

# **REQUIREMENTS DOCUMENTATION**

## **INFOSYS EMERGENCY AND MENTAL WELL BEING PROJECT**

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### **SUMMARY:**

The "Emergency and Mental Well-Being" application is a full-stack platform designed to provide immediate support and resources for individuals experiencing mental health crises or seeking mental well-being services. It connects users to a network of mental health professionals, offers tools for self-assessment, and provides educational resources to promote mental well-being. The platform enables users to access support, monitor personal progress, and access emergency contact options quickly.

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## **1. Scope of the Project:**

### **1. 1 User Features:**

- **Registration and Login:** Secure user registration and authentication.
- **Self-Assessment Tools:** Access to tools for evaluating mental health status.

- **Resource Library:** A database of resources such as articles, videos, and exercises.
- **Emergency Support:** Quick-access features to reach mental health professionals or emergency contacts.

## **1.2. Professional Features:**

- **Professional Registration:** A portal for mental health professionals to register and offer their services.
- **Appointment Management:** Scheduling and managing sessions with users.
- **Resource Contribution:** Professionals can add resources and tools to the platform.

## **1.3. System Features:**

**Analytics and Reporting:** Tracks user engagement and common mental health needs.

- 1.4. **Personalized Suggestions:** Recommends resources based on user activity and assessments.

## **2. Functional Requirements:**

### **2.1 User Functional Requirements:**

- **Registration and Login:** Users can create an account, log in, and manage profiles securely.
- **Self-Assessment Tools:** Users can access questionnaires and tools for mental health self-assessment.
- **Resource Access:** Users can search and browse mental health resources.
- **Emergency Contact Options:** Quick links to emergency contacts or nearby support centers.
- **Progress Tracking:** Users can monitor their mental well-being journey and track improvements.

## 2.2 Professional Functional Requirements

- **Registration:** Mental health professionals can register and provide qualifications.
- **Session Management:** Manage appointment requests, session notes, and follow-up reminders.
- **Resource Contribution:** Add resources for the community, such as articles, exercises, and videos.

## 3. Non-Functional Requirements

- **Performance:** Ensure smooth performance during high-traffic periods, especially in emergency situations.
- **Scalability:** The platform should be scalable to accommodate a growing number of users and professionals.

- **Security:** Strong encryption for user data, HIPAA compliance, and secure access control for mental health professionals.
- **Reliability:** High availability with minimal downtime, especially during emergencies.
- **Usability:** A user-friendly interface that makes navigation easy, particularly for users in distress.
- **Maintainability:** The platform should be modular, allowing for regular updates and maintenance.

#### **4. Tech Stack Used:**

##### **Frontend:**

**React JS:** To provide a dynamic and responsive interface for users and professionals.

##### **Backend:**

**Spring Boot:** For scalable and efficient backend services, handling user requests and data processing.

##### **Database:**

**MongoDB/MySQL:** For storing user data, resources, and session information securely.

##### **Microservices:**

**User Management:** Manages user registration, authentication, and profile management.

**Professional Management:** Handles professional registrations and service offerings.

**Resource Management:** Manages mental health resources available on the platform.

**Emergency Support:** Microservice dedicated to emergency features and real-time support connections.

## 5. User Stories:

### **User Story 1: User Registration and Login**

As a user, I want to register securely, so I can have personalized access to resources and tools on the platform.

#### **Acceptance Criteria:**

Registration requires a unique email address, password, and basic information.

Login functionality authenticates user credentials and provides access to the user dashboard.

### **User Story 2: Self-Assessment Tools**

As a user, I want to access mental health self-assessment tools, so I can gauge my mental well-being.

#### **Acceptance Criteria:**

Assessment results are displayed immediately and are securely stored in the user profile for future reference.

Users can retake assessments periodically to monitor progress.

### **User Story 3: Access Resource Library**

As a user, I want to browse mental health resources, such as articles and videos, to educate myself on mental well-being.

#### **Acceptance Criteria:**

Resources can be searched or filtered by categories such as stress, anxiety, depression, etc.

Content is updated periodically, and users can mark resources as favourites for quick access.

### **User Story 4: Emergency Support Access**

As a user, I want a quick-access option to connect with emergency contacts or mental health professionals when in need.

#### **Acceptance Criteria:**

Emergency contact options are available on the main dashboard.

The system provides contact information for nearby mental health facilities based on user location.

### **User Story 5: Professional Registration**

As a mental health professional, I want to register and verify my credentials to provide services on the platform.

**Acceptance Criteria:**

Registration includes credential verification and approval by the platform administrators.

Approved professionals can access a dashboard to manage appointments and resources.

**User Story 6: Appointment Management**

As a mental health professional, I want to manage appointment requests and schedules efficiently.

**Acceptance Criteria:**

Professionals can accept or reschedule appointments and add session notes.

Users receive appointment reminders via email or platform notifications.

**User Story 7: Resource Contribution by Professionals**

As a mental health professional, I want to share valuable resources to help users improve their mental well-being.

**Acceptance Criteria:**

Professionals can submit articles, exercises, and videos, which will be reviewed and approved by platform admins.

Resources are tagged by category and appear in the resource library upon approval.



## **User Story 8: Personalized Suggestions**

As a user, I want personalized recommendations based on my activity and assessments.

### **Acceptance Criteria:**

The platform uses assessment results and activity history to suggest relevant resources and exercises.

Users can receive notifications about recommended content and upcoming sessions.

## **6. Database Design**

### **User Table**

1. user\_id
2. name
3. email
4. password
5. role
6. contact\_number
7. created\_at

### **Emergency\_incidents Table**

1. user\_id
2. incident\_type
3. location
4. description
5. status
6. reported\_at
7. resolved\_at

### **mental\_health\_resources Table**

1. resource\_id
2. title
3. description
4. resource\_type
5. contact\_info

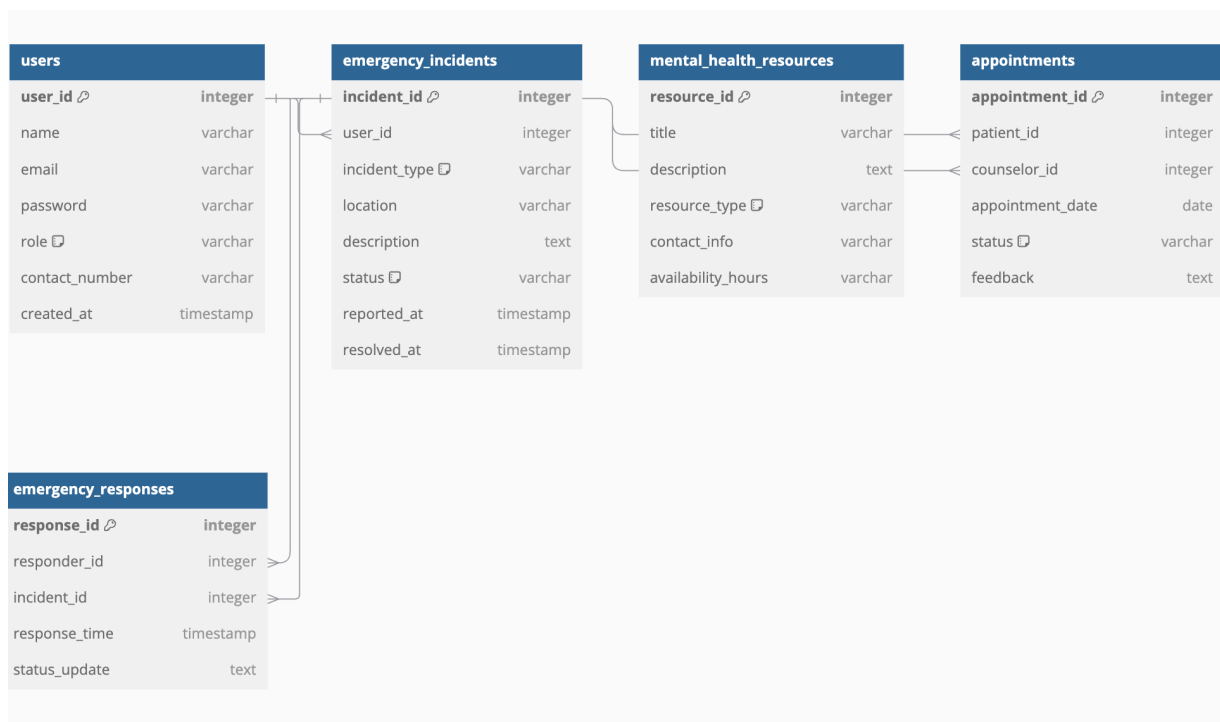
## 6. availability\_hours

### Appointments Table

1. appointment\_id
2. patient\_id
3. counselor\_id
4. appointment\_date
5. status
6. feedback

### Emergency\_responses Table

1. response\_id
2. responder\_id
3. incident\_id
4. response\_time
5. status\_update



Entity-Relationship (ER) Database Design Diagram - **EMERGENCY AND MENTAL WELLBEING**

