**Business Requirement Document**

**Project Overview**

The Wealth Intelligence (WIN) platform requires a messaging application to facilitate secure, real-time communication between Wealth Management Firms, their clients (end investors), and Investment Managers. The messaging solution must integrate seamlessly into the existing WIN platform, which utilizes Bootstrap and Angular, offering user-friendly communication while ensuring compliance with financial regulations and data security.

**Business Objectives**

1. Enable Secure Communication:

Provide a platform for secure, real-time messaging between clients and investment managers to improve communication and client engagement.

1. Centralize Client-Manager Interactions:

Eliminate the need for external communication tools, creating a more unified experience for users within the WIN platform.

1. Enhance Compliance:

Ensure all communication is encrypted and auditable, meeting regulatory and security requirements for financial data.

1. Improve Efficiency:

Increase response times and overall engagement between Wealth Management Firms and their clients through real-time notifications and messaging.

1. Provide Management Capabilities:

Equip Wealth Management Firms with tools to manage user accounts, permissions, and track communication for reporting and auditing purposes.

**Scope**

The scope includes designing, developing, and implementing a messaging application that:

* Supports secure messaging between clients and investment managers.
* Integrates with the WIN platform’s existing architecture (Bootstrap with Angular).
* Enables real-time communication and notifications.
* Allows firms to manage user roles and monitor communication.
* Ensures compliance through message encryption and an audit log.

**Stakeholders**

* **Primary Users**: Wealth Management Firms (Admins), Clients (Investors), Investment Managers
* **Project Sponsors**: WIN Platform Management
* **Development Team**: Software Engineers, QA Engineers, Product Owners
* **Legal and Compliance**: Ensures the application meets financial regulations.

**Functional Requirements**

1. **User Registration and Login**
   * Users (Clients, Investment Managers, Admins) must register and log in to access the messaging platform.
   * Secure login using two-factor authentication (2FA).
2. **Messaging Interface**
   * Clients and investment managers can exchange text-based messages securely within the application.
   * Support for real-time messaging (instant send/receive functionality).
3. **Notifications**
   * Real-time notifications for both clients and managers when a new message is received.
4. **Message Attachments**
   * Users can attach and send files/documents such as PDFs, images, or spreadsheets.
5. **Conversation History**
   * Users can view and search the history of messages between clients and managers.
6. **User Roles and Permissions**
   * Admins can manage user roles (e.g., client, investment manager, admin) and permissions (access to certain features).
7. **Admin Management Panel**
   * Wealth Management Firms can manage the messaging application, including creating or deactivating accounts, managing permissions, and setting up alerts.
8. **Search Functionality**
   * Users can search conversations by keywords, dates, or specific message threads.
9. **Message Encryption**
   * All messages and attachments must be encrypted in transit and at rest, ensuring compliance with financial data security regulations.
10. **Audit Trail and Reporting**
    * All messages and user actions (e.g., account changes, message deletions) must be logged for auditing and reporting purposes.
11. **Group Messaging**
    * Support for group chats between a client and multiple investment managers.
12. **User Status Indicators**
    * Show when users are online, offline, or away.

**Non-Functional Requirements**

1. **Security**:
   * Use end-to-end encryptions for all messages and file attachments.
   * Ensure the platform is compliant with financial regulatory standards.
2. **Performance**:
   * The messaging system should handle multiple concurrent users and deliver real-time messages with minimal delay.
3. **Scalability**:
   * The application should support an increasing number of users without performance degradation.
4. **Availability**:
   * Ensure 99.9% uptime for the messaging application to provide a reliable communication channel for users.
5. **Compatibility**:
   * The messaging app must seamlessly integrate with the WIN platform’s Bootstrap and Angular front-end framework.
6. **Usability**:
   * The user interface should be intuitive and easy to navigate for all user types (clients, investment managers, admins).

**Business Rules**

1. **User Registration and Access**
   * Only authorized users (clients and investment managers) can register on the platform.
   * Admins can deactivate or remove users from the messaging application as needed.
2. **Message Retention**
   * Messages should be retained for a configurable period (e.g., 6 months or 1 year) based on regulatory guidelines.
3. **Attachment Limits**
   * File attachments must be limited to a specific size (e.g., 10MB) and file types (e.g., PDFs, Word documents).

**Assumptions**

* The WIN platform will provide the necessary integration points (APIs, authentication services) to support the messaging functionality.
* Users will access the messaging application through both desktop and mobile devices.

**Constraints**

* The messaging application must be developed and deployed within a 6-month timeframe.
* The system must comply with all relevant financial data privacy and security regulations (e.g., GDPR, SEC compliance).
* Bootstrap with Angular is the only front-end technology that can be used to build the application interface.

**Risks**

1. **Data Security Risks**: Failure to implement strong encryption could lead to data breaches, especially as sensitive financial information may be exchanged.
2. **Integration Challenges**: Integrating with the existing WIN platform may present compatibility or performance challenges.
3. **Regulatory Compliance**: Not meeting financial data regulations could result in fines or penalties for the Wealth Management Firms.

**Milestones**

1. **Requirements Gathering**: 2 weeks
2. **Design Phase (UI/UX, Mockups, UML Diagrams)**: 3 weeks
3. **Development Phase**: 8 weeks
4. **Testing and QA**: 4 weeks
5. **User Acceptance Testing (UAT)**: 2 weeks
6. **Go-Live**: 1 week

**Success Criteria**

* Secure messaging between clients and investment managers is functional and compliant with security and regulatory standards.
* Real-time notifications work seamlessly, and there is no delay in message delivery.
* Admins can manage users, track communication, and generate reports effectively.
* The system is scalable, reliable, and provides 99.9% uptime.

**Appendices**

* Wireframes/Mockups: Visual design of key screens (login, messaging interface, admin panel).
* UML Diagrams: Use case and sequence diagrams to show interactions between users and the system.
* Test Plan: Outline of the test cases for login, messaging, attachments, notifications, and admin controls.