

User Stories

The following user stories define the scope and functionality of the backend system:

Authentication (Auth)

1. As a user, I want to register on the site, so I can access its features.
 - Acceptance Criteria:
 - The user can fill out a registration form with personal details.
 - The user must complete a captcha challenge to prevent bots.
 - The user receives a confirmation email to verify their account.
2. As an admin, I want to define roles (Doctor, Patient), so I can assign specific permissions and access rights.
3. As a user, I want to log in to the system using Spring Security, so that my account is protected.
4. As a user, I receive an email notification when a new appointment is created, so I am always informed.

Doctor Profile

1. As a doctor, I want to add new patients to my list, so I can manage my patient base.
2. As a doctor, I want to view a list of my patients, so I can easily manage and access their profiles.
3. As a doctor, I want to see my profile, including my biography, skills, and contact information, so that patients can learn more about me.
4. As a doctor, I want to view and filter appointments by date, so I can organize my schedule efficiently.
5. As a doctor, I want to add new appointments, so I can manage my availability for patients.

Patient Profile

1. As a patient, I want to find a doctor, procedure, or treatment, so I can receive the care I need.
2. As a patient, I want to view a list of doctors, so I can choose one that fits my needs.
3. As a patient, I want to view my profile, so I can see my personal information.
4. As a patient, I want to view all my visits and appointments, so I can keep track of my medical history.
5. As a patient, I want to see all my appointments in a calendar view, similar to Google Calendar, for better planning.
6. As a patient, I want to generate reports of my visits and treatments, for personal record-keeping.
7. As a patient, I want to see an expense list for my treatments, so I can manage my finances.

Treatment Management Timeline

Patient Features:

1. As a patient, I want to search for my treatments using filters like time ranges and stage types, so I can easily find relevant treatment details.
2. As a patient, I wish to view the details of my treatment in a visual timeline that shows different stages, to understand the progression and plan accordingly.
3. As a patient, I need to contact the doctor assigned to a particular stage of my treatment directly from the system, for convenience and clarity.
4. As a patient, I want to see the cost for each stage of my treatment, including medicines and the final bill, to manage my financial expectations.
5. As a patient, I want to make payments for my appointments easily through the system, enhancing my experience and convenience.

Doctor Features:

1. As a doctor, I want to find treatments I've created or are available to me, with efficient filtering options, to manage my patient load effectively.
2. As a doctor, I need to see the treatment stages assigned to me, to prepare and allocate my time appropriately.
3. As a doctor, I want the ability to create, modify, or cancel treatments as needed, ensuring patient plans are up-to-date and accurate.
4. As a doctor, I need to book rooms and assign personnel for treatment stages, to ensure resources are effectively allocated.
5. As a doctor, I aim to create a comprehensive medicines plan for each stage of the treatment, ensuring patients receive appropriate medication.

Appointments Management / Calendar

Patient Features:

1. As a patient, I want to view my appointments in a calendar format, with the ability to see recurring appointments, for better personal scheduling.
2. As a patient, I need to access detailed information about each appointment, including time, doctor, and purpose, for my records.
3. As a patient, I want the ability to contact the doctor or healthcare provider assigned to my appointment, for any queries or clarifications.
4. As a patient, I want to easily create a new appointment with available doctors, enhancing my access to healthcare services.
5. As a patient, I need to cancel or reschedule appointments through the system, providing flexibility in my healthcare management.
6. As a patient, I wish to pay for my appointments directly through the system, simplifying the payment process.

Doctor Features:

1. As a doctor, I want to create appointments for my patients, ensuring they receive the necessary care in a timely manner.
2. As a doctor, I need to cancel or reschedule appointments based on necessity, maintaining an accurate and up-to-date schedule.
3. As a doctor, I want to view my appointments in a calendar format, to efficiently manage my time and availability.
4. As a doctor, I wish to access and provide detailed information for each appointment, ensuring effective patient communication and preparation.
5. As a doctor, I aim to contact my patients regarding their appointments, fostering better doctor-patient relationships.
6. As a doctor, I want to create a summary or treatment plan for each appointment, ensuring a structured approach to patient care.

Medicines Management / Expenses**Patient Features:**

1. As a patient, I want to browse all available medicines using filters, making it easier to find what I need or have been prescribed.
2. As a patient, I wish to view detailed information about each medicine, including usage and side effects, to be well-informed.
3. As a patient, I want the ability to leave comments on medicines and reply to others' comments, sharing and gaining insights.
4. As a patient, I need to purchase medicines directly through the system, ensuring a convenient and secure transaction.
5. As a patient, I want to view all my billing information in one place and have the option to pay bills or split payments, managing my finances better.

Doctor Features:

1. As a doctor, I need to manage (read, create, update, delete) medicines within the system, ensuring patients have access to current and accurate information.
2. As a doctor, I want to add medicines to a patient's treatment plan, integrating medication management with overall patient care.
3. As a doctor, I aim to answer questions about medicines, providing clarity and support to my patients.
4. As a doctor, I need to generate expense reports for treatments, helping in the financial management of patient care.