a task.

3. A notification will be sent to the chosen employee from the administrator informing them that they have been added to a certain task.

Use Case: Resolve Task Request

-Input: Task request sent to employee.

-Output: Employee will accept or reject task request.

1. Employees will receive task request notification.

2. Employees will either accept or reject the request.

3. If a request is accepted the employee will request stock and be officially added to the task, if the task request is rejected the employee must recommend a suitable replacement.

4. A notification regarding the result of the task request will be sent to the

administrator.

User Management Subsystem

Use Case: Enter Credentials

-Input: User enters credentials.

-Output: User is added to the system.

1. Users will enter personal details (Name, Surname, ID number, Email address).

2. System will evaluate the validity of details entered.

3. User details will be saved to the database and users will officially be added to the system.

Extensions

2a. Users will enter email in incorrect format.

i. Error message will be displayed.

ii. Users will be prompted to re-enter email.

Use Case: Edit User Details

-Input: User changes certain details.

-Output: Changes are saved, and the system is updated.

1. User logs on to the app.

2. User clicks on the profile.

3. User clicks of change details.

4. User alters details.

5. User clicks on save changes.

Extensions

3a. Changes could not be saved.

i. Error message will be displayed informing the user that changes have not been saved.

Use Case: Refer Contractor

-Input: Contractor is referred.

-Output: Contractor is hired.

1. The employee will notify the administration that they cannot complete the task.

2. The administration will assess other employees who could possibly complete tasks.

3. Employee will refer to an external contractor who could possibly complete the task.

4. Administrator will contact and obtain the services of the external contractor.

Use Case: Upload Documents

-Input: Documents will be selected.

-Output: Documents will be uploaded.

1. User clicks on “Upload documents”.

2. Users browse devices for documents to upload.

3. User selects relevant documents.

4. User presses open to attach documents.

5. Users upload documents.

Extensions

3a. No document was selected.

i. Error message will be displayed.

ii. Users will re-select documents.

Use Case: Send Registration Link

-Input: Administrator will generate and send registration link.

-Output: Employee/Contractor will open the link and complete the registration process.

1. Email containing registration link will be sent to the employee.

2. Employee will open a link.

3. Employees will be directed to the registration page.

4. Employees will enter details.

5. Employees will upload relevant documents.

6. Administrator will be notified of registration.

Extensions

4a. Details entered are incorrect.

i. Error message will be displayed.

ii. Users will be prompted to re-enter details.

5a. Documents are not selected.

i. Error message will be displayed.

ii. Users must re-select documents.

Use Case: Delete Employee/Contractor

-Input: Search for employee.

-Output: Employee is deleted from system.

1. The administrator will search for the employee in question.

2. The system will retrieve the employee information.

3. The administrator will click “Delete Employee”.

4. Employee will be removed from the system.

Use Case: Generate Employee Report

-Input: Certain employees are selected.

-Output: Report generated for selected employee.

1. Administrator will select the generated report.

2. Administrator will input parameters for which report needs to be generated.

3. Report will be generated based on selected parameters.

Extensions

2a. No employee will exist in the system for defined parameters.

i. Error message will be displayed.

Stock Management Subsystem

Use Case: Generate Stock Report

-Input: Certain stock items are selected.

-Output: Report generated for selected stock item.

1. Administrator will select the generated report.

2. Administrator will input parameters for which report needs to be generated.

3. Report will be generated based on selected parameters.

Extensions

2a. No stock item will exist in the system for defined parameters.

i. Error message will be displayed.

Use Case: Modify Stock

-Input: New stock is inputted.

-Output: Stock level is changed.

1. Administrator will go to “Add Stock”.

2. Administrator will add newly acquired stock to the system.

3. The stock level will be updated to account for the newly added stock.

4. The administrator will be notified regarding the status of the new stock input.

Extensions

2a. The system will reject the new stock.

i. An error message will be displayed.

ii. Administrator Must re-enter new stock items.

Use Case: Use Stock

-Input: Stock is used.

-Output: Stock level is modified.

1. Employees will use stock.

2. Administrator will be notified about the stock being used.

3. Relevant changes will be made to the stock level once the stock is used.

Use Case: Request Stock

-Input: Employee will request stock.

-Output: Administrator will accept or reject the request.

1. Employee sends a stock request to the administrator.

2. Administrator will review the employee’s request.

3. System will check the levels of the requested stock.

4. System will calculate if the stock level is low and notify the administrator.

5. Administrator will notify the employee if the request was accepted or rejected.

# Activity Diagrams

# Database Modelling

Employee

* \*ID
* \*Name
* \*Sur
* \*IsAdmin
* \*IsContractor
* DateRegistered?
* ID picture

Activity

* \*ID
* \*Name
* Description

Tasks

* \*Activity ID
* \*Task ID
* Date
* Time
* \*Status
* Description

Task-Employee Bridge

* \*Activity ID
* \*Task ID
* \*IsSupervisor
* Note on the task
* Feedback Provided

Skills

* \*Skill ID
* \*Skill Name
* Skill Description

Employee-Skills bridge

* \*Skill ID
* \*Employee ID
* Skill level

Task-Skills bridge (for skills required for the task)

* \*Skill ID
* \*Task ID
* Skill level needed

Equipment

* \*Equipment ID
* \*Equipment name
* Equipment description
* \*Equipment quantity total
* \*Equipment quantity available

Task-Equipment bridge

* \*Task ID
* \*Equipment ID
* \*Equipment quantity needed
* \*Equipment quantity taken out of storage currently

Stock

* \*Stock ID
* \*Stock name
* Stock description
* \*Stock Total

Task-Stock bridge

* \*Task ID
* \*Stock ID
* \*Stock quantity needed
* \*Stock quantity used so far

