**Project Title**: Email Essence

**Date**: 18 March 2025

**Requirements Traceability Matrix (RTM)**

| Requirement ID | Description | Status | Test Result | Owner | Contributors | Notes |
| --- | --- | --- | --- | --- | --- | --- |
| FR01 | Email Retrieval: Secure email retrieval using Gmail API/IMAP with OAuth 2.0 authentication | Completed | Partial Test coverage: Unit | Joseph |  | Refactored to be a proper service class; |
| FR01.1 | Database Setup  (MongoDB) | Completed | No Test | Ritesh |  | JSON Validation is set up. Needs testing with a trial dataset. |
| FR01.2 | Database Integration with Backend  (MongoDB) | Completed | No Test | Ritesh | Joseph | Pending full backend connection |
| FR02 | AI-Powered Email Summarization: Automatic generation of 1-2 sentence email summaries using AI/LLM | Completed | Partial Test coverage: Unit | Joseph |  | Base implementation meets requirements; currently exploring local model options via LoRA.  Testing is not fully implemented yet. |
| FR03 | Minimal Web Interface | Complete | No Test | Shayan | Emma | Created Component structure.  Working on implementing end to end testing with React framework. |
| Frontend Requirements consist of Pages (FR03.x)  The Pages consist of React Components (FR03.x.x)  React Components are individually Tested | | | | | | |
| FR03.1 | **Dashboard** |  |  | Shayan | Emma |  |
| FR03.1.1 | Weighted Email List | Complete | Passing | Shayan | Emma | Passing with mock testing. |
| FR03.1.2 | Miniview | Complete | Passing |
| FR03.2 | **Inbox** |  |  | Shayan | Emma |  |
| FR03.2.1 | Email Entry Component | Complete | Passing | Shayan | Emma | Passing with mock testing. |
| FR03.2.2 | Inbox Box | Complete | Passing |
| FR03.2.3 | Email Display | Complete | Passing |
| FR03.2.4 | Reader View | Complete | No Test | Shayan | Emma |
| FR03.3 | **Sidebar** |  |  | Emma/ Shayan |  | working on saving user preferences |
| FR03.3.1 | Logo Button | Complete | No Test | Emma/ Shayan |  | Finished functionality and design.  Working on implementing testing with React framework. |
| FR03.3.2 | Inbox Button | Complete | No Test |
| FR03.3.3 | Settings Button | Complete | No Test |
| FR03.4 | **Settings** |  |  | Emma | Shayan |  |
| FR03.4.1 | Summaries In Inbox Toggle | Complete | Passing | Emma | Shayan | Working on Backend Integration.  Testing: completed renderings test, need to work on component interaction |
| FR03.4.2 | Email Fetch Interval Slider | Complete | Passing |
| FR03.4.3 | Theme Selector | Complete | Passing |
| FR03.5 | **Login** | Complete | Passing | Emma/Ritesh | Shayan/Joseph | Testing: completed renderings test, need to work on component interaction |
| FR01.3 (FC) | Caching Setup  (Redis) | Not Started | No Test | Ritesh |  | Initial setup in progress |
| FR01.4 (FC) | Caching Integration | Not Started | No Test | Ritesh | Joseph | Pending initial setup |
| FR04 (FC) | Keyword Analysis | Partial (AI) | No Test | Joseph |  | Pending initial setup **after MVP** |
| FR05 (FC) | Cross-Platform Desktop Support | Not Started | No Test | Shayan | Emma | Pending initial setup with Tauri. |
| FR06 (FC) | OAuth 2.0 Authentication | Partial (Single) | No Test | Joseph | Ritesh | Google Implementation complete; need to lay the foundation for other providers. |

*Requirement ID:* Frontend | Backend

*Description:* Brief description of the requirement

*Status:* Not Started | In Progress | Completed

*Test Result:* Pass | Fail |

*Owner:* The team member responsible for this requirement

*Contributors:* List of contributors or developers

*Notes:* Additional information, clarifications, challenges