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Configuration Audits

Subject: Software Configuration Management

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3.5 CONFIGURATION AUDITS – GYM ACCESS MANAGEMENT SYSTEM

3.5.1 Functional Configuration Audit (FCA)

The Functional Configuration Audit (FCA) for the Gym Access Management System verifies that each configuration item (CI) has been developed in accordance with specified functional requirements.

Key audit items and observations:

- Each baselined CI corresponds directly to a documented system requirement (e.g., payment integration, rewards logic).
- Traceability matrices were used to verify requirements-to-implementation relationships.
- A sample of approved change requests (e.g., CR-01 and CR-02) were traced to implemented features.
- All identified defects from prior test cycles were reviewed and resolved or documented appropriately.
- Documentation for operational and support use (user manual, admin guide) was reviewed for completeness and alignment with the current software version.

Conclusion: The system satisfies the documented functional specifications. All functionalities for electronic payments and rewards tracking are traceable and verifiable.

3.5.2 Physical Configuration Audit (PCA)

The PCA ensures that all physical components and documentation of the Gym Access Management System conform to the baseline definitions.

Key audit activities:

- Confirmation that all configuration items have been baselined with correct version numbers and revision history.
- Sampling of built modules (e.g., payment module, rewards dashboard) confirmed compliance with coding standards and naming conventions.
- Reviewed build records to ensure the correct version of each component was included in the final release.
- Documentation set reviewed against configuration status accounting records to confirm completeness.
- Delivery media (code repositories and document sets) were checked for correct labeling and conformity with specifications.

Conclusion: The physical build of the system matches the baseline specifications, with no deviations found in deployed components or documentation.

3.5.3 Configuration Management (CM) Internal Audits

Internal audits were conducted to verify adherence to SCM policies, plans, and procedures.

Key findings:

- All team members demonstrated awareness of SCM policies and their connection to project objectives.
- SCM procedures and instructions were accessible and current (latest revisions in use).
- Entry and exit criteria for each major development phase (planning, implementation, testing) were clearly defined and met.
- All SCM personnel met qualification standards (training, experience, task proficiency).
- No unauthorized changes were detected during the audit period.

Conclusion: Internal SCM practices were followed correctly and supported consistent process execution. The SCM environment was found to be compliant and effective.

3.5.4 Reviews

Throughout the project lifecycle, structured reviews were conducted:

- Design Reviews: Verified consistency between architectural models and module-level design documents.
- Code Reviews: Peer reviews were conducted for all modules, focusing on standards compliance and logic clarity.
- Test Case Reviews: All test procedures and cases were reviewed for coverage, clarity, and alignment with requirements.
- Deployment Reviews: Reviewed final deliverables prior to release to ensure readiness and completeness.

Conclusion: Reviews contributed significantly to defect prevention and overall product quality. Each review was documented, with follow-up actions tracked to closure.

Overall Audit Result

All four aspects of configuration audits (FCA, PCA, Internal Audits, and Reviews) confirm that the Gym Access Management System meets its functional, physical, and quality requirements and that SCM practices ensured process control and baseline integrity.