Mindflux 1.0 -

Product Requirement Document

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| Version | : 0.1 |
| Date | : 08/SEPTEMBER/2025 |
| Author | : Palanivel S |

Document Modification History

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| --- | --- | --- | --- |
| Version | Modified By | Date | Remarks |
| 0.1 | Palanivel S | 08-09-2025 | Initial Draft |
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Contents

[1. Executive Summary 3](#_Toc208274726)

[2. Introduction 3](#_Toc208274727)

[2.1. Purpose 3](#_Toc208274728)

[2.2. Scope 3](#_Toc208274729)

[2.3. Objectives 4](#_Toc208274730)

[3. Overview of Roles 4](#_Toc208274731)

[3.1. End User (Employee/Contributor) 4](#_Toc208274732)

[3.2. Space Owner / Moderator 4](#_Toc208274733)

[3.3. Administrator (Admin) 5](#_Toc208274734)

[4. Functional Requirements – End User 5](#_Toc208274735)

[4.1. Authentication & Profile 5](#_Toc208274736)

[4.2. Page & Document Management 5](#_Toc208274737)

[4.3. Collaboration 6](#_Toc208274738)

[4.4. Spaces & Organization 6](#_Toc208274739)

[4.5. File & Media Embedding 6](#_Toc208274740)

[4.6. Search & Discovery 6](#_Toc208274741)

[4.7. Notifications 6](#_Toc208274742)

[5. Non-Functional Requirements – End User 7](#_Toc208274743)

[5.1. Performance & Scalability 7](#_Toc208274744)

[5.2. Security & Privacy 7](#_Toc208274745)

[5.3. Availability & Reliability 7](#_Toc208274746)

[5.4. Usability & Experience 8](#_Toc208274747)

# Executive Summary

**Changepond Mindflux** is an **organization-level knowledge management and collaboration tool** inspired by platforms like *Confluence*. It is designed to help teams create, organize, and share documents, project information, and knowledge in a structured manner.

The application enables employees to **create pages, wikis, and knowledge bases**, collaborate in real-time, and maintain version histories of documents. Unlike traditional tools, Mindflux ensures **simplified, secure login through email OTP (passwordless)**, making access easy and secure.

Mindflux offers:

* **Knowledge Sharing**: Create structured pages, meeting notes, and project documentation.
* **Collaboration**: Real-time co-authoring, commenting, tagging, and task assignments.
* **Organization**: Hierarchical spaces and categories for teams, projects, or departments.
* **Searchability**: Advanced search to locate content by title, tags, or keywords.
* **Governance & Security**: Role-based permissions, audit logs, and compliance support.

This platform will serve as a **centralized hub for organizational knowledge**, reducing redundancy, improving documentation practices, and enhancing cross-team collaboration.

# Introduction

## Purpose

The purpose of this BRD is to define the **objectives, scope, and requirements** for *Changepond Mindflux*. The document ensures stakeholders, developers, and business teams share a common understanding of how the tool will function and deliver value.

## Scope

Mindflux is a **collaboration and documentation tool** with the following in-scope features:

* **Authentication**: Passwordless login using **email OTP only**.
* **Page & Document Management**: Create, edit, delete, and organize documents.
* **Spaces/Workspaces**: Create and manage spaces for projects, teams, or departments.
* **Collaboration**: Real-time co-editing, comments, mentions, and task assignment.
* **Version Control**: Maintain revision history of documents with rollback.
* **Search & Tagging**: Advanced search by title, tags, and keywords.
* **Integration**: Link pages, embed files, and integrate with third-party tools.
* **Notifications**: Real-time alerts for mentions, edits, comments, and updates.
* **Admin Controls**: Permissions management, audit logs, compliance, and reporting.

## Objectives

* Provide a **centralized knowledge base** for the organization.
* Enable **real-time collaboration** on documents and projects.
* Ensure **secure and passwordless login** for ease of access.
* Improve **documentation practices** and reduce knowledge silos.
* Support **scalability** with flexible spaces and role-based permissions.

# Overview of Roles

Mindflux supports different roles within the organization to ensure efficient collaboration, structured documentation, and secure access control.

## End User (Employee/Contributor)

* Logs in via **email OTP only** (passwordless).
* Creates, edits, and reads **pages, wikis, and documents**.
* Collaborates with colleagues through **comments, mentions (@username), and reactions**.
* Uploads and embeds **files, images, or links** into pages.
* Uses **search and tagging** to find relevant content quickly.
* Views version history and restores earlier versions of documents.
* Joins and participates in **spaces/workspaces** created by teams or departments.

## Space Owner / Moderator

* Creates and manages **spaces** (team/project knowledge hubs).
* Defines **structure and hierarchy** of pages within a space.
* Configures **permissions** for members of the space (view, edit, comment).
* Pins important documents to the top of the space.
* Monitors activity within the space (recent edits, new pages, comments).

## Administrator (Admin)

* Manages **organization-wide settings** and permissions.
* Configures default policies for content creation, access, and retention.
* Monitors **audit logs** for compliance and accountability.
* Creates **templates** for standardized documents (e.g., meeting notes, project plans).
* Controls **integrations** with third-party tools (chat, project management, storage).
* Generates **analytics and usage reports** (active spaces, top contributors, most searched keywords).

# Functional Requirements – End User

These requirements specify what an **End User (Employee/Contributor)** must be able to do inside Mindflux.

## Authentication & Profile

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| **ID** | **Requirement** | **Description** | **Priority** |
| END-FR-01 | OTP Login | End User logs in via **email OTP only** (passwordless). | High |
| END-FR-02 | Session Control | Sessions expire after defined idle time; re-authentication with OTP required. | High |
| END-FR-03 | Profile Setup | End User can set up a profile with **Name, Designation, Department, Skills, Profile Photo**. | High |
| END-FR-04 | Profile Updates | Ability to edit/update profile details anytime. | Medium |

## Page & Document Management

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| **ID** | **Requirement** | **Description** | **Priority** |
| END-FR-05 | Create Pages | Create new pages using a **rich text editor** (headings, lists, tables). | High |
| END-FR-06 | Edit Pages | Edit existing pages authored by the user (or with edit permission). | High |
| END-FR-07 | Delete Pages | Delete own pages (soft delete with restore option). | Medium |
| END-FR-08 | Version Control | Maintain **revision history** and allow rollback to previous versions. | High |
| END-FR-09 | Templates | Use pre-defined templates (meeting notes, project plans, documentation). | Medium |

## Collaboration

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| **ID** | **Requirement** | **Description** | **Priority** |
| END-FR-10 | Real-Time Co-Editing | Multiple users can edit a page simultaneously. | High |
| END-FR-11 | Comments | Add inline comments or general comments on pages. | High |
| END-FR-12 | Mentions | Mention colleagues using **@username** for collaboration. | High |
| END-FR-13 | Reactions | React to content with emoji-based feedback. | Medium |
| END-FR-14 | Task Assignment | Assign tasks or action items to users within a page. | Medium |

## Spaces & Organization

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| **ID** | **Requirement** | **Description** | **Priority** |
| END-FR-15 | Join Spaces | Join spaces created by teams, departments, or projects. | High |
| END-FR-16 | Browse Pages | Navigate pages organized under spaces. | High |
| END-FR-17 | Pin Content | Pin important pages within a space for quick access. | Medium |
| END-FR-18 | Favorites | Mark pages or spaces as favorites for easy retrieval. | Medium |

## File & Media Embedding

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| **ID** | **Requirement** | **Description** | **Priority** |
| END-FR-19 | Upload Files | Upload images, documents, or attachments into pages. | High |
| END-FR-20 | Embed Media | Embed links, videos, or diagrams into content. | Medium |
| END-FR-21 | File Preview | Preview common file formats without download. | Medium |

## Search & Discovery

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| **ID** | **Requirement** | **Description** | **Priority** |
| END-FR-22 | Search Pages | Search across pages by **title, author, tags, or keywords**. | High |
| END-FR-23 | Filter Results | Filter search results by space, tags, or last modified date. | High |
| END-FR-24 | Smart Suggestions | Provide suggested pages based on frequent access. | Medium |

## Notifications

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| **ID** | **Requirement** | **Description** | **Priority** |
| END-FR-25 | Mentions Alerts | Notify user when mentioned in a page or comment. | High |
| END-FR-26 | Edit Alerts | Notify when a followed page is edited. | Medium |
| END-FR-27 | Task Alerts | Notify user when assigned a task. | High |
| END-FR-28 | Comment Alerts | Notify when someone comments or replies on user’s page. | High |

# Non-Functional Requirements – End User

These define **quality standards** for how Mindflux should work for End Users.

## Performance & Scalability

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| **ID** | **Requirement** | **Priority** |
| NFR-01 | System must support **5,000 concurrent users** without degradation. | High |
| NFR-02 | Page load time ≤ **2 seconds** under normal load. | High |
| NFR-03 | Real-time co-editing updates must appear within **1 second**. | High |

## Security & Privacy

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| **ID** | **Requirement** | **Priority** |
| NFR-04 | OTP login must be encrypted (TLS 1.2+). | High |
| NFR-05 | End Users can only edit/delete content where they have permission. | High |
| NFR-06 | All actions (page edits, comments, file uploads) must be audit-logged. | High |
| NFR-07 | Compliance with **GDPR/ISO 27001** for data protection. | High |

## Availability & Reliability

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| **ID** | **Requirement** | **Priority** |
| NFR-08 | Ensure **99.9% uptime** excluding planned maintenance. | High |
| NFR-09 | Autosave page edits every **15 seconds** to prevent data loss. | High |
| NFR-10 | Daily backups with recovery in **≤4 hours**. | High |

## Usability & Experience

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| **ID** | **Requirement** | **Priority** |
| NFR-11 | Provide a **responsive UI** across desktop, web, and mobile devices. | High |
| NFR-12 | Rich text editor must support tables, diagrams, and formatting. | High |
| NFR-13 | Search results must return in ≤3 seconds. | Medium |
| NFR-14 | Provide **light/dark mode** for user preference. | Low |