

## Project Worksheet

### 1. Business Requirements Document (BRD)

Project Scope
<ol style="list-style-type: none"><li>1. Delays in processing patient information, including creating and updating medical records.</li><li>2. Lack of a centralized accounting system, which is why data is stored in different sources</li><li>3. Lack of communication between each departments</li><li>4. Lack of easy-use system with full information about patients</li></ol>

Stakeholders
IT department, Hospital Administration, Doctors, Patients, Finance department, IT Project manager

Business Objectives
<ol style="list-style-type: none"><li>1. Create a new modern CRM system which contained information from all departments and access to patients cards</li><li>2. Optimize data</li><li>3. Digitalize patients cards</li><li>4. Not effective communication between different departments</li><li>5. Give access to do automatic reports</li></ol>

Functional Requirements
<ol style="list-style-type: none"><li>1. Patient Management:<ol style="list-style-type: none"><li>1.The system which allowed to create card for patient (contact information, medical history, insurance information)</li><li>2. The system should allow you to open card with whole medical patient history</li><li>3. The system should give you to search patients by a different filters</li></ol></li><li>2. Department-Based Access:<ol style="list-style-type: none"><li>1. CRM system should allow to choose department</li><li>2. Each department suppose to have different panel with list of patients and their status</li></ol></li><li>3. Medical Records &amp; Documentation:<ol style="list-style-type: none"><li>1.Doctors should have possibility to create, edit and sign patient card</li><li>2.The system should support to add documents</li><li>3.The system should audit log</li></ol></li><li>4. Appointment &amp; Workflow:<ol style="list-style-type: none"><li>1.The system should allow planning of appointments, referrals to departments, and hospitalizations.</li><li>2.There should be support for automatic notifications: to the doctor, laboratory, pharmacy.</li><li>3.The system should display the patient's current status (pending → processing → completed).</li></ol></li><li>5. Reportin:<ol style="list-style-type: none"><li>1.The system should generate reports: number of appointments, doctors' workload, tests performed, etc.</li><li>2.Users should be able to export data to standard formats (pdf, excel).</li></ol></li></ol>

## Non-functional requirements

1. Performance & Scalability:
  - 1.The system must handle at least 500 simultaneous users without loss of performance.
  - 2.The loading time of the main pages (Dashboard, Patient Profile, Department View) should not exceed 2 seconds under standard load.
  - 3.The system should be scalable - adding new branches, new locations, or increasing the number of users should not require a complete redesign of the architecture.
  - 4.Patient searches should return results in no longer than 1 second.
2. Availability & Reliability:
  - 1.The system should be available 99%
  - 2.An automatic backup system should be implemented every 24 hours
3. Security & Privacy:
  - 1.All patient data must be transmitted over HTTPS/TLS 1.2+
  - 2.The system must comply with HIPAA or local medical data protection standards
  - 3.Passwords must comply with the policy: minimum 8 characters, complexity, regular update
  - 4.Access to the system must be through authorization with multi-factor authentication (MFA) for staff
4. Usability:
  - 1.The system should be optimized for large monitors and tablets used in medical facilities
  - 2.Basic functions (search, create a record, view the patient's chart) should be available in 2–3 clicks.
5. Maintainability & Support:
  - 1.Monitoring tools (health checks, logs, uptime tracking) should be available.
6. Data Management Requirements:
  - 1.Data should be stored in a structured form with the ability to quickly search and filter.
  - 2.All archival records must be kept for at least 10 years.
7. Localization & Compliance:
  - 1.The system must support localization (languages: English, Spanish)
  - 2.All formats (dates, units of measurement, medical terms) must comply with local hospital standards.