Life Hospital System

Requirements Specification and Analysis

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REQUIREMENTS ANALYSIS DOCUMENT

# Introduction

## Purpose of the System

* Life Hospital System (LHS) is a web-based application that provides the users get appointment from the hospital. It is like hospital automation.
* There are two level of users;

1. User
2. Administration
3. Staff

* We will call Life Hospital System as LHS.
* LHS includes a few information about the user (patient) like name, surname, and appointment date etc. for future usage.
* LHS provides user to list the available date and the personal (doctors) to get appointment in that time interval.
* LHS generates reports for the appointment information and identification number for that appointment.

## Scope of the System

* The system will be used to get social and personal information from the patient and creating an online appointment by using that information.
* The system will be stored data for every staff and patient.
* The system will be used to list of the patients, their quick information and their appointment information.

## Objectives and Success Criteria of the Project

* Proper and conducive project plan
* Assigning tasks to the team members by using GitHub.
* Reviewing and doing a rework when needed.
* Managing project risks efficiently.
* Allocating time for process improvement

## Definitions, Acronyms, and Abbreviations

LHS: Life Hospital System.

## Overview

* After this section, you will be facing with cases, our models, system requirements, glossary of the system.
* RAD is organized on our group member’s meeting.

# Current System

Current system is not available. Because, the hospital is new.We will create a new system for it. When User (patient) registered system, this system provides you to get any appointment from any departments in hospital, he/she can reach laboratory results or doctors and departments information.We can call this system as Life Hospital System.

# Proposed System

First of all, this system offers the possibility to choose according to status of user. If user is patient, login on system and he/she get an appointment from this system. Also this system offer opportunity to cancel appointment.Other user is Hospital Personel which is setting available doctors times, adding laboratory results on system and editing patients’ appointments on system.Finally, users have knowledge about hospitals’ vision and mission on this website.

## Overview

Life Hospital System offers users the option of it easier and faster procedure. Also, it could be solution to prevent the confusion which may occurs when an appointment and appointment get tracking. Because of all these reasons we can reach the large masses in accordance with the purpose of this project.

## Functional Requirements

* + 1. **User Mode**
* **Register;**

Patients may register on the system with required information.İf users not registered in the system, they can login the system after registered

* **Request Password Reminder;**

When patient forgot his/her password, use reminder password button to remember password.

* **Authentication;**

Patients can enter the system with own SSN number and password which is created by own on register. Patients who is previously registered in the system can access next step from this part.

* **Book an Appointment;**

When patients enter get appointment option, they do selection hospital, department, doctor, day and hour step by step.

* **Save an appointment;**

After he or she checked appointment’s information on the page which is show patient’s choosing if all information are true he/she click the save button and get an appointment.

* **Cancel an appointment;**

Patient’s all appointment showing same page on system. Patient click the appointment button if patient is not going to go to appointment then he can cancel which he wants.

* **Logs Off;**

Patients exit the system when they finished their operations on the system.

* + 1. **Hospital Personel mode**
* **Authentication;**

Hospital Personel can login on system with SSN number and password.

* **Add Laboratory Results ;**

Hospital Personel can add patient’s laboratory results on system with patient’s information.

* **Edit Laboratory Results ;**

If necessary, Hospital Personel can edit patient’s laboratory results on system with patient’s information.

* **Set Available Date for Doctor ;**

First of all Hospital Personel choose department which he/she is work there. Then enter information (doctor, date and hour) which are contained monthly work program.Monthly program is given to him/her by doctors.

* **Edit appointment information;**

Hospital Personel update information which must be change, on saved program by Hospital 9Personel.

* **Save;**

Hospital Personel record all doctors’ programs on the system when he or she entered all informations.

* **Log Off;**

Personnel exit the system when they finished the operations on the system.

* + 1. **Admin mode**
* **Authentication;**

Admin can login on system with SSN number and password.

* **Reach List Of Doctors;**

Admin can reach list of doctors.Admin can add, edit or delete doctors in this list.Then Admin updates which is necessary such as a doctor come to work the hospital.

* **Reach List Of Personels;**

Admin can reach list of personels.Admin can add, edit or delete personels in this list.Then Admin updates which is necessary such as a personels come to work the hospital.

* **Reach List Of Policlinics;**

Admin can reach list of policlinics.Admin can add, edit or delete policlinics in this list.Then Admin updates which is necessary such as a policlinics in the hospital.

* **Log Off;**

Admin exit the system when they finished their operations on the system.

## Nonfunctional Requirements

* Usability

Program should be use easily by People who have the average information about using computer .It must be usable at any time.

* Reliability

People can’t access personal information which recorded on database by developer.

* Performance

This system must be quick.

It supports more than one user at same time. But it is not developed to people who are take appointment at the same time and same appointment.

Information which are uploads on database must be updatable according to the requirements.

* Supportability

Developer will be responsible to provide continuance, compatibility and testability on created program.

* Implementation

Design of database done with MySql SERVER 2012

Visual Studio 2012 will be used as coding IDE.

Asp.Net C# Object Oriented will be used as programming language.

* Interface

Application can use on devices which have Internet and its browser should be usable.

* Packaging

System’s all steps as a package are within GitHub.

* Legal

Project’s all contents are protected by the law of copyright.

Describe the scenarios, use cases, object model, and dynamic models for the system. This section contains the complete functional specification, including mock-ups illustrating the user interface of the system and navigational paths representing the sequence of screens.

* ***Scenarios***

## Scenario 1

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| **Scenario name:** Edit and add Doctor |
| **Participant actor instances: Tolga:**Admin **Selin**:Doctor |

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| --- |
| System Models**Flow of events:**   1. Tolga add to Selin and she wants to add or edit these information to the system. 2. Firstly Tolga writes lifehospital.com on browser. 3. Tolga sees login pages and she enter TC number into TC number text field also enter password into Password text field on this pages. 4. If TC number,password and role match to information which are in LFH database Tolga can login to the LFH. |

## Scenario 2

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| --- |
| **Scenario name:** Adding Doctor |
| **Participant actor instances: Murat:**Admin **Selin:**Doctor |
| **Flow of events:**   1. Murat hears that Selin came to the same hospital with Murat. 2. Firstly Murat logs into the LFH. 3. Murat selects “Add Doctor” button. 4. Murat fills the related field with the personal information of the Selin. 5. Then Murat click “save” button. 6. LFH save the Selin’s personal informations on database . 7. Murat sees a "Saved successfully" message on screen.Then Murat logs of. |

## Scenario 3

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| **Scenario name:** Deleting Doctor |
| **Participant actor instances: Hasan:**Admin **Selin:**Doctor |
| **Flow of events:**   1. Hasan hears that Selin leave to the same hospital with Hasan. 2. Firstly Hasan logs into the LFH. 3. Hasan selects “Delete Doctor” button 4. He sees all doctor who work the same hospital with Hasan. 5. Hasan chooses Selin. 6. Then Hasan click “save” button. 7. LFH finds the Selin on database and delete her all informations on system. 8. The message shown on screen that “The doctor is deleted successfully”. 9. Hasan logs of. |

## Scenario 4

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| **Scenario name:** Books Appointment |
| **Participant actor instances:** Cihan:Patient |
| **Equipment:** Any computer with a supported browser. |
| **Flow of events:**   1. Cihan starts browser and types URL of the LFH system. 2. Cihan authenticates. 3. Cihan list options of the system. 4. Cihan clicks the option ‘book appointment’. 5. Cihan list available departments, doctors and the date of the examination. 6. Cihan selects Department A, 29.06.2016 12:00 as a date with the Doctor B. 7. Cihan clicks ‘book appointment’ button to get appointment. 8. Cihan is navigated by the LFH system to confirmation page. 9. Cihan checks his appointment details. 10. Cihan clicks ‘confirm’ button to send LFH system a confirmation request. 11. Cihan logs off. |
| **Entry Condition:** Cihan wants to get an appointment from a specific hospital and date. |
| **Exit Condition:** There is no available date for Cihan – OR – Cihan cannot login to the LFH system. |

***Scenario 5***

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| **Scenario name:** Mark an Appointment |
| **Participant actor instances:** Doctor,Patient and Personnel |
| **Flow of events:**   1. Doctor prepares an appointment ‘s mothly program and he/she gives this program to personnel. 2. Personnel login the system and clicks the edit appointment button. 3. Personnal enters this program in this system and clicks the save button. 4. Then,patient login the system to book an appointment. 5. Patient choose department,doctor,day and time step by step. 6. Patient clicks ? (randevu kaydet butonu)? 7. Doctor opens the system when he/she Works to view a Daily appointment. 8. Patient goes to hospital for his/her appointment. 9. Doctor Views this appointment on the page that shows the appointment . 10. When this appointment comletes,doctor mark it in the box which is across the appointment’s informations. 11. Personal click save button to save final of table. |

***Scenario 6***

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| **Scenario name:** Request Password |
| **Participant actor instances:** Personal |
| **Flow of events:**   1. User URL girer 2. User clicks login button 3. New Page opens that login the system. 4. If personal can not remember his/her password ,user directly clicks the password reminder button. 5. System sets an e-mail to his/her e-mail address. 6. Or personal enters his/her password and TC number. 7. System checks the TC number and password that stored in the database. 8. If his/her TC number and password do not match the database system give an error and system shows this error as a message on screen. 9. Personal see message on screen. 10. He/She try one more time to login system. 11. He/She can not login the system results of these trying. 12. Personal clicks the password reminder because of this reason and open new page. 13. Personal enters his/her e-mail in the box which is seperated to enter e-mail. 14. System sents his/her password by using e-mail. 15. Then Personal enter his/her e-mail and see password. 16. Finally,personal login the system with this password. |

***Scenario 7***

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| **Scenario name:** Login for Patient |
| **Participant actor instances:** Cihan: Patient |
| **Equipment:** Any computer with a supported browser. |
| **Flow of events:**   1. Cihan starts browser and types URL of the LFH system. 2. Cihan clicks to the login button. 3. Cihan is navigated to the ‘login’ page by the LFH system. 4. Cihan fills the needed information TC and Password. 5. LFH system checks the information which is entered by Cihan. 6. If the TC and password match with the TC and password which is stored in database. Cihan authenticates. |
| **Entry Condition:** Users want to get an appointment and visits the LFH Home Page and choose patients |
| **Exit Condition:** TC number which entered user and TC number which registered on database is not matching. |

### **Scenario 8**

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| **Scenario name:** Cancel an Appointment |
| **Participant actor instances:** Cihan: Patient |
| **Equipment:** Any computer with a supported browser. |
| **Flow of events:**   1. Cihan starts browser and types URL of the LFH system. 2. Cihan authenticates. 3. Cihan list options of the system. 4. Cihan clicks the option ‘list appointments’. 5. Cihan list his appointment which he already booked. 6. Cihan is navigated by the LFH system to the ‘list appointment’ page. 7. Cihan clicks one of his appointments. 8. Cihan is navigated by the LFH system to the ‘appointment-information’ page. 9. Cihan clicks ‘cancel this appointment’ to delete from his book. 10. The appointment is canceled by Cihan. 11. Cihan clicks LFH system logo to redirect to patient-dashboard. 12. Cihan clicks logs off. 13. Cihan logs off. |
| **Entry Condition:** Users want to get an appointment and visits the LFH Home Page and choose patients |
| **Exit Condition:** TC number which entered user and TC number which registered on database is not matching. |

### **Scenario 9**

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| **Scenario name:** List Appointment |
| **Participant actor instances:** Cihan: Patient |
| **Equipment:** Any computer with a supported browser. |
| **Flow of events:**   1. Cihan starts browser and types URL of the LFH system. 2. Cihan authenticates. 3. Cihan list options of the system. 4. Cihan clicks the option ‘list appointments’. 5. Cihan list his appointment which he already booked. 6. Cihan is navigated by the LFH system to the ‘list appointment’ page. 7. Cihan clicks one of his appointments. 8. Cihan is navigated by the LFH system to the ‘appointment-information’ page. 9. Cihan checks his appointment information which is detailed. (Hospital, department, date etc.) 10. Cihan clicks LFH system logo to redirect to patient-dashboard. 11. Cihan clicks logs off. 12. Cihan logs off. |
| **Entry Condition:** Cihan wants to list one of his appointment information. |
| **Exit Condition:** There is no current appointment in Cihan’s book. |