LLM Automated Evaluation Results

Functional Requirements Evaluation Table

Based on the requirement documents provided by the user (functional requirements and external interfaces), I, as a requirement review expert, conducted the evaluation following these steps:

1. Data Entity Statistics: I identified data entities that need to be managed within the system from the functional requirements (excluding external data sources or formats mentioned in external interfaces). A total of 8 data entities were identified: email, contact, group, reminder task, archiving policy, mailbox account, log, and server configuration.

2. Merging Functional Requirements: According to the rules, I merged functional points that operate on the same data entity, and excluded general configuration-type system requirements (such as preference settings or multilingual support). After merging, there were 20 functional requirements in total:

• FR-13, FR-14, FR-15, and FR-16 (all related to log entity operations) were merged into FR-LOG (Log Management Function).

• Other functional requirements were not merged due to different operations or data entities (e.g., email backup and recovery are distinct operations; server backup and system backup target different entities).

• No configuration-type requirements were removed, as all requirements are core functional ones and not “padding requirements”.

3. Identifying Hallucinated Requirements: Based on the standard (a hallucinated requirement is defined as an operation on a data entity that cannot be associated with existing entities, resulting in a weakly disconnected E-R diagram), all functional requirements involve identified entities and can be connected (email is the core, linked with contact, group, etc.; reminder tasks and archiving policies are connectable to email; logs record all operations). The E-R diagram is weakly connected. Therefore, no hallucinated requirements exist.

The evaluation table is as follows (each functional requirement evaluated individually):

｜Functional Requirement｜Hallucinated Requirement｜Evaluation Justification｜

｜FR-01: Email Sending Function｜No｜Involves the email entity; behavior path connects with the SMTP interface; input-output forms a logical closed loop; E-R diagram is not weakly connected.｜

｜FR-02: Email Receiving Function｜No｜Involves the email entity; integrates with IMAP/POP3 protocols; data flow is verifiable; E-R structure is clearly connected.｜

｜FR-03: Email Formatting Function｜No｜Operation revolves around the email entity; data path is closed; behavioral goal is clear; entity is not isolated.｜

｜FR-04: Email Search Function｜No｜Search logic is based on fields within the email entity; behavior path is clearly testable; entity relationships are effectively connected.｜

｜FR-05: Email Archiving Function｜No｜Involves email and folder entities; archiving behavior forms a closed structure; data entities are sufficiently associated.｜

｜FR-06: Contact and Group Management Function｜No｜Involves two core entities, both with related operations in the system; logic is complete and without isolated structures.｜

｜FR-07: Reminder Task Setting Function｜No｜Reminder entity can be connected with email; behavior input-output is clear; system structure forms a closed loop.｜

｜FR-08: Archiving Policy Setting Function｜No｜Policy entity is associated with email records; input-output logic is clear; entity path is not isolated.｜

｜FR-09: Email Backup Function｜No｜Email entity and backup operation form a complete behavioral chain; connections exist between system entities.｜

｜FR-10: Email Recovery Function｜No｜Recovery operation is based on the email entity; paths are traceable; entity relationships are closed.｜

｜FR-11: Mailbox Account Management Function｜No｜Mailbox account is a standalone management entity; system functions clearly link to it; no hallucinated structure exists.｜

｜FR-12: Server Backup and Recovery Function｜No｜Involves the server configuration entity; linked with backup files; operational logic is complete and paths are verifiable.｜

｜FR-17: System Backup and Recovery Function｜No｜Multiple entities participate in the operation; system behavior paths are clear; no isolated nodes in the structure.｜

｜FR-18: Email Server Connection Monitoring Function｜No｜Server configuration entity participates in the behavior path; monitoring data is embedded in system structure; connection is clear.｜

｜FR-19: Email Server Configuration Management Function｜No｜Configuration management revolves around the server entity; input-output forms a closed loop path.｜

｜FR-20: Email System Security Function｜No｜Encryption behavior is attached to the email entity; secure transmission logic is traceable; structure is connected.｜

｜FR-21: User Permission Management Function｜No｜Permission entity is connected with the user entity; input-output is clearly defined; behavior chain is complete.｜

｜FR-22: Email System Log Recording Function｜No｜Log recording revolves around core functions; automatically generated to form a closed behavioral loop; entity is not isolated.｜

｜FR-23: Email System Data Integrity Check Function｜No｜Check operation is bound to the email entity; path is clear; system behavior logic is unbroken.｜

｜FR-LOG: Log Management Function (Merged FR-13, FR-14, FR-15, FR-16)｜No｜Multiple log entities participate in the behavior path; logic structure is complete; no isolated nodes in the E-R diagram.｜

Summary

The entire document involves 8 data entities: email, contact, group, reminder task, archiving policy, mailbox account, log, and server configuration.

After merging same-functional-point requirements, there are 20 functional requirements (originally 23, with FR-13 to FR-16 merged as FR-LOG).

There are 0 hallucinated requirements: all requirements involve connectable data entities and the E-R diagram is weakly connected.

There are 20 non-hallucinated requirements: all are valid.

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