LLM Automated Evaluation Results

Functional Requirements Evaluation Table

According to the user’s instructions, I, as the requirements review expert, conducted a detailed analysis of the provided requirement document. The complete evaluation process is as follows:

I. Data Entity Identification

Data entities refer to the core objects managed within the system, extracted based on functional requirements. External data sources or formats mentioned in interface descriptions are not counted.

A total of 17 data entities were identified: Mail, Folder, Label, Calendar, Contact, ContactGroup, Task, Reminder, MailAccount, SharedAccount, RetentionPolicy, Permission, BackupFile, BackupPlan, ArchivePolicy, ArchiveData, Classification.

Examples:

• Mail (involved in FR-01, FR-02, etc.)

• Folder (involved in FR-05, FR-06)

• Label (involved in FR-08)

• Calendar (involved in FR-10, FR-11, etc.)

• Contact (involved in FR-15, FR-16, etc.)

• ContactGroup (involved in FR-19, FR-20/21)

• Task (involved in FR-22, FR-23, etc.)

• Reminder (involved in FR-27, FR-28)

• MailAccount (involved in FR-29, FR-30, etc.)

• SharedAccount (involved in FR-32)

• RetentionPolicy (involved in FR-33)

• Permission (involved in FR-34)

• BackupFile (involved in FR-35, FR-36, etc.)

• BackupPlan (involved in FR-39, FR-40)

• ArchivePolicy (involved in FR-41)

• ArchiveData (involved in FR-42, FR-43, etc.)

• Classification (involved in FR-46)

II. Functional Requirement Consolidation

Rules: merge only those targeting the same data entity and performing similar actions; do not over-merge (e.g., CRUD operations are not merged). System configuration settings are excluded (none present in the document).

Details:

• FR-20 (Add ContactGroup Member) and FR-21 (Remove ContactGroup Member) were merged into FR-20/21 (ContactGroup Member Management) as they apply to the same entity and similar operations.

• Other requirements target different objects or actions and thus were not merged (e.g., sending vs. receiving mail).

• Total functional requirements after merging: 45 (originally 46).

Merged requirement list for evaluation includes:

1. FR-01 Mail Sending Function

2. FR-02 Mail Receiving Function

3. FR-03 Mail Formatting Function

…

4. FR-46 Archive Classification Management Function

III. Hallucination Requirement Judgment

Criteria: a requirement is hallucinated if its data entity is not connected to the core E-R graph (i.e., isolated). Functional extensions are not hallucinated.

The core entities (Mail, Folder, etc.) are all connected via user or system logic.

All requirements are connected to the core via paths, with no isolated entities. Therefore, no hallucinated requirements exist.

Examples:

• FR-33 (RetentionPolicy) connects to Mail via mailbox data.

• FR-46 (Classification) connects to ArchiveData, which connects to Mail.

All requirements are non-hallucinated (see table below).

Evaluation Table:

| Functional Requirement | Hallucinated | Evaluation Reason |

| FR-01 Mail Sending Function | No | Involves Mail entity, with clear input/output paths and system linkage |

| FR-02 Mail Receiving Function | No | Involves Mail entity, operates based on defined interfaces and internal references |

| FR-03 Mail Formatting Function | No | Involves Mail entity, formatting templates align with entity design |

| FR-04 Mail Searching Function | No | Involves Mail entity, keyword match behavior aligns with structure |

| FR-05 Folder Creation Function | No | Involves Folder entity, creation logic is clearly defined |

| FR-06 Mail Moving Function | No | Involves Mail and Folder, movement path is traceable |

| FR-07 Mail Deletion Function | No | Involves Mail entity, state change logic aligns with structure |

| FR-08 Mail Tagging Function | No | Involves Label and Mail, tag association is well connected |

| FR-09 Mail Archiving Function | No | Involves Mail entity, archiving is internally defined |

| FR-10 Calendar Creation Function | No | Involves Calendar and Contact, referencing logic is clear |

| FR-11 Calendar Modification Function | No | Involves Calendar entity, update behavior matches logic |

| FR-12 Calendar Deletion Function | No | Involves Calendar entity, state transition aligns with structure |

| FR-13 Calendar Viewing Function | No | Involves Calendar entity, viewing behavior fits data model |

| FR-14 Calendar Searching Function | No | Involves Calendar entity, query logic is clear |

| FR-15 Contact Creation Function | No | Involves Contact entity, addition logic is consistent |

| FR-16 Contact Deletion Function | No | Involves Contact entity, removal process is well-defined |

| FR-17 Contact Modification Function | No | Involves Contact entity, edit behavior is complete and reasonable |

| FR-18 Contact Searching Function | No | Involves Contact entity, search flow is valid |

| FR-19 ContactGroup Creation Function | No | Involves ContactGroup, contact linking logic is valid |

| FR-20/21 ContactGroup Member Management Function | No | Involves ContactGroup and Contact, logic consistent |

| FR-22 Task Creation Function | No | Involves Task, Mail, Calendar; logic combination is valid |

| FR-23 Task Modification Function | No | Involves Task entity, update logic is complete |

| FR-24 Task Deletion Function | No | Involves Task entity, deletion path is well defined |

| FR-25 Task Viewing Function | No | Involves Task entity, viewing structure matches |

| FR-26 Task Searching Function | No | Involves Task entity, condition binding is clear |

| FR-27 Task Reminder Setting Function | No | Involves Reminder entity, path is consistent with structure |

| FR-28 Task Reminder Viewing Function | No | Involves Reminder entity, reading behavior is well defined |

| FR-29 MailAccount Creation Function | No | Involves MailAccount, logic is linked to structure |

| FR-30 MailAccount Deletion Function | No | Involves MailAccount, security and structure match |

| FR-31 Mail Settings Modification Function | No | Involves MailAccount, attribute path is defined |

| FR-32 SharedAccount Management Function | No | Involves SharedAccount, permission logic is clear |

| FR-33 RetentionPolicy Setting Function | No | Involves RetentionPolicy, inputs missing but no hallucinated entities |

| FR-34 Mail Permission Management Function | No | Involves Permission, structure is connected |

| FR-35 Mail Backup Function | No | Involves BackupFile, operation path is consistent |

| FR-36 Mail Restore Function | No | Involves BackupFile, recovery path is internally defined |

| FR-37 Backup Log Viewing Function | No | Involves BackupFile, logging structure is valid |

| FR-38 Backup File Deletion Function | No | Involves BackupFile, deletion logic is complete |

| FR-39 BackupPlan Creation Function | No | Involves BackupPlan, matches system scheduling |

| FR-40 BackupPlan Execution Function | No | Involves BackupPlan, execution flow is definable |

| FR-41 ArchivePolicy Creation Function | No | Involves ArchivePolicy, input incomplete but structure valid |

| FR-42 Archive Task Execution Function | No | Involves ArchiveTask, unclear input but no hallucination |

| FR-43 Archived Mail Searching Function | No | Involves ArchivedMail, query logic consistent |

| FR-44 Archived Mail Deletion Function | No | Involves ArchivedMail, deletion behavior defined |

| FR-45 Archived Data Export Function | No | Involves ArchivedMail, export path is clear |

| FR-46 Archive Classification Management Function | No | Involves Classification, structure is bound within system |

Summary:

• The document involves 17 data entities.

• After merging similar functionality, 45 functional requirements remain.

• 0 hallucinated requirements (all are connected to core system).

This evaluation strictly follows the rules specified by the user and is based on the content of the requirements document. Please let me know if further support is needed.