IT314 Software Engineering

Group 26

Project : Xpense Tracker

➤ **Usecase Documentation:**

Use Case Name: User Login

Identifier: UC1

Actors: Employee, Manager

Preconditions:

- The user must have a registered account in the Expense Management System for their respective roles.

Postconditions:

- If credentials are valid, the user gains access to their respective dashboard.

Main Success Scenario:

1. User accesses the login page.

2. User enters their registered email and password.

3. System validates the entered credentials.

    [Extension point : Registration check]

4. the system grants access to the user's dashboard according to their roles.

Alternate Flows:

2a. If the entered email or password is incorrect, display an error messageand prompt the user to re-enter the information.

At extension point – Registration check:

If the user is not registered, refer Use Case 'User Registration' (UC-2).

Use Case Name: User Registration

Identifier: UC2

Actors: Employee, Manager

Preconditions:

- The user must not have an existing account in the Expense Management System.

Postconditions:

- The user's profile is created in the System.

Main Success Scenario:

1. User accesses the registration page.
2. User provides necessary information e.g. first_name, Last_name, email, password, Birth Date, Contact Number and role (employee/manager).
3. System validates the provided information.
4. System creates a new user profile with the provided information.

Alternate Flows:

2a. If the provided registration information is incomplete or invalid, display an error message and prompt the user to provide the necessary details again.

Use Case Name: Create Project and Invite Employees

Identifier: UC3

Actors: Employee, Manager

Preconditions:

- The user is logged into the system as the manager.
- There should be employees registered to be invited.

Postconditions:

- The project is created with the specified details.
- The invited employee is enlisted in the project.

Main Success Scenario:

1. The manager navigates to the "Projects" section of the application.
2. The manager selects the option to "Create New Project".
3. The manager fills in the project details, including:

   a. Project Name

   b. Description

   c. Budget

   d. Alert Limit

4. After creating the project, an option to invite employees is presented.
5. The manager search the employees and send the invite to join the project.
6. The invited employee receives a notification indicating they have been invited to join a project.
7. The employee reviews the pending project invitation and accept it.

Alternate Flow:

3a. The manager does not enter the required details or invalid details ,which may show error in project creation.

9a. The employee does not accept the invitation to join the project.

At any point during the project creation process, the manager may choose to cancel. The system discards the entered project details and returns the manager to the main dashboard.

Use Case Name: Add Expense

Identifier: UC4

Actors: Employee

Preconditions:

- The employee is logged into their profile.

- The employee is associated with the project for which they want to add an expense.

Post Conditions:

- The expense is successfully added to the selected project with the specified details.

- The project's total expenses are updated accordingly if approved.

- The employee can view the added expense in the project's expense log.

Main Success Scenario:

1. The employee navigates to the "Projects" section of the application.

2. Within the selected project, the employee chooses the option to "Add Expense."

3. The employee fills in the expense details, including:
   a. Expense Name
   b. Date of Expense
   c. Amount
   d. Link of uploaded bill
   e. Expense Category (selecting from options such as food, travel, fuel, internet, hotel, maintenance, other).
   f. Description

4. The employee submits the expense details for the selected project.

5. The system validates the entered information and associates the expense with the chosen project.

Alternate Flow:
2a. The employee cancels the expense addition at any point during the process. The system discards the entered details, and the employee returns to the dashboard.

Use Case Name: Verify Expense

Identifier: UC5

Actors: Employee, Manager

Preconditions:

• The employee must have submitted an expense request.

• The manager must have the necessary permissions to review the documents and make decisions on approval requests.

Post-Conditions:

• The status of the expense is updated to either "Approved" or "Rejected" based on the action taken by the Manager.

• If the request is approved, The total budget is reduced according to that.

• The employees are informed of the decision (approval or rejection) through notifications or communication channels defined in the system.

Main Success Scenario:

1. The Manager navigates to the "Expense" section of the system.

2. The system displays a list of pending approval requests to manager submitted by the employees.

3. The Manager selects the expense and review it to verify.

4. The Manager accepts the expense after verifying.

5. The system updates the status of the expense to 'Approved'.

6. The Employee receives the notification about same.

7. The Manager may continue to review other approval requests.

Alternate Flow:

4a. The Manager rejects the expense after verifying.

5a. The system updates the status of the expense to 'Rejected'.

Use Case Name: Generate Report

Identifier: UC6

Actors: Manager

Preconditions:

- The manager is logged into their profile.

- The manager has the necessary permissions to generate expense reports.

- Selected project has been created by manager.

Post Conditions:

- The report is generated for the selected project.

- The manager can view and download the report, containing Manager name, Employees, category-wise expense graph, employee-wise expense graph and expense details in tabular form.

Main Success Scenario:

1. The manager navigates to the "Project Analytics" section of the website.

2. For a particular project, manager is provided a report containing the details i.e. Manager name, Employees, category-wise expense graph, employee-wise expense graph and expense details in tabular form.

3. The manager submits the request to generate the expense report.

4. The system processes the request and compiles a detailed report in pdf format.

5. The manager only can download the report.

Alternate Flow:

1a. The manager cancels the report generation at any point. The system discards the entered setting

Use Case Name: Make Announcement

Identifier: UC7

Actors: Employee, Manager

Preconditions:

- The user must be logged into their account as either an employee or a manager.
- The employee must have joined the project.

Postconditions:

- The announcement is successfully posted on the project stream.

Main Success Scenario:

1. The user navigates to the project stream.
2. The user selects the option to make an announcement.
3. The user enters the announcement content and submits it.
4. The announcement is posted on the project stream for all team members to view.

Alternate Flows:

2a. If the user does not have the necessary permissions to make an announcement, display an error message.