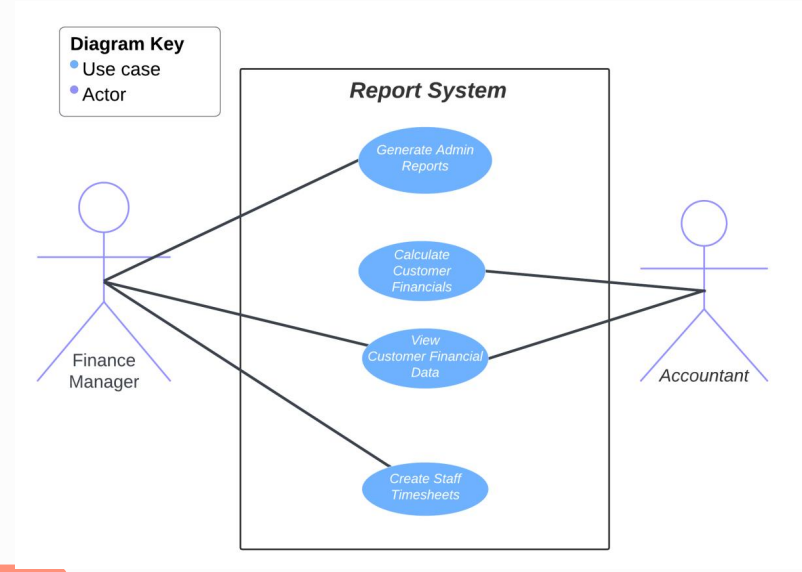


# Writing Effective Use Cases & Scenarios

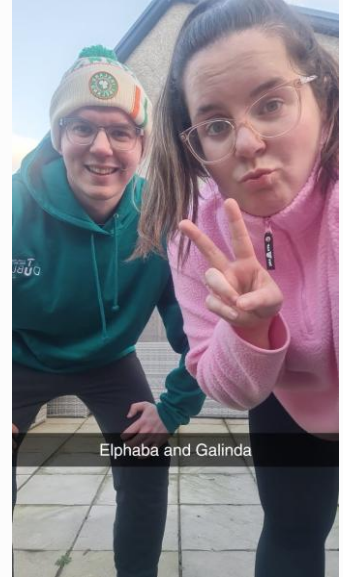


26<sup>th</sup> of Feb 2025  
James Dean

# About me



- President of IIBA Ireland Chapter
- Business Analyst (BA) – 8 Years
- Bachelor of Science (BSc) Honours Degree in IT Management
- ECBA and AAC Certified – IIBA
- PSPO I
- Worked across various industries
- Currently working in Energy - Product Management

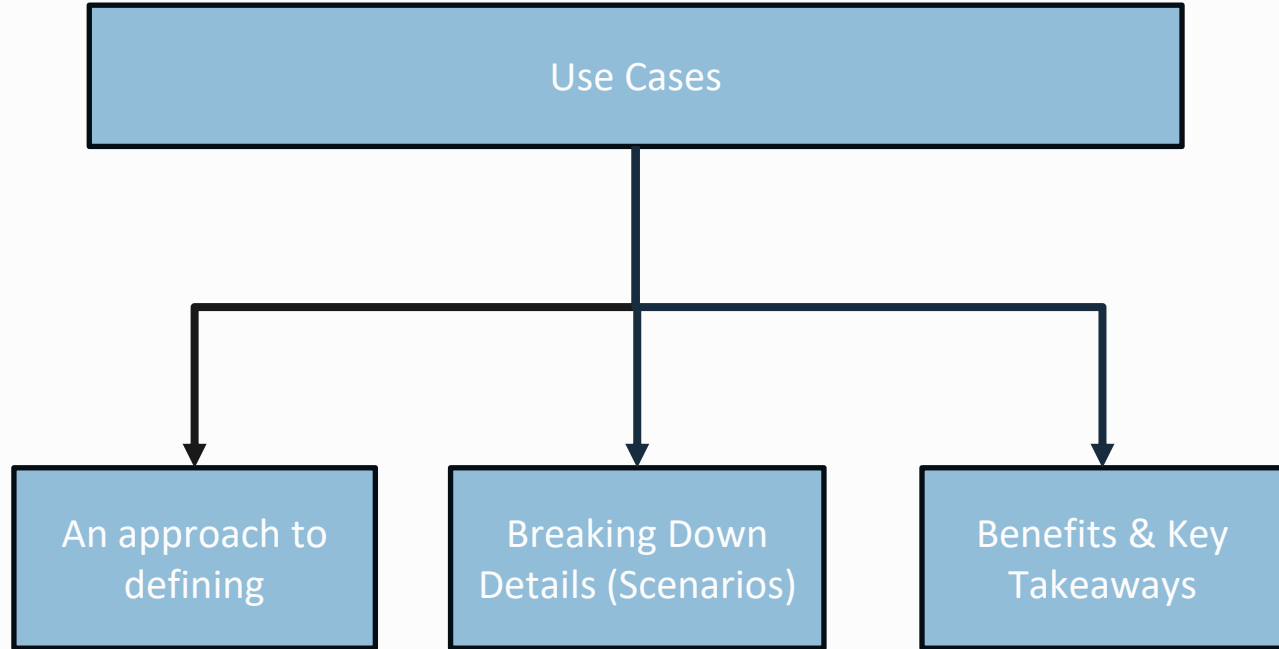


## Fun Facts:

- Twin
- Dancer



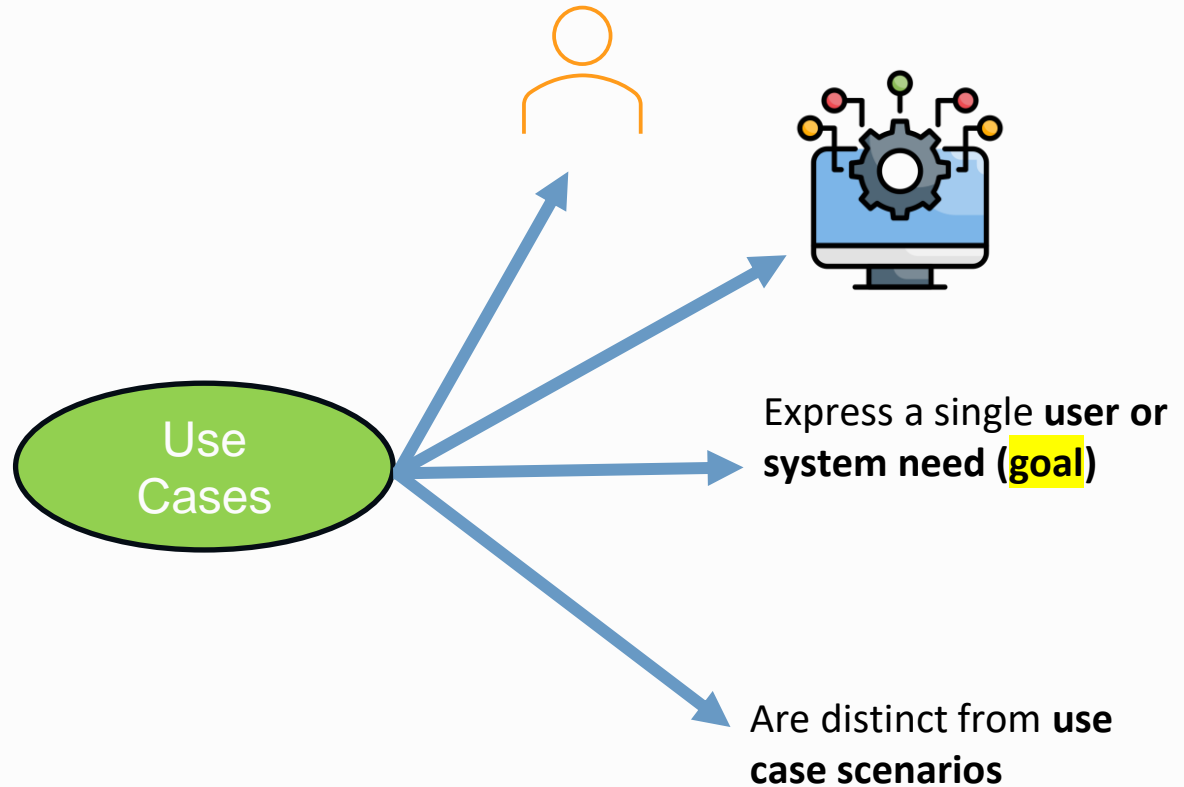
**What will  
we  
discover  
today?**



# What are Use Cases?



# Use Cases

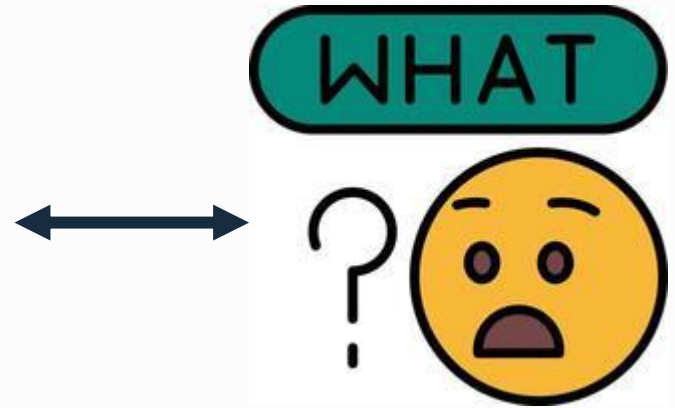


Sometimes referred to “**business use cases**”

# Use Cases



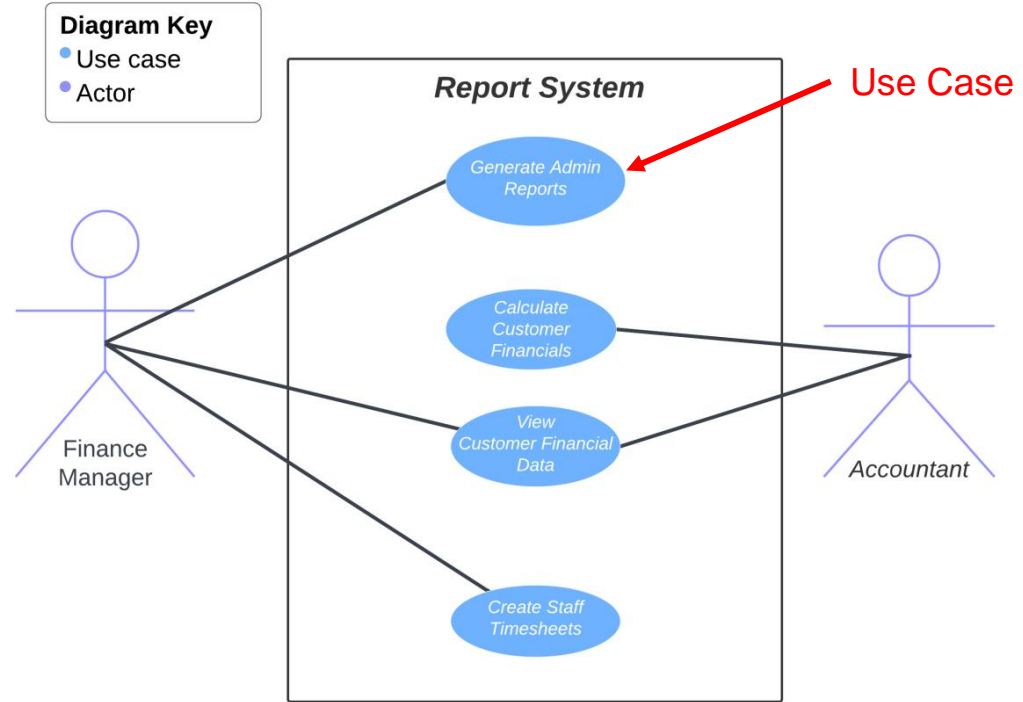
Type of User  
Known as  
**Actor**



User Goal  
Known as a  
**use case**

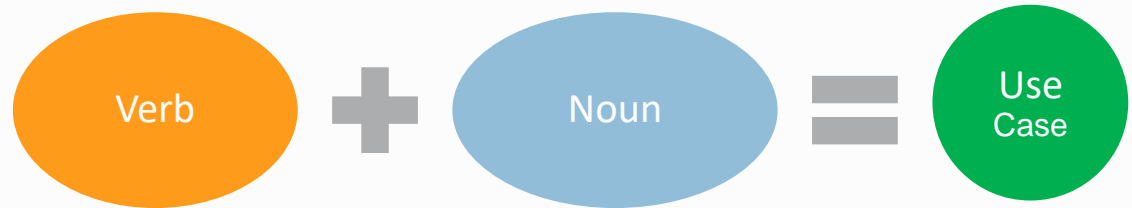
# Use Case Example

Use cases describe how a **user** or **system** interacts with a system or solution to achieve a **goal**



# How to Define Use Cases?

If **Business Requirements** have been defined you will need to extract and define actors and use cases.



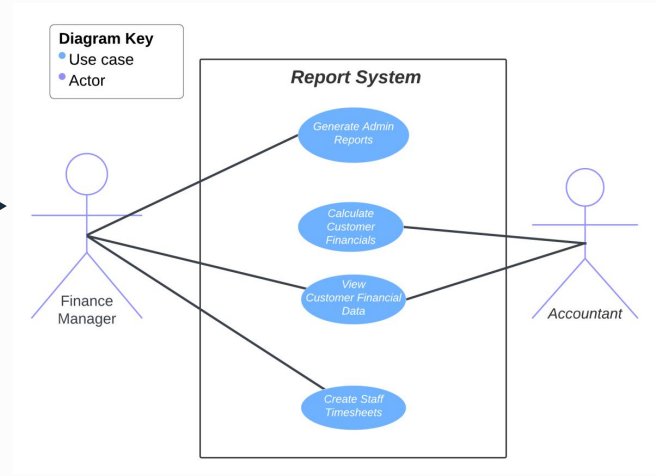
Helpful Techniques:

- Workshops
- Interviews
- Process Modelling



# How to Define Use Cases?

If **Business Requirements** haven't been defined, you will need to discover and define the use cases.



Helpful Techniques:

- Discovery Workshops
- Product Vision
- Interviews
- Process Modelling

# Use Case Activity

## Activity!

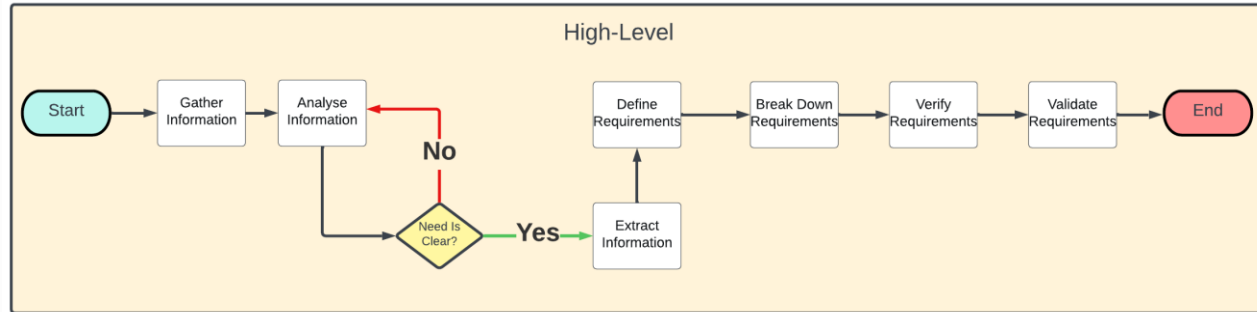
Goal: **Define use cases for a flight booking system**

Remember to think of **actors (users)** and their **use cases (goals)**



# How to Define Use Cases?

**Note:** This is not a linear process; elicitation occurs at every stage.



# Example Product Discovery Whiteboard

## Open Questions

The whiteboard is divided into six sections, each with a question and sticky notes:

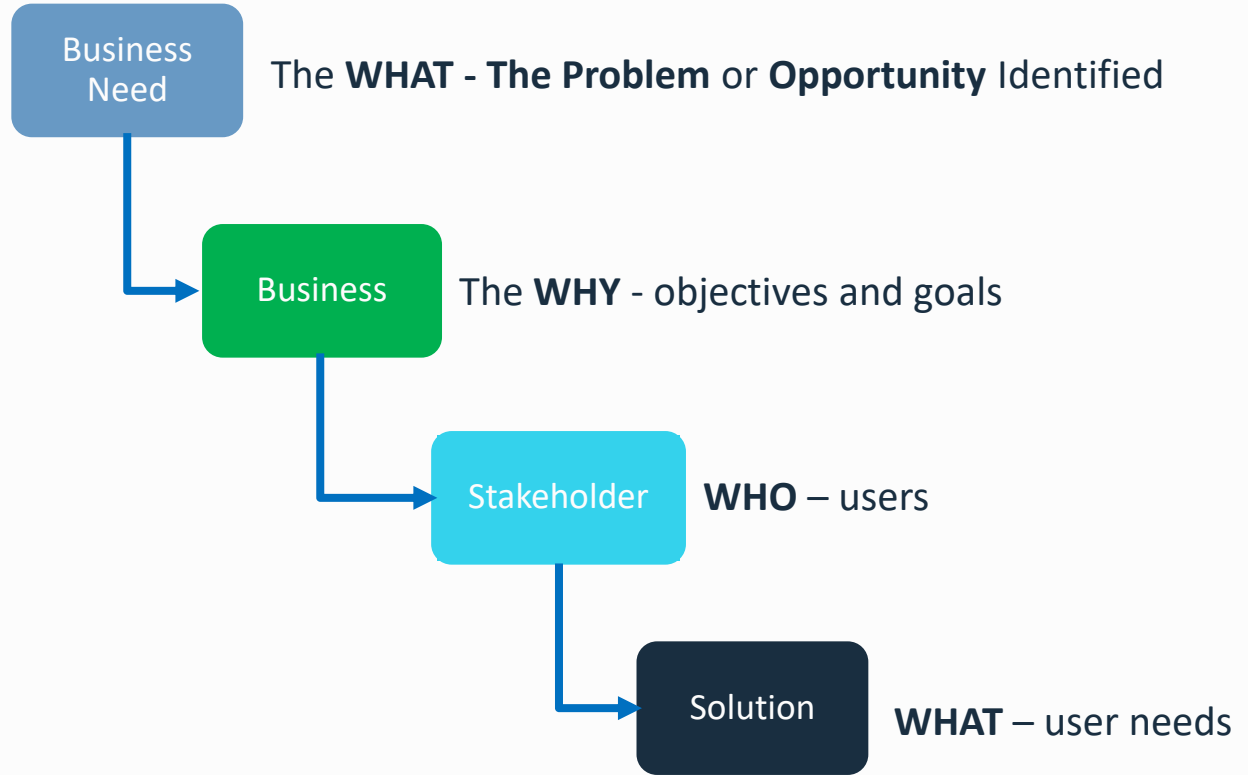
- What outcomes should the product achieve for Phase 1?** (4 blue sticky notes)
- What user groups are we targeting for Phase 1 of the product?** (3 green sticky notes)
- What user group needs are we hoping Phase 1 of the product will achieve?** (3 yellow sticky notes)
- What key features are in scope for Phase 1 of the product?** (3 orange sticky notes)
- What metrics will we use to measure success of Phase 1 features of the product?** (3 teal sticky notes)
- What risks or assumptions do we think we will encounter in Phase 1 of the product?** (4 purple sticky notes)

## Example Objectives

- Enhance user experience to monitor operational and earnings data
- Easy access to key operational and financial metrics
- The ability to view actionable insights that empower users to make informed and effective decisions at both operational and strategic levels
- Ensure users have accurate, real-time, and predictive data to assess compliance and performance.
- Promote sustainability by enabling users to measure and monitor their environmental impact.
- Drive engagement and retention in ancillary services by providing data-driven incentives and transparency.

# How to Define Use Cases?

# How to Define Use Cases?



# How to Define Use Cases - Example

The **WHAT** - The Problem or Opportunity Identified

Business Need



**Problem** = Traditional hotel booking is slow and inefficient, requiring guests to call or visit in person.

The **WHY** - objectives and goals

Business



**Objective:** Increase revenue by enabling 24/7 room booking accessibility.

**Goal** = Increase direct hotel bookings by 20% in the first year.

The **WHO** – users

Stakeholder



Guests  
Staff

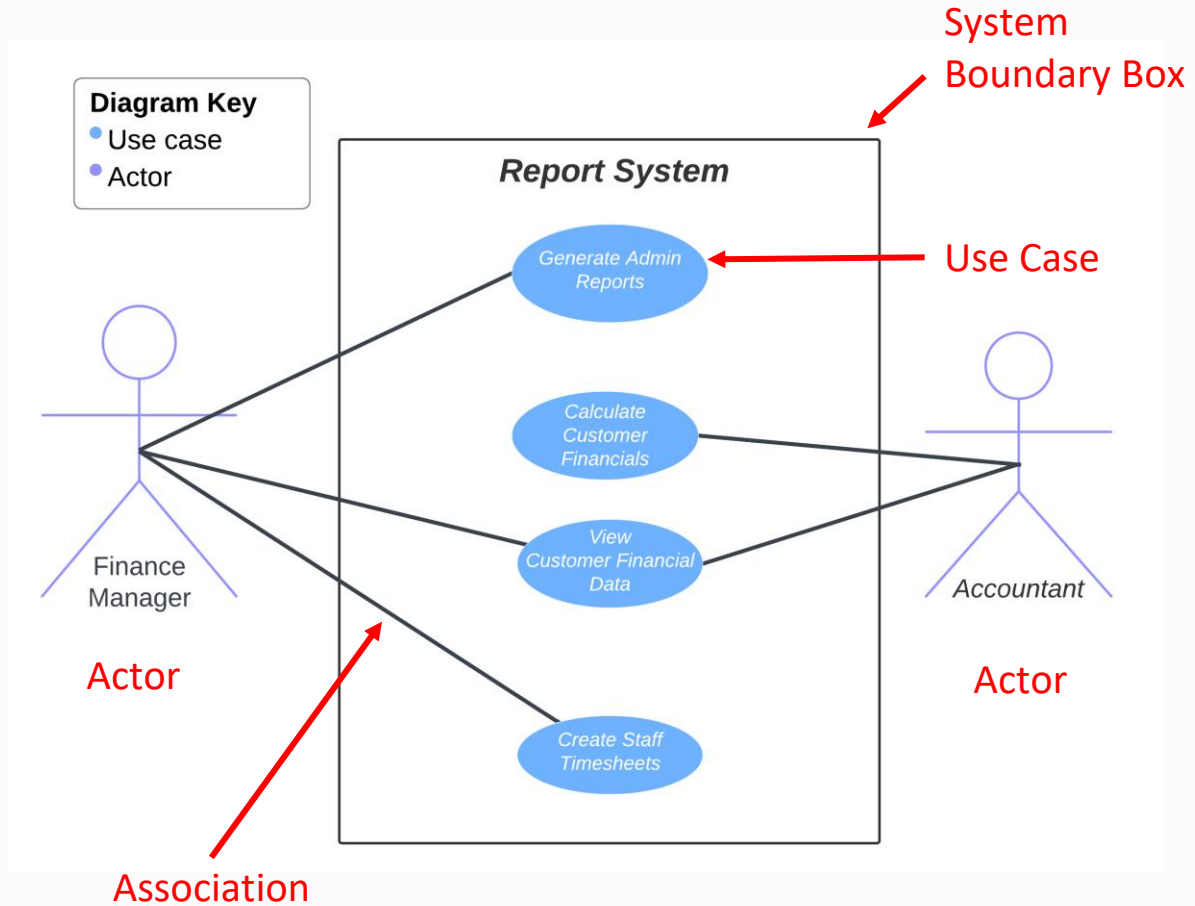
The **WHAT** – user needs (use cases)

Solution



Search for a Room  
Reserve a Room  
Manage Reservations

# Use Case Diagram



# Activity!

Goal: Define use cases for a use case diagram – case study



Link:

[https://miro.com/app/board/uXjVLihseSI=?share\\_link\\_id=933837102930](https://miro.com/app/board/uXjVLihseSI=?share_link_id=933837102930)

# How to Define Use Cases?

Room 1

Case Study: Healthcare Appointment Scheduling

A large hospital chain, **ABC Health**, wants to modernize its appointment scheduling system to improve efficiency and enhance the patient experience.

Currently, **patients** book appointments manually via phone calls, leading to:

- ⚠️ Long wait times
- ⚠️ Scheduling conflicts
- ⚠️ High no-show rates

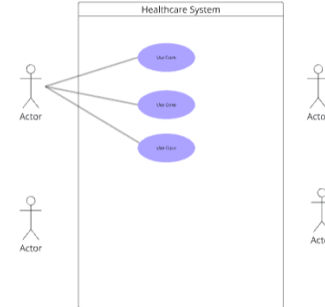
To solve this, ABC Health is introducing an **AI-powered appointment scheduling system** that will:

- ✅ Dynamically manage doctor availability
- ✅ Predict patient wait times
- ✅ Optimise scheduling using historical data
- ✅ Integrate with telemedicine
- ✅ Send reminders to reduce missed appointments

Task 1: Identify **core use cases** that align with business goals

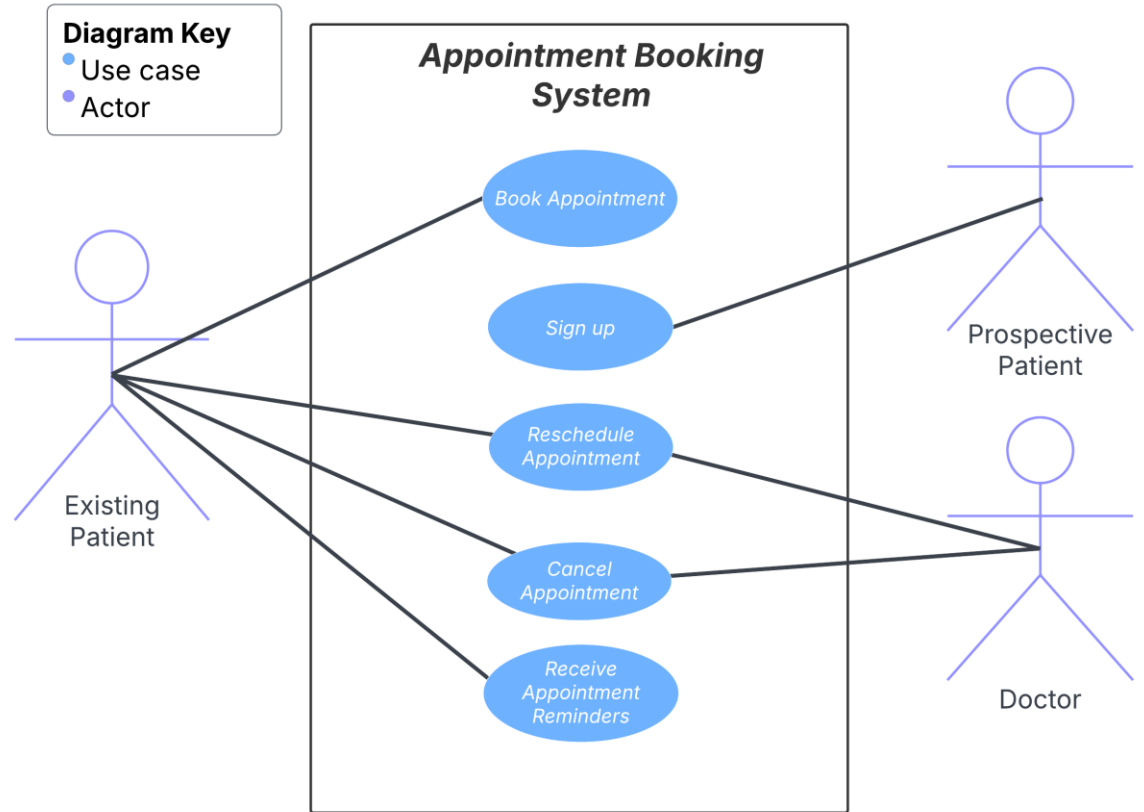


Task 2: Map your use cases into a **use case diagram**



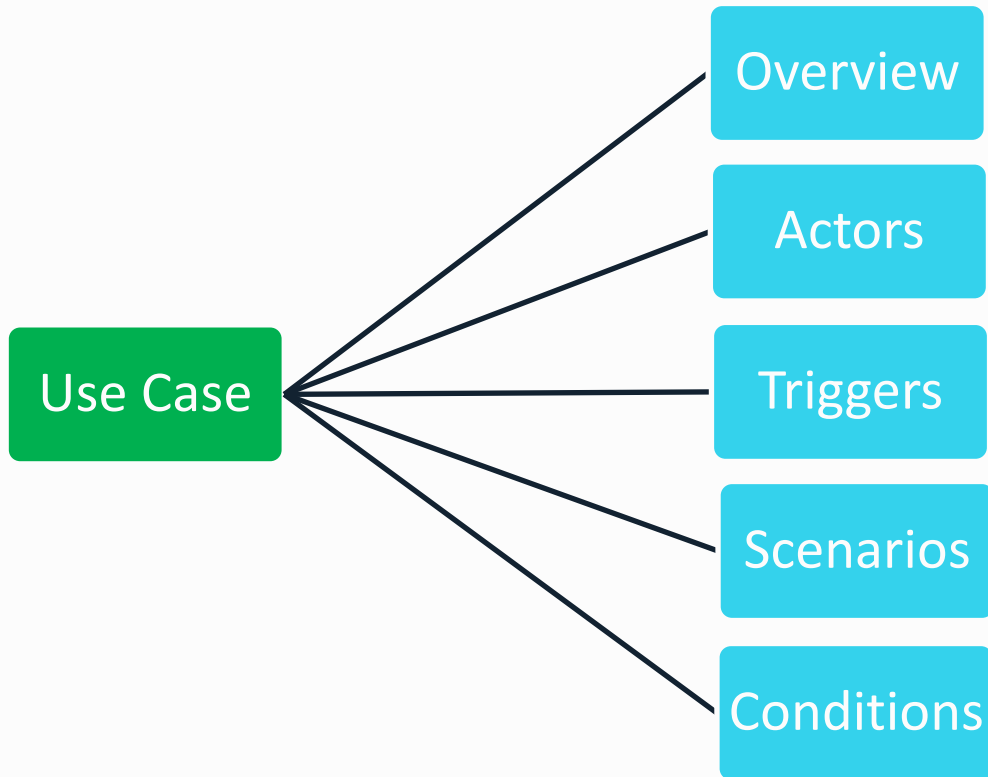


# Use Case Diagram Solution



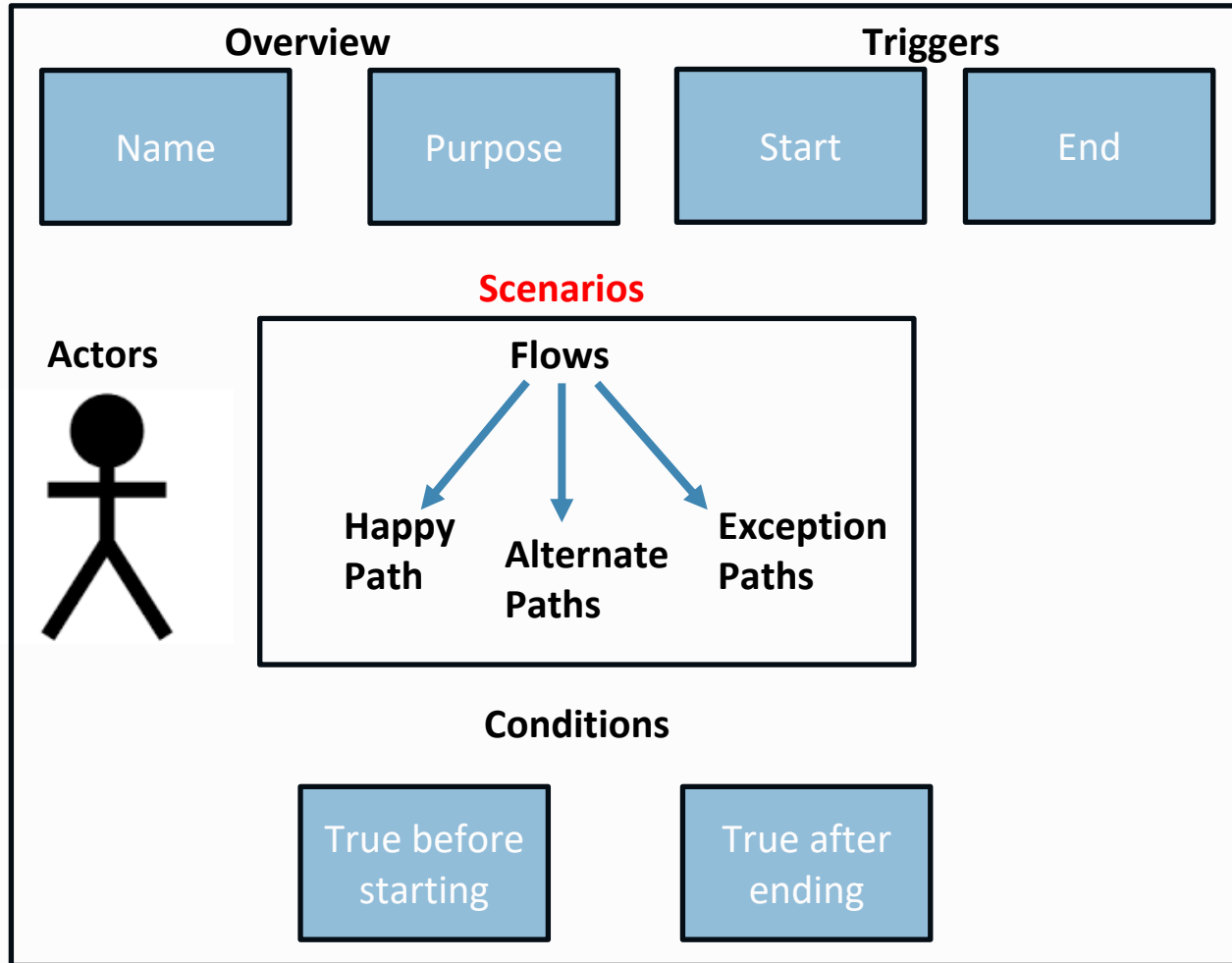
# Use Case Scenarios

Description of the **ways in which a user interacts with a system or solution**



# How to write use case scenarios?

## Use Case Description



# Example Use Case Description

## Use Case Name: Request Leave

<b>Purpose</b>	Allows a company employee to <b>request different types of leave</b>
<b>Starts When</b>	Company Employee <b>selects to apply for leave</b>
<b>Ends When</b>	The Company Employee <b>views that the type of leave has been successfully requested</b>
<b>Actors</b>	<ul style="list-style-type: none"><li>• Company Employee (<b>User</b>)</li><li>• HR System (<b>System</b>)</li></ul>
<b>Pre-conditions (Before)</b>	<ul style="list-style-type: none"><li>• Company Employee <b>has logged into the HR System</b></li><li>• Leave balance for the Company Employee <b>is available</b></li></ul>
<b>Post conditions (After)</b>	<ul style="list-style-type: none"><li>• <b>Success:</b> The leave request has been successfully requested and an email has been sent to the Company Employee's Manager for approval</li><li>• <b>Failure:</b> The leave request is cancelled, the Company Employee has insufficient leave balance</li></ul>
<b>Happy Path (Main Flow)</b>	<ol style="list-style-type: none"><li>1. The User <b>selects to apply for leave</b></li><li>2. The System <b>displays a list of leave types</b></li><li>3. The User <b>selects the annual leave type</b></li><li>4. The System <b>checks leave balance</b></li><li>5. The System <b>displays an option to inputs leave details</b></li><li>6. The User <b>inputs leave details</b></li><li>7. The System <b>displays an option to request leave</b></li><li>8. The User <b>selects to request leave</b></li><li>9. The System <b>attempts to log the leave request</b></li><li>10. The System <b>displays a success message to the User</b></li><li>11. The User <b>views that the type of leave has been successfully requested</b></li></ol>
<b>Alternate Paths</b>	3A: Chooses a jury duty leave type <ul style="list-style-type: none"><li>• The System displays an option to upload jury service letter</li><li>• The User selects to upload jury service letter</li><li>• The User navigates to where the jury service letter is stored on their local computer</li><li>• The User selects the file to upload</li><li>• Continue with Happy Path Step 6</li></ul>
<b>Exception Paths</b>	4A: Insufficient leave balance <ul style="list-style-type: none"><li>• The System displays an error message to the User informing them</li><li>• Use case ends</li></ul>

# Use Case Description Activity

## Activity!

Goal: **Write a use case description – case study**

Link:

[https://miro.com/app/board/uXjVLihseSI=?share\\_link\\_id=933837102930](https://miro.com/app/board/uXjVLihseSI=?share_link_id=933837102930)



# Use Case Description Solution

Use Case Name: Book Appointment	
<b>Purpose</b>	Allows an existing patient to <b>book different types of General Practitioner (GP) appointments</b>
<b>Starts When</b>	Existing Patient <b>selects to book an appointment</b>
<b>Ends When</b>	The Existing Patient <b>receives a booking confirmation</b>
<b>Actors</b>	<ul style="list-style-type: none"><li>Existing Patient (<b>User</b>)</li><li>GP Appointment System (<b>System</b>)</li></ul>
<b>Pre-conditions (Before)</b>	<ul style="list-style-type: none"><li>Existing Patient has logged into the GP Appointment System</li></ul>
<b>Post conditions (After)</b>	<ul style="list-style-type: none"><li><b>Success:</b> Appointment is confirmed and a notification is sent to the Existing Patient</li><li><b>Failure:</b> No dates and time slots are available for an appointment type</li></ul>
<b>Happy Path (Main Flow)</b>	<ol style="list-style-type: none"><li>The User <b>selects to book an appointment</b></li><li>The System <b>displays a list of appointment types</b></li><li>The User <b>selects the general consultation appointment type</b></li><li>The System <b>displays an option to select a date</b></li><li>The User <b>selects a date</b></li><li>The System <b>checks available time slots for the selected date</b></li><li>The User <b>displays available time slots</b></li><li>The User <b>selects a time slot</b></li><li>The User <b>selects to book the appointment</b></li><li>The System <b>attempts to book the appointment</b></li><li>The System <b>displays a success message</b></li><li>The System <b>sends a notification with the booking confirmation</b></li><li>The User <b>receives the booking confirmation</b></li></ol>
<b>Alternate Paths</b>	5A: Chooses a different date slot <ul style="list-style-type: none"><li>The System checks available time slots for the selected date</li><li>The System displays available time slots</li><li>Continue with Main Flow Step 8</li></ul>
<b>Exception Paths</b>	7A: No time slots available <ul style="list-style-type: none"><li>The System displays an error message informing them no time slots are available and displays a list of alternative GP practices</li><li>Use case ends</li></ul>

# Benefits of Use Cases & Scenarios

1. Defines **scope**
2. Identifies system **users**
3. Supports **incremental development**
4. Focuses on **real user goals (needs)**
5. Provides a **big-picture view** of users and their needs
6. Aids **planning**
7. Works with **user stories** and **wireframes**
8. Models the **process flow**



# Key Takeaways

## Use Cases

1. Focus on **verb + noun** when defining **actions**
2. Consider **how users interact** with the **system** or **solution**
3. Identify **different user types** and their specific **needs (goals)**
4. Separate **wants** and **needs**

## Use Case Scenarios

1. Focus on **one user**, one **system**, and one **use case**
2. Ensure "**starts when**" matches the first step in the happy path
3. Avoid **repeating pre-conditions** in the first step of the happy path
4. Don't assume the happy path - **think about what can go wrong**
4. **Post-conditions** cover **success** (happy & alternate paths) and **failure** (exception paths)



Q&A

