Project Design Phase-II: Solution Requirements (Functional & Non-functional)

Field	Detail
Date	**02 November 2025**
Team ID	**NM2025TMID00414**
Project Name	**Optimizing User Group and Role Management with Assess, Control, and Workflow**
Maximum Marks	**4 Marks**

Functional Requirements

Following are the functional requirements (FRs) of the proposed solution, aligning with the **Assess, Control, and Workflow** pillars.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	**Role Definition & Mapping (Control)**	**FR-1.1:** System shall allow Security Admins to create and modify business roles (e.g., 'Finance Analyst').
		FR-1.2: System shall map business roles to a collection of granular technical permissions across target systems.
FR-2	**Access Request Workflow (Workflow)**	**FR-2.1:** Users shall be able to submit self-service requests for new roles via a dedicated portal.
		FR-2.2: System shall route requests to the user's Manager and the Role Owner for multi-stage approval.
FR-3	**Automated Provisioning/Deprovisioning (Workflow)**	**FR-3.1:** Upon final approval, system shall automatically provision/deprovision the role in the target application via connectors.
		FR-3.2: System must automatically revoke all roles upon notification of user departure (offboarding).
FR-4	**Periodic Access Recertification (Assess)**	**FR-4.1:** System shall schedule and initiate quarterly campaigns for all Role Owners to review and either approve or revoke current role assignments.
		FR-4.2: System shall automatically revoke any role not explicitly re-approved within

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
		the defined campaign deadline.
FR-5	**Segregation of Duties (SoD) Check (Control)**	**FR-5.1:** System must detect conflicting role combinations (e.g., 'Payment Processor' and 'Payment Approver') during the request workflow.
		FR-5.2: If an SoD violation is detected, the request must be escalated for mandatory exception approval.

Non-functional Requirements

Following are the non-functional requirements (NFRs) essential for the reliability and effectiveness of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The self-service portal and recertification dashboard must be **intuitive and simple** enough for all users (technical and non-technical) to navigate with minimal training.
NFR-2	**Security**	The platform must support **MFA** for administrative access and use **encrypted communication** (TLS) for all provisioning connectors.
NFR-3	**Auditability**	All workflow approvals, access changes, recertification decisions, and SoD checks must be recorded in an **immutable, searchable log** with full timestamp and user ID.
NFR-4	**Performance**	The average time-to-provision for an approved role request must not exceed **5 minutes** for the most common target applications.
NFR-5	**Availability**	The core Role Management and Workflow services must maintain a minimum uptime of **99.9%** during business hours.
NFR-6	**Scalability**	The system must be able to manage access for **over 100,000 users** and process **5,000 role-related**

NFR No.	Non-Functional Requirement	Description
		transactions per day without significant degradation of performance.