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| --- |
| Software Engineering Project |
| Electronic Health Record System |
| Requirements Report |
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**Contents**

[1 Introduction 2](#_Toc467079817)

[2 Identification of Viewpoints 3](#_Toc467079818)

[2.1 Principal Viewpoints of the System 3](#_Toc467079819)

[2.1.1 Interactor Viewpoints 3](#_Toc467079820)

[2.1.2 Indirect Viewpoints 3](#_Toc467079821)

[2.1.3 Domain Viewpoints 3](#_Toc467079822)

[2.2 Viewpoint Hierarchy Diagram 4](#_Toc467079823)

[2.3 Requirements of each Viewpoint 5](#_Toc467079824)

[2.3.1 Requirements of the Interactor Viewpoints 5](#_Toc467079825)

[2.3.2 Requirements of the Indirect Viewpoints 5](#_Toc467079826)

[2.3.3 Requirements of the Domain Viewpoints 5](#_Toc467079827)

[3 Requirements Definition 6](#_Toc467079828)

[3.1 Functional Requirements 6](#_Toc467079829)

[3.2 Non-Functional Requirements 6](#_Toc467079830)

[3.3 Domain Requirements 6](#_Toc467079831)

[3.4 Volatile Requirements 6](#_Toc467079832)

[3.5 Enduring Requirements 6](#_Toc467079833)

[4 Requirements Interviews with Domain Experts 7](#_Toc467079834)

[5 Requirements Prioritization and Negotiation 8](#_Toc467079835)

[6 Requirements Traceability Matrix 9](#_Toc467079836)

[7 Use Cases of Main Scenarios 10](#_Toc467079837)

[8 Domain Model 11](#_Toc467079838)

[9 Other Schemas 12](#_Toc467079839)

# Introduction

The lately technological improvements in information technology (IT) have made a great impact on medical organizations. Today, health information systems are used in virtually every hospital. Health information technologies are used mainly to increase efficiency, quality of service and to reduce costs in hospitals.

*Electronic Health Record System* will provide the doctors and their staff with an electronic copy of the patient file. Personal information and medical information about the patient will be stored and managed by the system. Medical information may consist of any health related information related to a patient. Some important medical information the system supports can be listed as examinations, patient stories, symptoms, tests (blood, urine, etc.), diagnosis, treatments and prescribed medications. The system will also be able to assist physicians in diagnosing and treating a patient by providing diagnosis and treatment recommendations according to the provided information, remind patients of an upcoming event (any appointment, periodic check-up, periodic test, etc.) by sending emails or notifications and track information for billing purposes.

In this document, we specify the stakeholders and the requirements of the system that will be implemented.

# Identification of Viewpoints

## Principal Viewpoints of the System

### Interactor Viewpoints

#### Users

|  |  |
| --- | --- |
| Viewpoint | Description |
| Doctor |  |
| Patient |  |
| Nurse |  |
| Pharmacist |  |
| Laboratory |  |
| Health Technician |  |
| Hospital Kitchen |  |
| Registration and Admission |  |

#### System Staff

|  |  |
| --- | --- |
| Viewpoint | Description |
| System Administrator |  |
| IT Employee |  |
| Maintenance Engineer |  |

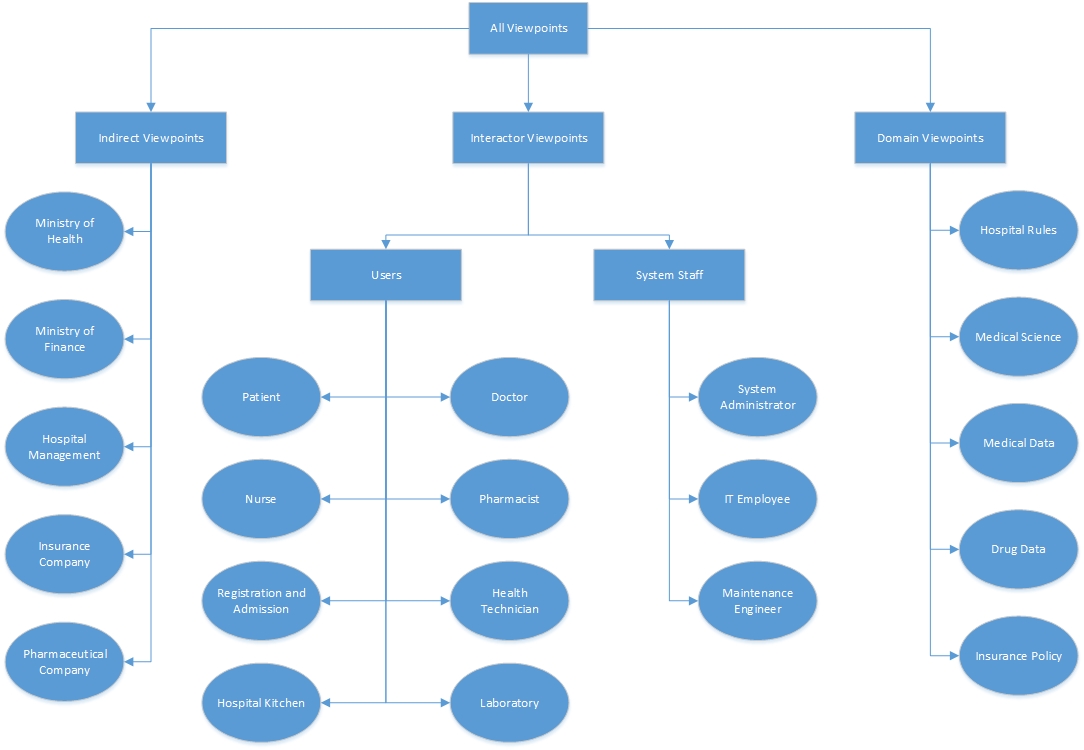
### Indirect Viewpoints

|  |  |
| --- | --- |
| Viewpoint | Description |
| Hospital Management |  |
| Ministry of Health |  |
| Ministry of Finance |  |
| Insurance Company |  |
| Pharmaceutical Company |  |

### Domain Viewpoints

|  |  |
| --- | --- |
| Viewpoint | Description |
| Medical Science |  |
| Hostpital Rules |  |
| Medical Data |  |
| Drug Data |  |
| Insurance Policy |  |

## Viewpoint Hierarchy Diagram



## Requirements of each Viewpoint

### Requirements of the Interactor Viewpoints

|  |  |
| --- | --- |
| Viewpoint | Requirements |
| Patient | Book appointments. |
| View his/her own medical info, prescriptions, appointments, admissions. |
| Get notifications about upcoming events.(appointments, check-ups, etc.) |
| Doctor | View/Add/Update patients medical info, prescriptions, appointments and admissions. |
| Get diagnosis and treatment recommendations from the system. |
| Nurse | View and update patient information. |
| View patient appointments. |
| Pharmacist | View patient prescriptions. |
| Manage medical item stocks. |
| Laboratory | View patient info. |
| Add and update laboratory results. |
| Health Technician | View and update patient information. |
| View patients medical info. |
| Hospital Kitchen | View patients medical info. |
| View patients admission info. |
| Registration and Admission |  |
|  |
| System Administrator | Add New Pharmacy |
| Add New Doctor |
| IT Employee |  |
|  |
| Maintenance Engineer | Maintain the system |
| Optimize the system |

### Requirements of the Indirect Viewpoints

|  |  |
| --- | --- |
| Viewpoint | Requirements |
| Hospital Management |  |
|  |
| Ministry of Health |  |
|  |
| Ministry of Finance |  |
|  |
| Insurence Companies |  |
|  |
| Pharmaceutical Company |  |
|  |

### Requirements of the Domain Viewpoints

|  |  |
| --- | --- |
| Viewpoint | Requirements |
| Hospital Rules |  |
|  |
| Medical Science |  |
|  |
| Medical Data |  |
|  |
| Drug Data |  |
|  |
| Insurance Policy |  |
|  |

# Requirements Definition

## Functional Requirements

|  |  |
| --- | --- |
| Stakeholder | Definition |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Non-Functional Requirements

|  |  |
| --- | --- |
| Category | Requirement |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Domain Requirements

|  |  |
| --- | --- |
| Stakeholder / Category | Definition |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Volatile Requirements

|  |  |
| --- | --- |
| Stakeholder / Category | Definition |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Enduring Requirements

|  |  |
| --- | --- |
| Stakeholder / Category | Definition |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

# Requirements Interviews with Domain Experts

# Requirements Prioritization and Negotiation

# Requirements Traceability Matrix

# Use Cases of Main Scenarios

# Domain Model

# Other Schemas