

# VitaCare - Feature Process Document

## Team Members

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## Project Title:

**VitaCare** - A Comprehensive Doctor-Hospital Services App.

## Completed Features and Their Process

### 1. User Authentication

#### 1.1 Login Feature

- **Description:** Users can securely log in to the app.
- **Technology Used:** Firebase Authentication
- **Process:**
  - User enters email and password.
  - Firebase validates credentials.
  - Redirects to appropriate dashboard based on role (Doctor or Patient).

## 1.2 Signup Feature

- **Description:** Separate signup flow for Patients and Doctors.
- **Technology Used:** Firebase Authentication + Firestore
- **Process:**
  - User selects role (Patient/Doctor).
  - Enters details like name, phone, email, etc.  
Doctor signs up with additional info (specialty, chamber, etc.).
  - Data stored in Firestore under respective collections.

## 2. User Role Management

### 2.1 Patient Role Features

- View list of hospitals with details (address, available beds, ICU).
- Search and view doctors by specialty (e.g., cardiologist, dermatologist).
- View doctor chamber, contact info.
- View and search blood donors by blood group.
- Option to become a blood donor (details saved in Firebase).

### 2.2 Doctor Role Features

- Edit own profile and medical information (name, chamber, contact etc).
- Update info using an "Edit" button.
- Access is restricted to logged-in doctors only.

### 3. Hospital Information System

#### 3.1 Hospital Details

- View hospitals with real-time data:
  - Name
  - Address
  - Available beds
  - Available ICU
- Data fetched from Firebase database.

### 4. Doctor Information System

#### 4.1 View Doctors

- Filter doctors based on specialty (e.g., pediatrician, surgeon).
- View doctor profiles with:
  - Name
  - Chamber address
  - Contact number

### 5. Blood Donation System

#### 5.1 Become a Blood Donor

- Patients can register themselves as blood donors.
- Donor info (name, group, contact) stored in Firebase.

## 5.2 Find Blood Donor

- Users can search for blood donors by group (e.g., A+, O-).
- Displays list with contact details.

## Technologies Used

- Frontend: Java, XML (Android Studio)
- Backend: Firebase Realtime Database & Firestore
- Authentication: Firebase Authentication