**WATERFALL DELIVERABLES PART- 1**

1. **Business Case Document**

* Why is this project initiated?

This project is initiated to address the growing need for a secure, scalable, and user-friendly email and cloud storage solution. The goal is to provide users with a seamless experience for managing emails and storing files in the cloud, while ensuring data security, accessibility, and collaboration features. The application will also help organizations reduce dependency on third-party services and improve data control.

* What are the current problems?
* Existing email and cloud storage solutions lack seamless integration.
* Security concerns with data breaches and unauthorized access.
* Limited storage options with high costs for upgrades
* Lack of efficient collaboration tools within email platforms.
* Downtime and reliability issues with existing platforms
* With this project how many problems could be solved?
* Seamless email and cloud storage integration.
* Advanced security features such as end-to-end encryption and multi-factor authentication.
* Cost-effective storage plans with flexible scalability.
* Built-in collaboration tools (real-time file sharing, version control)
* Improved reliability with minimal downtime through cloud redundancy.
* What are the resources required?
* Human Resources
* Project manager
* Business Analyst
* Software Developers (Frontend and Backend)
* UI/UX Designer
* QA Testers
* Devops Engineer
* Security Specialist
* Infrastructure
* Cloud Servers
* Secure Database Storage
* Developmental tools and Frameworks
* Database management System
* Security tools (encryption, firewalls, etc..)
* Financial Resources
* Development costs
* Infrastructure costs
* Training and Onboarding costs
* Maintenance and Support costs
* How much organizational change is required to adopt this technology?
* Employees will need to transition from existing third-party services to the new application. This may require changes in workflows and processes.
* Staff will need training to use the new application effectively.
* Encouraging employees to adopt the new system and trust its security and reliability.
* Upgrading or setting up new infrastructure to support the application.
* Time frame to recover ROI?

The estimated time frame to recover ROI is 2-3 years. This is based on:

* Savings from eliminating third-party subscription fees.
* Increased productivity due to improved collaboration and accessibility.
* Reduced operational costs associated with data breaches or inefficiencies in current systems.
* How to identify Stakeholders?
* Primary Stakeholders
* Business owners and executives who approve funding and strategy
* Development and security teams responsible for building the platform.
* Secondary Stakeholders
* End-users (businesses and individual customers).
* Complaince and regulatory bodies.
* Cloud service providers and third-party vendors.
* Stakeholder Identification Methods
* Conduct surveys and market research.
* Engage in stakeholder interviews and consultations.
* Analyse competitors' stakeholder engagement models.

1. **BA Strategy**

As a Business Analyst, we need to ensure the project meets business needs by bridging the gap between stakeholders and the development team. Below is the step-by-step approach:

* Elicitation Techniques:
* Interviews: Conduct one-on-one or group interviews with key stakeholders (e.g., clients, end-users, IT team) to gather detailed requirements.
* Workshops: Organize collaborative sessions to brainstorm and prioritize features.
* Surveys/Questionnaires:  Use these to gather input from a large group of users or stakeholders.
* Observation: Observe how users currently handle email and cloud storage to identify pain points.
* Document Analysis: Review existing systems, policies, and processes related to email and cloud storage.
* Prototyping: Develop wireframes/mockups to validate UI/UX expectations.
* Stakeholder Analysis:
* Identify Stakeholders: List all stakeholders (e.g., clients, end-users, developers, IT support, legal/compliance teams).
* Define roles, expectations, and communication preferences.

RACI Matrix (Responsible, Accountable, Consulted, Informed)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Task/Activity** | **Business Analyst** | **Dev Team** | **QA** | **Client** | **Project Manager** | **Compliance** |
| Requirements Gathering | R | C | I | A | C | C |
| Design Approval | C | A | I | R | C | I |
| Development | I | R | C | A | C | I |
| Testing | C | I | R | A | I | I |
| UAT Sign-Off | C | I | I | R | A | C |

* Documents to Prepare:
* Business Requirement Document (BRD): High-level business needs and objectives.
* Functional Requirement Document (FRD): Detailed functionalities (Email integration, Cloud storage, Security).
* Software Requirement Specification: Technical specifications for the system.
* User Stories and Use Cases: Define system interactions and workflow scenarios.
* Traceability Matrix (RTM): Map requirements to test cases.
* User Acceptance Testing (UAT) Plan: Outline UAT process and criteria for acceptance.
* Change Request Document: Manage scope modifications.
* Process to Sign Off on Documents:
* Document Review: Conduct internal and external stakeholder reviews.
* Feedback Collection: Ensure feedback incorporation before approval.
* Client Approval Process:
* Submit documents for review via email or project management tools (JIRA, Confluence).
* Hold review meetings and address concerns.
* Obtain formal approval via sign-off emails or e-signatures.
* Communication Channels:
* Project Management Tool: Use tools like Jira, Trello, or Asana to track tasks and progress.
* Email:  For formal communication and document sharing.
* Meetings & Stand-ups: Weekly sync-ups and monthly stakeholder reviews.
* Collaboration Platforms: Use platforms like Slack or Microsoft Teams for real-time communication.
* Status Reports: Share weekly or monthly progress reports with stakeholders.
* Handling Change Requests:
* Change Request Form: Create a standardized form for stakeholders to submit change requests.
* Impact Analysis: Assess the impact of changes on scope, timeline, and budget.
* Document Updates: Update relevant documents (e.g., BRD, FRD) to reflect approved changes.
* Project Process Updates:
* Dashboards: Use dashboards in project management tools to visualize progress.
* Status Reports: Share detailed reports with stakeholders, highlighting completed tasks, upcoming milestones, and risks.
* Milestone Reviews: Conduct reviews at key milestones to ensure alignment with project goals.
* UAT and Client Project Acceptance:
* Define UAT scope, test cases, and success criteria.
* Work with end-users to conduct UAT and log defects.
* Collaborate with the development team to resolve defects.
* Prepare a formal acceptance form for the client to sign off on UAT and project delivery.

1. **Functional Specifications:**

|  |  |
| --- | --- |
| Project name | Mail Smart App |
| Customer name | Tech Solutions Inc. |
| Project Version | 1.0 |
| Project Sponsor | John Doe |
| Project Manager | Jane Smith |
| Project Initiation date | Feb 5, 2025 |

**Functional Requirement Specifications:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Req ID** | **Req Name** | **Req Description** | **Priority** |
| FR0001 | Login | Users should be able to login to access the application | 10 |
| FR0002 | Sign Up | New users should be able to create an account | 10 |
| FR0003 | Forgot Password | Users should be able to reset their password via email | 9 |
| FR0004 | Email Compose | Users should be able to compose and send emails | 10 |
| FR0005 | Inbox | Users should be able to view received emails | 10 |
| FR0006 | Sent Items | Users able to view sent emails | 8 |
| FR0007 | Attachments | Users should be able to attach files to emails | 9 |
| FR0008 | Cloud Upload | Users should be able to upload files to cloud storage | 10 |
| FR0009 | Cloud Download | Users should be able to download files from cloud storage | 10 |
| FR0010 | File Sharing | Users should be able to share stored files via emails or links | 9 |
| FR0011 | Storage Management | Users should be able to view and manage their storage usage | 8 |
| FR0012 | Email Filtering | Users should be able to filter emails by sender, date and type | 8 |
| FR0013 | Search Emails | Users should be able to search emails using keywords | 9 |
| FR0014 | Search Files | Users should be able to search files in cloud storage | 9 |
| FR0015 | Two- factor Authentication | Users should be able to enable two-factor authentication for security | 9 |
| FR0016 | Logout | Users should be able to securely log out | 10 |

1. **Requirement Traceability Matrix:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Req ID** | **Req Name** | **Req Description** | **Design** | **T1** | **D1** | **D2** | **T2** | **UAT** |
| FR001 | Login | User must be able to access the application | Yes | Pending | No | Yes | Yes | Yes |
| FR002 | Forgot password | Users must be able to reset passwords via email | Yes | Pending | No | Yes | Yes | Yes |
| FR003 | Email Compose | Users must be able to compose and send emails | Yes | Pending | No | Yes | Yes | Yes |
| FR004 | Email Inbox | Users must be able to view and receive emails | Yes | Pending | No | Yes | Yes | Yes |
| FR005 | Email Search | Users must be able to search emails by keyword | Yes | Pending | No | Yes | Yes | Yes |
| FR006 | Cloud Upload | Users must be able to upload files to cloud storage | Yes | Pending | No | Yes | Yes | Yes |
| FR007 | Cloud Download | Users must be able to download stored files | Yes | Pending | No | Yes | Yes | Yes |
| FR008 | File Sharing | Users must be able to share files via link or email | Yes | Pending | No | Yes | Yes | Yes |
| FR009 | Security & Encryption | User data must be encrypted in transit and at rest | Yes | Pending | No | Yes | Yes | Yes |
| FR0010 | Performance | App shud handle large users | Yes | Yes | Yes | Yes | Yes | Yes |

**Key to RTM Columns:**

* Req ID: Unique identifier for the requirement.
* Req Name: Name of the requirement.
* Req Description: Detailed description of the requirement.
* Design: Indicates if the requirement has been addressed in the design phase (Yes/No).
* T1 (Unit Test): Indicates if the requirement has passed unit testing (Yes/No/Pending).
* D1 (Integration Test): Indicates if the requirement has passed integration testing (Yes/No/Pending).
* D2 (System Test): Indicates if the requirement has passed system testing (Yes/No/Pending).
* T2 (Regression Test): Indicates if the requirement has passed regression testing (Yes/No/Pending).
* UAT (User Acceptance Test): Indicates if the requirement has passed user acceptance testing (Yes/No/Pending).