**System Workflow**

The system workflow describes the sequence of operations and interactions between the user, system components, and different roles within the application. Below is an outline of the general workflow for this project:

1. **Registration**:
   * Both **patients** and **donors** need to create accounts on the platform by registering through their personal details.
   * The registration includes entering basic information such as name, email, phone number, and password.
2. **Patient Login**:
   * After registration, patients can log into the system using their username and password.
3. **Patient Upload Request**:
   * After logging in, the patient submits a request for medical help, including uploading necessary documents such as the treatment-related bills or prescriptions (in image format).
4. **AI-based Verification**:
   * Once the patient uploads the documents, the system uses AI-powered algorithms, specifically **Fuzzy Matching Algorithm** for pattern recognition and **YOLOv8 for text detection**, to verify the authenticity of the documents (e.g., matching with hospital data).
5. **Fraud Detection**:
   * If the documents are valid, the request proceeds for donor visibility.
   * If fraudulent, the system blocks the request and notifies the patient.
6. **Donor Login**:
   * Donors log in to the platform to view and approve medical help requests from patients.
7. **Fund Contribution**:
   * After a donor approves the request, the donor can make a payment via the integrated payment gateway (e.g., PayPal, Stripe).
   * Once the payment is completed, the donor uploads the payment receipt.
8. **Completion**:
   * After the patient has received the donation and completed their treatment, they can update their treatment status, and the transaction is marked as completed.

**Actors**

1. **Patient**:
   * Registers on the platform.
   * Submits medical help requests along with supporting documents (e.g., treatment bills, prescriptions).
   * Logs in to check the status of their request and interacts with donors.
2. **Donor**:
   * Registers and logs into the platform.
   * Views the submitted medical help requests.
   * Approves and contributes funds for verified medical requests.
   * Makes payments for verified treatment requests.
3. **System (AI Engine)**:
   * Verifies the authenticity of medical documents using AI algorithms (Fuzzy Matching and YOLOv8 for text detection).
   * Blocks fraudulent requests and processes valid ones for donor visibility.
4. **Payment Gateway**:
   * Handles the transaction process between donors and patients.
   * Secures payment data and processes the donations via PayPal, Stripe, etc.