# FDM

EXPENSES MANAGER

## Requirements, Use Cases and Risk Assessment

GROUP 15

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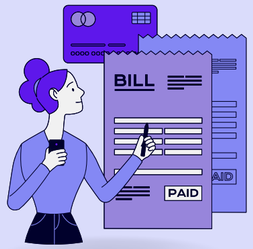
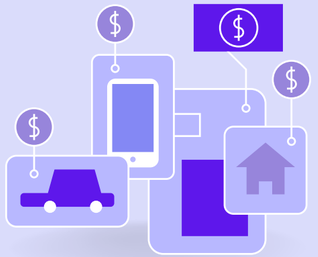
# Requirements Elicitation

Data Requirements

Functional System Requirements




Functional User Requirements



Functional Claim Requirements

Non-Functional Requirements

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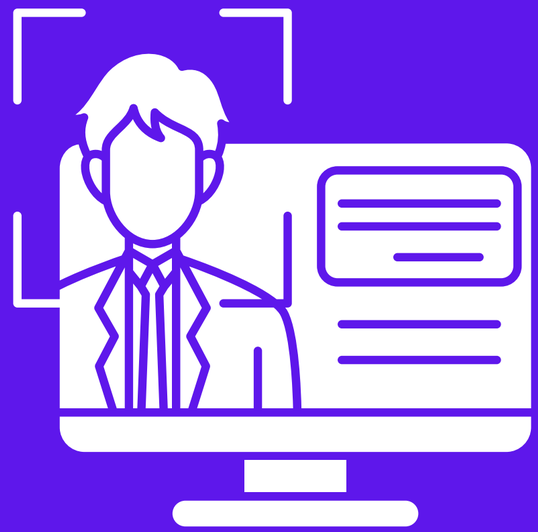
# Data RQs

**EMPLOYEES**
- ***[FE8]*** Personal information (name, role...)
- ***[FE2-3]*** Email and password for login
- ***[FE2-3]*** Budget and reliability score
- ***[FE2-3]*** List of claims submitted

**LINE MANAGERS**
- ***[FLM1]*** List of employees they oversee
- ***[FLM2]*** List of claims to process

**CONSULTANTS**
- ***[FC1]*** Location and currency of choice

**ADMINS**
- ***[FA4]*** Email and access code for login



**EXPENSES CLAIM**
- ***[FX2-3]*** Email of Employee who submitted it and of LM who processes it
- ***[FX1/4]*** Unique Claim ID and Proof of Expense ID
- ***[FX5-7]*** Expenditure amount, date of submission, status, currency
- ***[FX8-19]*** Specific details based on the type of claim

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# System Requirements

**GENERATE / CALCULATE**

- ***[FS17]*** Employee reliability score
- ***[FS18]*** Employee remaining budget
- ***[FS3]*** Monthly Expenditure sheets / insights
- ***[FS15]*** Claim ID and Proof of Expense ID

**NOTIFY**

- ***[FS9]*** LM if Employee exceeds budget
- ***[FS8]*** LM if Employee's score goes under 65%
- ***[FS6]*** Finance for approved claims and Expenditure sheets
- ***[FS7]*** HR for reported claims

**ENSURE**

- ***[FS19]*** Each claim is submitted with an Expense Proof
- ***[FS2]*** Tailored interfaces for each User Type

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# User Requirements

**EMPLOYEES**

- ***[FE1]*** can log in with email and password
- ***[FE6]*** can make new expense claims
- ***[FE7]*** can submit proof of expense claim (e.g. receipt)
- ***[FE11]*** can view their remaining allowance

**LINE MANAGERS**

- ***[FLM3]*** can approve claims
- ***[FLM4]*** can report claims, giving their reason
- ***[FLM5]*** can view information for all employees they oversee

**CONSULTANTS**

- ***[FC2]*** can change their location shown on the system
- ***[FC3]*** can change their currency shown on the system

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# Claim Requirements

**TRAVEL CLAIMS**

- ***[FX8-9]*** Transportation type and dates of travel
- ***[FX10]*** Motive of travel

**OVERNIGHT STAY CLAIMS**

- ***[FX11-12]*** Structure type, name and location
- ***[FX13]*** Check in and check out dates

**MEAL CLAIMS**

- ***[FX14-16]*** Meal type, location/structure, date of meal

**PURCHASE CLAIMS**

- ***[FX17-19]*** Purchase type, items and store, date of purchase

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# Non-Functional Requirements

**PERFORMANCE**

- ***[NF1]*** Authentication takes less than 5 seconds
- ***[NF5]*** Claims load within 5 seconds

**USABILITY**

- ***[NF4]*** User must be able to login within 3 clicks
- ***[NF6]*** User shall be able to perform any specified use case scenario within 10 minutes
- ***[NF8]*** User must be able to apply any filter within 4 clicks

**PLATFORM**

- ***[NF2]*** The system will run on Google Chrome, Firefox and Safari web browsers
- ***[NF3]*** Backend application for administrators shall run on the Windows platform

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# Use Cases

**WHAT**

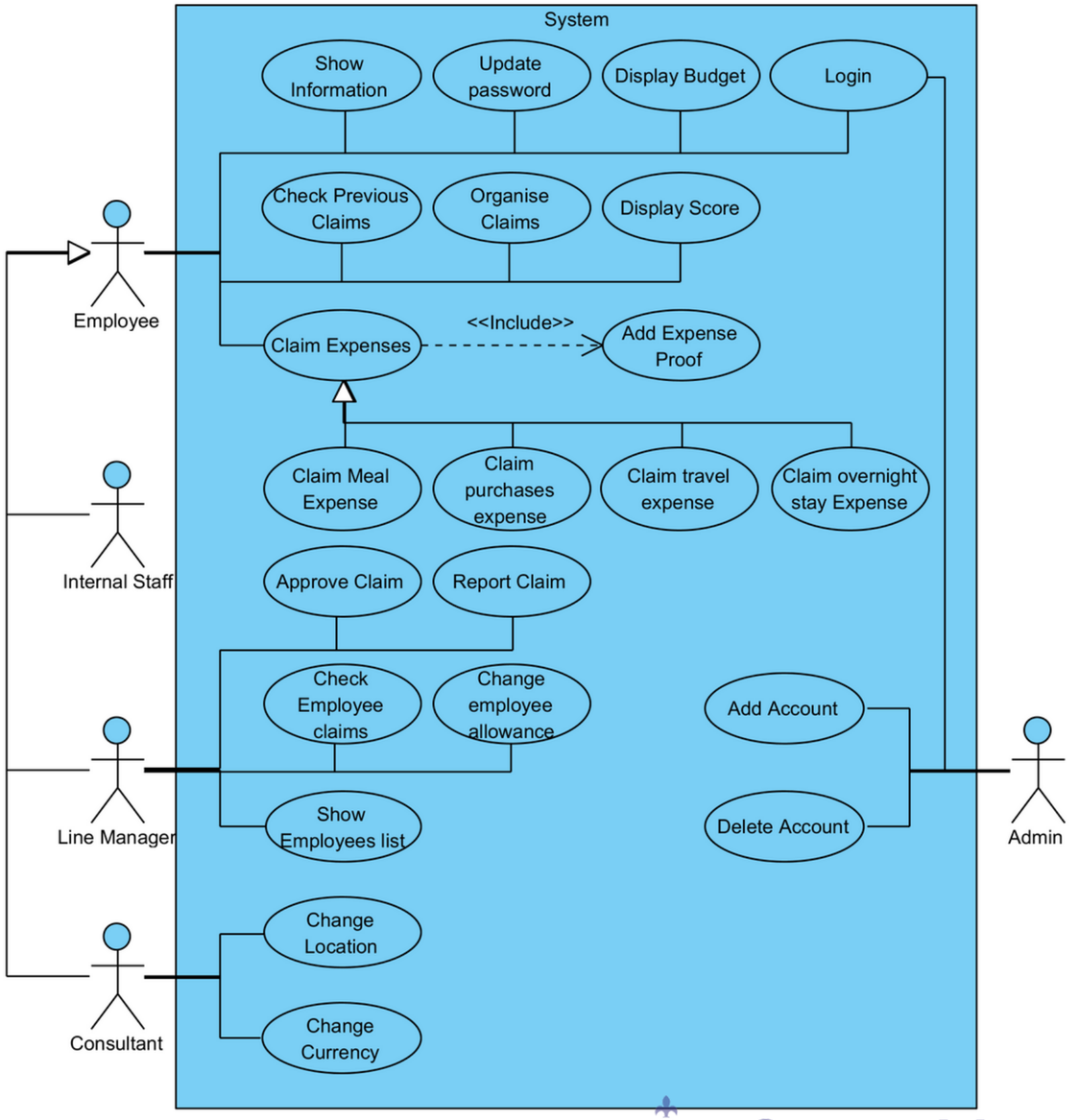
- Use cases represent actions that user can do on the system

**WHY**

- Use cases explain who interacts with the system and how they interface themselves with it

**WHO**

- FDM Expenses Manager will support four types of users: Employees (Line Managers, Internal Staff, Consultants) and Admins

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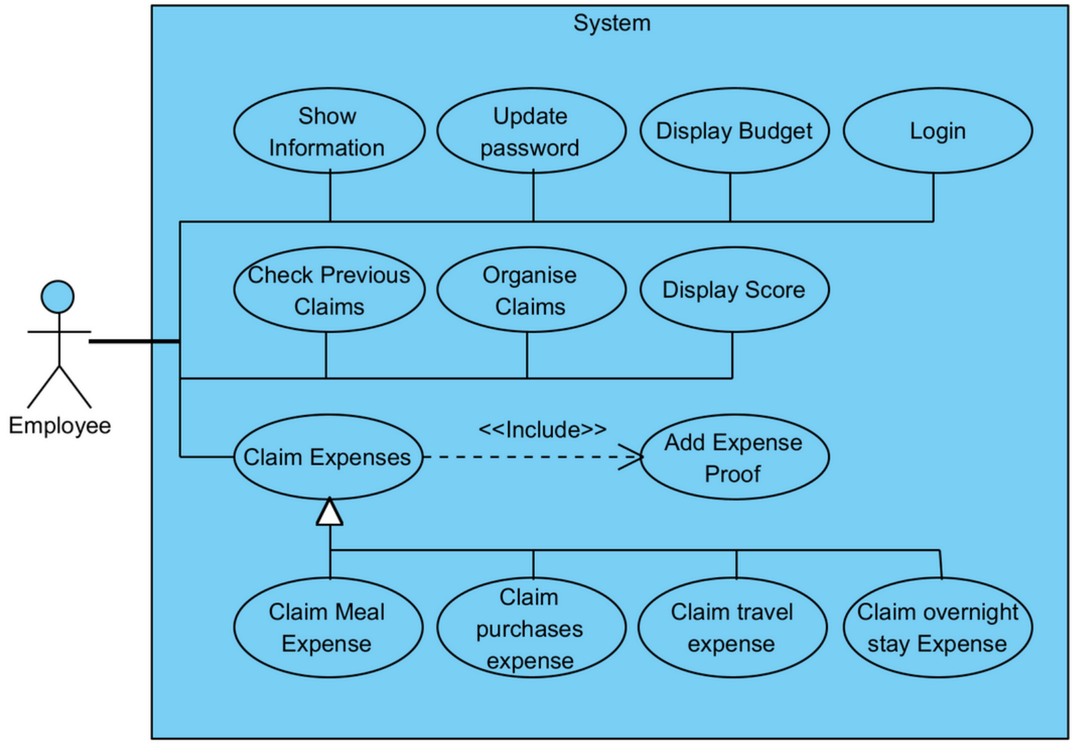
# Employees

## Internal Staff, Consultants and Line Managers




**GENERAL** Log in to the web based system

**EXPENSE RELATED** Claim expenses (four types), check previous claims and organise them, add a proof of expense

**ACCOUNT RELATED** Show personal information stored in the system, display reliability score and budget, update Password

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1. Click "Claim Expense"

2. Fill in expenditure details

3. Provide Proof of Expense

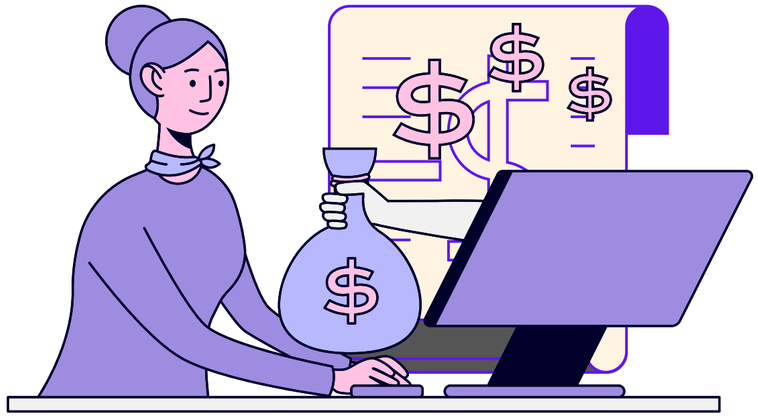
Is file correct? Are all fields filled?

No

4. Enter missing details or add another file

Yes

5. Press Submit!



# Submit Claim

An Employee requests a reimbursement for business related expenses.

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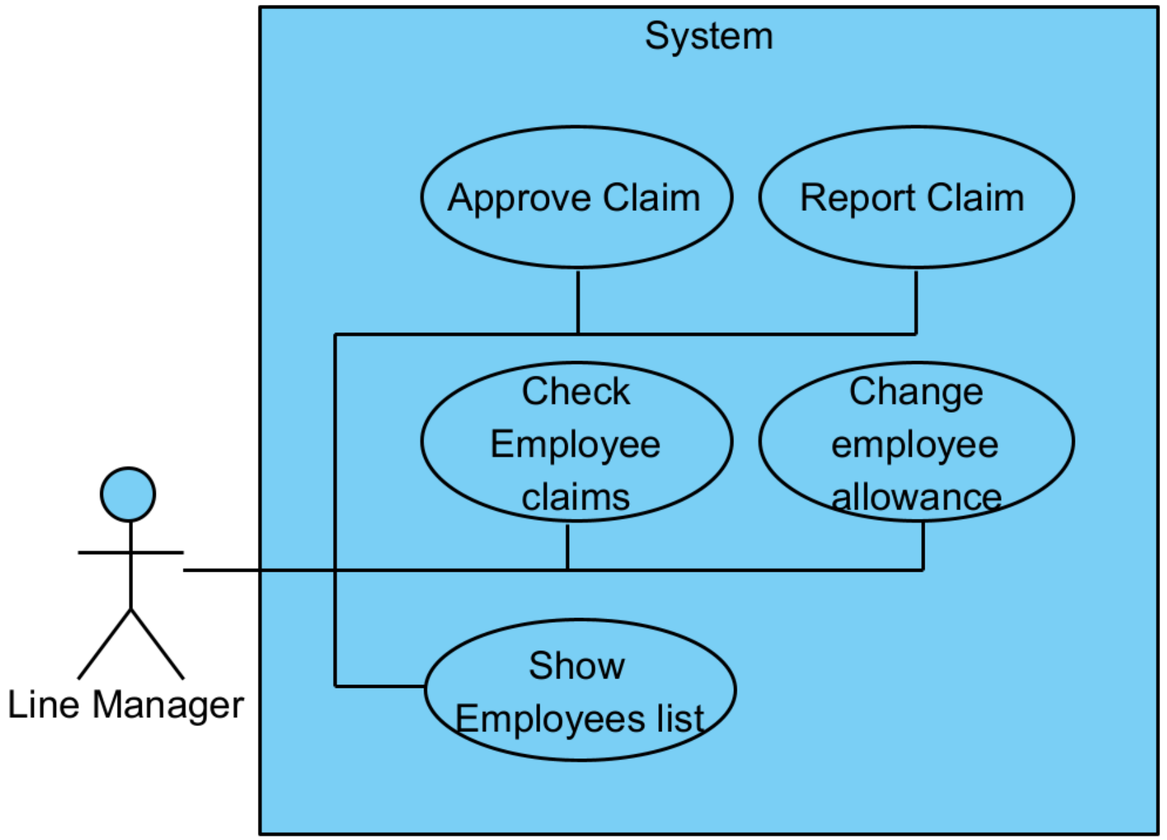


# Line Managers

**CLAIM RELATED**

Approve or report claims, show employee claims and organise them

**EMPLOYEE RELATED**

Show the information of each employee the LM oversees

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# Report Claim

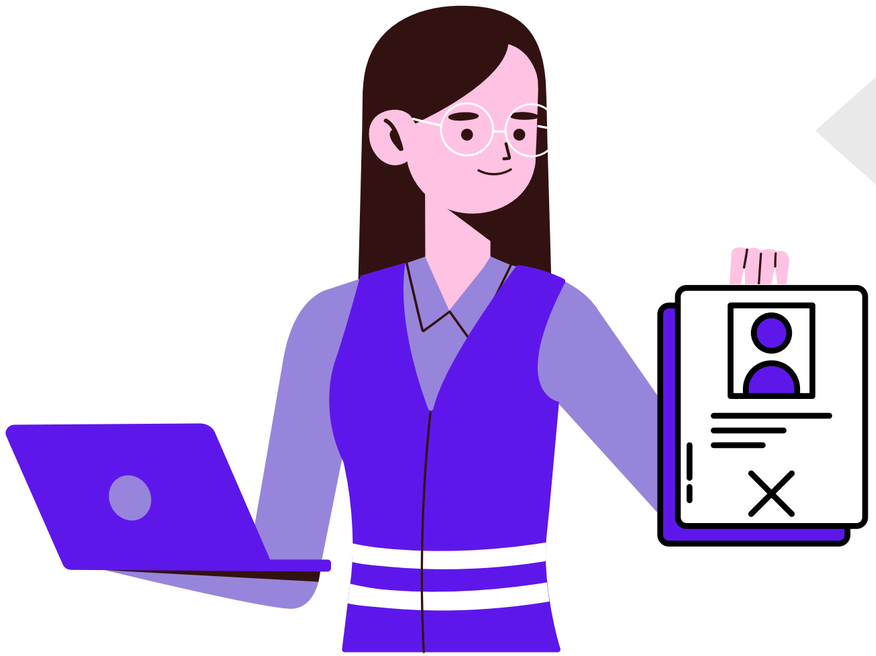
A Line Manager rejects an expense claim and reports it.

1. Navigate the list of pending claims
2. View claim details
3. Click "Report Claim" and choose motivation
4. Optionally give more information
5. Error message displayed

Backend is running correctly?

Yes

No



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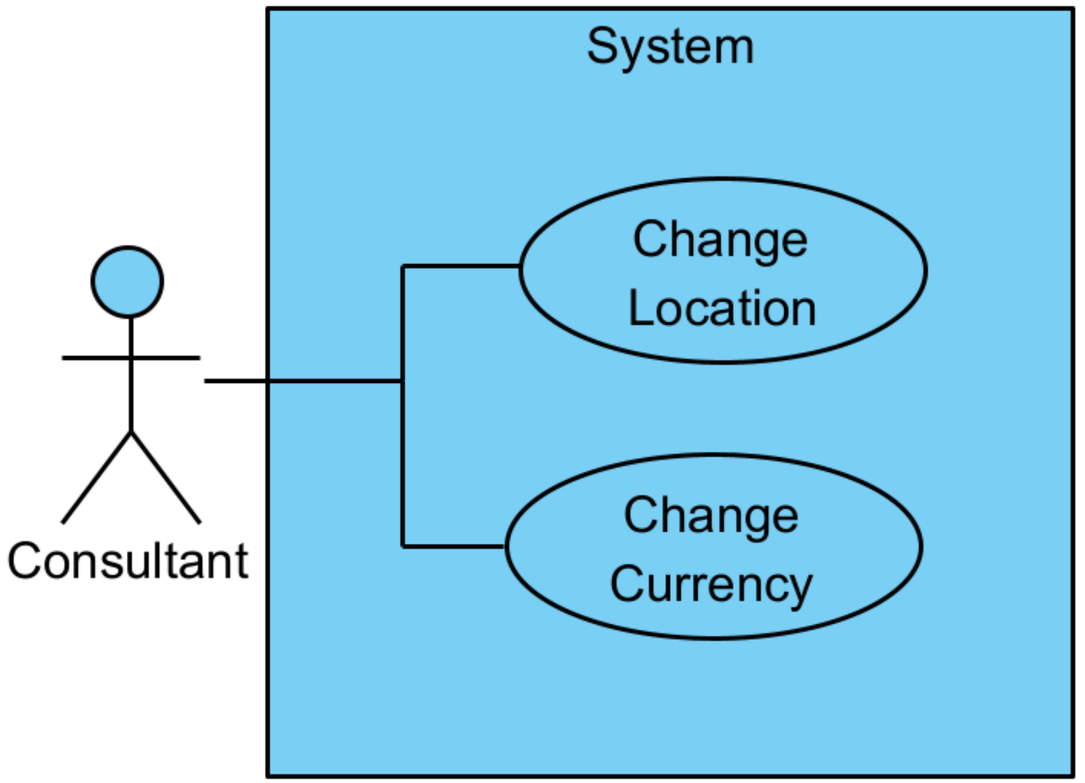
# Consultants

**CHANGE LOCATION** Consultants work locally and internationally

**CHANGE CURRENCY** Working internationally means payment in differing currency types

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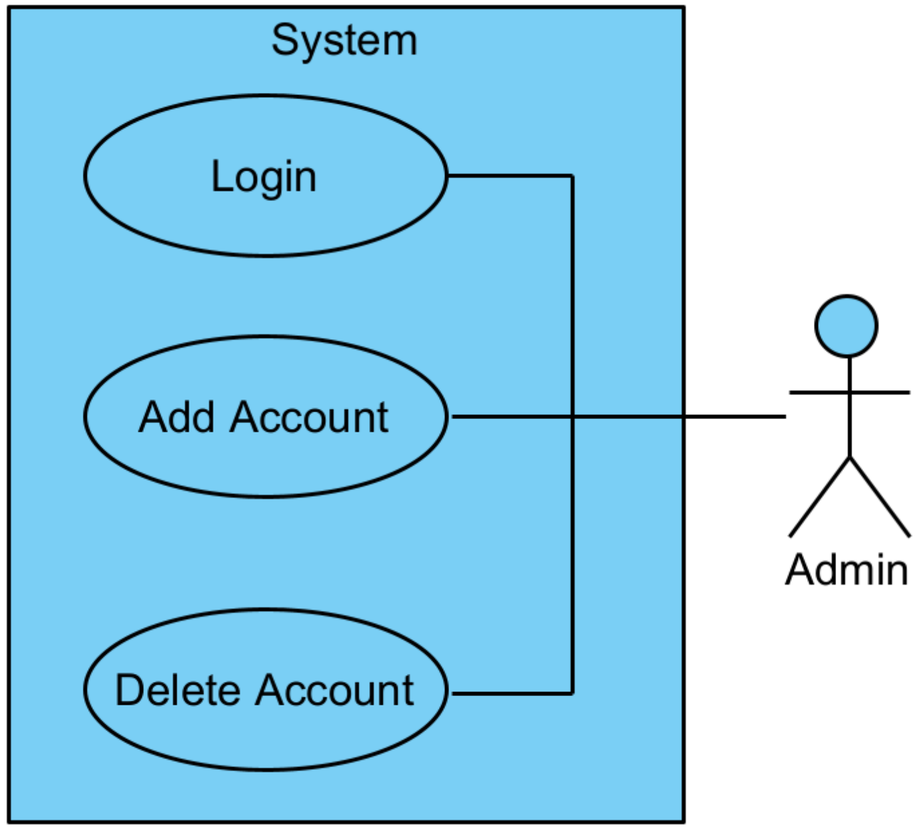
# Administrators

**LOGIN** Access the desktop based system

**ADD ACCOUNT** Add employee type accounts to the system

**REMOVE ACCOUNT** Remove employee type accounts from the system

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# Risks

## High

- Poor time management
- Team members are not productive

## Medium

- Poor allocation of work
- Overly ambitious project scope
- Lack of comunication

## Low

- Breach of data
- Lack of version control
- Not enough technical experience

# Mitigations

- Frequent progress meetings and project plan adjustments
- Consider switching members' roles

- Evenly divide work across the team
- Focus on key requirements
- Communicate progress outside of meetings

- Perform testing with fake data
- Ensure frequent back ups
- Experiment and learn different technologies

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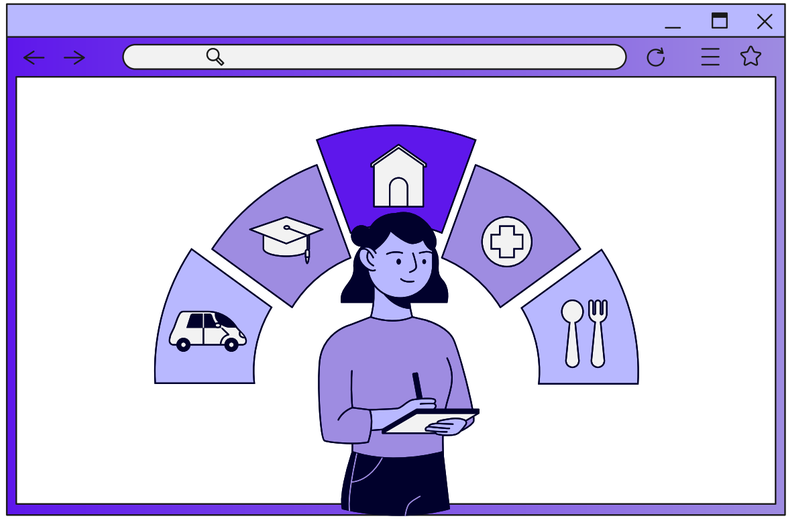
# FDM Expenses Manager

Requirements Elicitation summary



### Data Requirements

Data stored for users, expenses, and proof of expenses

### Functional Requirements

Features and automations of the system

### User Use Cases

Allows expense submission and reviewing

### Non Functional Requirements

Web app for major browsers, responsive user interface

### Risk Assessment

Mismanagement, miscommunication may lead to low quality product

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