**Document 6: Use Case Diagram, Activity Diagram & Use Case Specification**

**1. Use Case Diagram**

A **Use Case Diagram** represents the interactions between actors (users) and the system. Below is the use case diagram for the Franchise Live Training and Sales Enablement system.

**Q1. Draw a Use Case Diagram - 2 Marks**





**Use Case Specification Document**

**1. Use Case Name**

**Enroll in Training Module**

**2. Use Case Description**

This use case describes the process by which a Sales Representative logs into the system, selects a training module, completes the training, takes an assessment, and receives certification if they pass.

**3. Actors**

* **Primary Actors:**
	+ Sales Representative
* **Secondary Actors:**
	+ Admin (Manages Training Modules)
	+ System (Validates Access, Tracks Progress, Issues Certificates)

**4. Basic Flow (Main Scenario)**

1. Sales Representative logs into the system.
2. System validates login credentials.
3. Sales Representative navigates to the Training Module section.
4. Sales Representative selects a training course.
5. System verifies access permissions.
6. Sales Representative starts the training.
7. System tracks progress and saves session data.
8. Sales Representative completes training and takes an assessment.
9. System evaluates assessment results.
10. If the user passes, the system issues a completion certificate.
11. If the user fails, they are given an option to retake the assessment.
12. System updates the user’s training completion status.

**5. Alternate Flow**

**(If User Wants to Pause Training and Resume Later)**

1. Steps 1-6 from the basic flow.
2. Sales Representative pauses the training session.
3. System saves the progress.
4. User logs in at a later time and resumes from where they left off.
5. The rest of the steps continue from Step 7 of the Basic Flow.

**6. Exceptional Flows (Error Scenarios)**

1. **Invalid Login Credentials** – System denies access and prompts user to re-enter correct details.
2. **Unauthorized Access** – If the user tries to access restricted content, the system shows an error message.
3. **System Crash or Timeout** – If the system crashes, it saves progress and allows resumption upon relogin.
4. **Assessment Failure** – If the user fails multiple times, they are required to retake the entire training.

**7. Pre-Conditions**

* Sales Representative must have an active user account.
* Training module must be assigned to the user’s role.
* Internet connectivity must be available for system access.

**8. Post-Conditions**

* User has successfully completed training and received a certificate.
* User’s training completion status is updated in the system.

**9. Assumptions**

* Users are familiar with the system interface.
* Training content is updated regularly.
* System is always available with minimal downtime.

**10. Constraints**

* Training sessions must be completed within a defined time.
* System must handle multiple concurrent users.
* Assessments must be standardized for all users.

**11. Dependencies**

* Integration with content management system (CMS) for training materials.
* User authentication module must function correctly.
* Email or notification system for reminders.

**12. Inputs and Outputs**

**Inputs:**

* User credentials for login.
* Selection of training module.
* Assessment responses.

**Outputs:**

* Training progress updates.
* Assessment results.
* Certificate of completion (if passed).

**13. Business Rules**

* Only authorized Sales Representatives can access training modules.
* Users must pass assessments with a minimum score of 80%.
* Training progress is automatically saved every 5 minutes.

**14. Miscellaneous Information**

* System should support multiple languages.
* Training modules can be updated dynamically by Admin.

**Document 7: Screens and Pages (Mock-ups)**

**Project: Franchise Live Training and Sales Enablement**

**1. Introduction**

This document outlines the mock-up designs for key screens of the Franchise Live Training and Sales Enablement system. The mock-ups follow a structured workflow from user login to training completion and certification.

**2. Screens and Pages**

Below are the essential screens in the system, designed using **Balsamiq/Axure**.

**2.1 Home Page**

* The landing page for the application.
* Provides navigation options:
	+ Login
	+ Register
	+ Explore Training Modules
	+ Contact Support

**2.2 Login Page**

* Fields:
	+ Email / Username
	+ Password
* Buttons:
	+ Login
	+ Forgot Password?
	+ Register

**2.3 Dashboard**

* Sales Rep Dashboard:
	+ View enrolled training modules
	+ Track training progress
	+ Access sales playbooks
	+ View notifications
* Admin Dashboard:
	+ Manage users
	+ Upload and update training materials
	+ Generate reports

**2.4 Search and Enroll in Training**

* Search bar to find available training modules.
* Filters:
	+ Category-based filtering (Product Training, Sales Skills, etc.)
	+ Difficulty level (Beginner, Intermediate, Advanced)
* "Enroll Now" button for each module.

**2.5 Training Module Page**

* Training Video / Document Viewer
* Progress Tracker
* "Mark as Complete" button
* "Take Quiz" button (if applicable)

**2.6 Quiz and Assessment Page**

* Multiple-choice quiz interface.
* Real-time feedback on answers.
* Final score display with pass/fail status.

**2.7 Certification Page**

* Displays certificate upon successful completion of training.
* Download and share options.

**2.8 Notifications Page**

* System-generated reminders for pending training.
* Admin messages for content updates.

**2.9 Logout Page**

* Confirmation message: "Are you sure you want to log out?"
* Button: "Logout"

**Document 8: Tools – Visio and Axure Experience**

**1. Introduction**

This document outlines my experience using **Microsoft Visio** and **Axure RP** in the development of the Franchise Live Training and Sales Enablement system. These tools were used for **creating UML diagrams, wireframes, and prototypes** to ensure clear documentation and communication of system requirements.

**2. Experience with Microsoft Visio**

**2.1 Purpose of Using Visio**

Microsoft Visio was used for:

* **Use Case Diagrams** – To visually represent system interactions.
* **Activity Diagrams** – To map out process flows.
* **Sequence Diagrams** – To illustrate interactions between system components.
* **Entity-Relationship Diagrams (ERD)** – To define database structures.

**2.2 Key Features Utilized**

* **Drag-and-Drop Functionality** – Made it easy to create structured diagrams.
* **Predefined UML Templates** – Helped in quick creation of diagrams.
* **Alignment and Connector Tools** – Ensured clarity and consistency in diagram layouts.
* **Exporting Capabilities** – Allowed seamless sharing of diagrams in PNG, PDF, and SVG formats.

**2.3 Challenges Faced**

* **Limited Customization** – Some elements had fixed properties that were difficult to modify.
* **Complexity for Large Diagrams** – Managing large diagrams required additional organization.

**2.4 Solutions Implemented**

* Used **layering techniques** to manage complex diagrams.
* Ensured **consistent notation** by using UML standard symbols.
* Used **color coding** to differentiate system components.

**3. Experience with Axure RP**

**3.1 Purpose of Using Axure**

Axure RP was used for:

* **Creating Wireframes** – Designed low-fidelity and high-fidelity prototypes.
* **Interactive Prototypes** – Simulated user interactions for better visualization.
* **Mock-up Designs** – Developed UI layouts for training modules and dashboards.

**3.2 Key Features Utilized**

* **Dynamic Panels** – Allowed creating interactive mock-ups.
* **Conditional Logic** – Helped simulate real-time system behaviors.
* **Widgets and Libraries** – Provided pre-built UI components for quick design.
* **Team Collaboration** – Shared live prototypes with stakeholders for feedback.

**3.3 Challenges Faced**

* **Steep Learning Curve** – Required initial practice to master advanced features.
* **High System Resource Usage** – Large prototypes caused slowdowns.

**3.4 Solutions Implemented**

* Used **predefined templates** to speed up design.
* Created **modular prototypes** to reduce complexity.
* Used **cloud sharing** to collaborate with the development team.

**4. Conclusion**

Both **Microsoft Visio** and **Axure RP** played crucial roles in the **visual documentation and prototyping** of this project.

* **Visio** was best suited for **structural diagrams and system modeling**.
* **Axure** was most effective for **creating interactive prototypes** that improved stakeholder understanding.

By leveraging both tools, I ensured that the project deliverables were well-documented and visually clear, making the development process smoother and more efficient.

**Document 9: BA Experience**

**1. Introduction**

This document outlines my experience as a **Business Analyst (BA)** across different phases of the **Franchise Live Training and Sales Enablement** project. It details my role in **requirement gathering, analysis, design, development, testing, and deployment** following the **Waterfall methodology**.

**2. Requirement Gathering Phase**

**2.1 Techniques Used**

* **MoSCoW Technique** – Prioritized requirements as **Must-have, Should-have, Could-have, and Won’t-have**.
* **Prototyping** – Developed wireframes to clarify requirements.
* **Stakeholder Interviews & Workshops** – Engaged with key users (Sales Reps, Admins, Trainers) to gather detailed insights.
* **FURPS+ Validation** – Verified requirements under **Functionality, Usability, Reliability, Performance, and Supportability**.

**2.2 Challenges Faced**

* **Client Unavailability** – The client was unavailable at times, leading to delays.
* **Redundant Requirements** – Some requirements were duplicated, leading to confusion.

**2.3 Solutions Implemented**

* Identified alternative points of contact within the client’s team.
* Maintained a **Requirements Log** to track changes and eliminate redundancies.

**3. Requirement Analysis Phase**

**3.1 Activities Performed**

* Created **UML diagrams** (Use Case, Activity, ERD) to visualize workflows.
* Used **Visio** to develop process flow diagrams.
* Conducted **peer reviews** with the development team to validate feasibility.
* Developed **BRS (Business Requirement Specification) and SRS (Software Requirement Specification)**.

**3.2 Challenges Faced**

* Conflicts among stakeholders on certain process flows.
* Resistance to changes from team members.

**3.3 Solutions Implemented**

* Conducted **JAD (Joint Application Development) sessions** to align all stakeholders.
* Implemented feedback iteratively, ensuring all concerns were addressed.

**4. Design Phase**

**4.1 Activities Performed**

* Created detailed **Use Case Specifications**.
* Developed test cases based on use case diagrams.
* Communicated design expectations with the **UI/UX team**.
* Ensured **negative test cases** were also considered for error scenarios.
* Maintained **RTM (Requirement Traceability Matrix)** to track requirement coverage.

**4.2 Challenges Faced**

* Ensuring every requirement had an associated test case.
* Aligning designs with **technical feasibility**.

**4.3 Solutions Implemented**

* Held **frequent meetings with the design and development team** to bridge gaps.
* Used Axure to create **high-fidelity prototypes** for better visualization.

**5. Development Phase**

**5.1 Activities Performed**

* Organized **JAD sessions** to clarify requirements for developers.
* Addressed **technical queries** during coding.
* Ensured developers followed **design specifications**.
* Maintained an **open communication channel** for issue resolution.

**5.2 Challenges Faced**

* Some developers were **resistant to BA feedback**.
* **Unavailability of team members** during discussions.

**5.3 Solutions Implemented**

* Scheduled **one-on-one discussions** with resistant team members to explain project impact.
* Recorded key meetings and shared **meeting minutes** for reference.

**6. Testing Phase**

**6.1 Activities Performed**

* Developed **test cases** based on system requirements.
* Performed **high-level testing** to validate key functionalities.
* Collaborated with the **QA team** to ensure testing accuracy.
* Managed **RTM updates** to verify requirement fulfillment.
* Facilitated **User Acceptance Testing (UAT)** with stakeholders.

**6.2 Challenges Faced**

* **Inconsistent test data** from the client.
* **Client delays in UAT approval**.

**6.3 Solutions Implemented**

* Requested **realistic test data** early in the process.
* Created a **structured UAT process** to streamline approvals.

**7. Deployment Phase**

**7.1 Activities Performed**

* Compiled **RTM and closure documents** for final approval.
* Coordinated with teams to ensure a **smooth deployment**.
* Prepared **end-user manuals** for training.
* Organized training sessions for system users.

**7.2 Challenges Faced**

* Ensuring all users attended training sessions.
* Managing last-minute **change requests**.

**7.3 Solutions Implemented**

* Scheduled multiple training sessions to accommodate user availability.
* Documented **change requests** and assessed their impact before approval.

**8. Conclusion**

Throughout the project lifecycle, my role as a **Business Analyst** was crucial in:

* **Aligning business needs with technical execution.**
* **Facilitating effective communication among teams.**
* **Ensuring quality deliverables through structured processes.**

By utilizing structured **BA methodologies** and **collaboration tools**, I successfully navigated challenges and contributed to the project’s successful completion.