Hospital Appointment System

Requirements Specification and Analysis

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Muhammed Bilal Kutlu

Dilara Turanlı

Didar Turanlı

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REQUIREMENTS ANALYSIS DOCUMENT

# Introduction

## Purpose of the System

* Hospital Appointment System (HAS) 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 Hospital Appointment System as HAS.
* HAS includes a few information about the user (patient) like Name, disease, appointment date etc. for future usage.
* HAS provides user to list the available date and the personal (doctors) to get appointment in that time interval.
* HAS 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.
* The system will be provided to the staff if the patient attended to his own appointment or not.
* The system will be blocked the user who did not come his appointment for 3-times.

## 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

HAS: Hospital Appointment 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 was not enough for the person who wants to book an appointment from a hospital which he/she wants. This system provides you to get an appointment from any hospital you want. So the user doesn’t have to visit website for each hospital. We can call this system as All-in-one Hospital Appointment 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 edit information about appointment if user is personnel. At the same time, doctors follow their patient’s appointment on this system. Finally, users have knowledge about hospitals’ vision and mission on this website.

## Overview

Hospital on-line appointment 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

* **Register;**

Patients may register on the system with required information

Who are not registered in the system? They can login the system after registered operation.

* + 1. **User Mode**

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.

* **Edit an appointment;**

When patient finished his/her selection, warning appears on the screen. The warning is “Please check the appointment information and confirm.” If patient see any error, exit the page which has information about appointment then return back the selection page and edit appointment.

* **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. **Personnel mode**
* **Authentication;**

Personnel part on home page, personnel can login on system with SSN number and password which is given by hospital which is personnel work.

* **Add Doctor;**

Personnel updates which is necessary such as a doctor come to work the hospital.

* **Delete Doctor;**

Personnel update which is necessary such as a doctor arrive the hospital.

* **Set Available Date for Doctor**

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

* **Save;**

Personnel record all doctors’ programs on the system when he or she entered all information’s.

Edit appointment information;

Personnel update information which must be change, on saved program by personnel.

* **Log Off;**

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

* + 1. **Doctor mode**
* **Authentication;**

Doctor part on home page, doctor can login on system with SSN number and password which is given by hospital which is doctor work

* **List the Upcoming Appointments**

Doctor sees appointment patient and when they are going to come appointment when doctor enter this part.

* **Assign as the Appointment Over;**

Doctor tick up patients came or not came their appointment on page which shows appointment.

* **Log Off;**

Doctors 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

There is not unproblematic system so there will be errors. However those errors should be decreases.

* 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.

## System Models

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 of the Patient

*Sample patient name:* Bilal

*Equipment:* Any computer with a supported browser.

1. Bilal starts browser and types URL of the HAS system.
2. Bilal registering the HAS system with his personal information and SSN.
3. Bilal authenticates.
4. Bilal list options of the system.
5. Bilal clicks the option ‘book appointment’.
6. Bilal list available departments, doctors and the date of the examination.
7. Bilal selects Department A, with the Doctor B.
8. Bilal list the appointment information in the section.
9. Bilal logs off.
10. Bilal authenticates.
11. Bilal, now wishes to change the date of the appointment. The system does not permit changes of the appointment once the appointment has been submitted.
12. Bilal logs off.
13. **Half the remainin Appointments**

*Sample patient name:Didar*

*Flow the events:*

1. Didar starts browser and types URL of the HAS system.
2. Didar enter her SSN number.
3. Didar enter her password.
4. Didar click login button and enter the system
5. Didar choose hospital than click departments part
6. Choose department according to her disease
7. She gave up to get an appointment
8. After that she close the page when she does not click the books an appointment button
9. Finally she will be log off.
10. **Same Time Appointment**

*Sample patient name:Didar(patient1),Dilara(Patient2)*

*Flow the events:*

1. Didar and Dilara starts browser and types URL of the HAS system.
2. Didar and Dilara enter their own SSN number.
3. Didar and Dilara enter their own password.
4. Didar and Dilara click authentication button and they enter the system.
5. They click book an appointment button.
6. They choose same hospital on the hospital option.
7. In the next step they choose same departments on the department option
8. Then they choose same doctor on the doctors option.
9. In the last selection they choose same day and time.
10. When all selection finished Didar and Dilara click books an appointment button at the same time and system give a warning to users.
11. Didar and Dilara not get an appointment and return back the page which is include books an appointment button to this operations.
12. Finally repeat all operations to get an appointment.

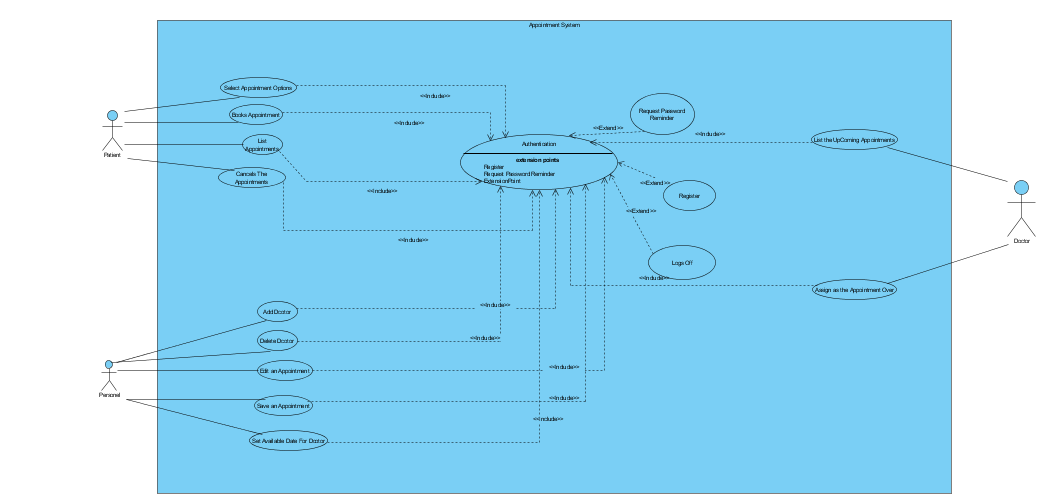
### Use case model

|  |
| --- |
| **Use case name:** Register |
| **Participant actors:** Patient |
| **Flow of events:**   1. User starts browser and types URL of the HAS system 2. User click patients button. 3. User click register button. 4. User fill blank his/her Personal information. 5. User create a new password on password field. |
| **Entry Condition:** Users want to get an appointment and visits the Has Home Page and choose patients |
| **Exit Condition:** SSN number which entered user and SSN number which registered on database is not matching. |

|  |
| --- |
| **Use case name:** Login |
| **Participant actors:** Patient, OR Personel, OR Doctor |
| **Flow of events:**   1. User starts browser and types URL of the HAS system 2. User authenticates. 3. User enters his/her username and password into the required fields and clicks the “login” button to send login request. 4. HAS checks if the username and password matches the specified table of database. 5. If the information match the database,User can Login. |
| **Entry Condition:** User visits the Has Home Page and choose own status. |
| **Exit Condition:** Users enter your SSN number or password incorrect.Another condition  User complete book an appointment operation. |
| **Use case name:** Forget password |
| **Participant actors:** Patient, OR Personel, OR Doctor |
| **Flow of events:**   1. When user authenticate he/she forget the password. 2. He/she click Password reminder button. 3. User enters his/her SSN number. 4. HAS checks if the SSN number on database and send a mail which have a new password to user’s mail. 5. User check his/her mail. 6. Users can login with password which received by e-mail. |
| **Entry Condition:** User forgot password. |
| **Exit Condition:** User can not access e-mail. |

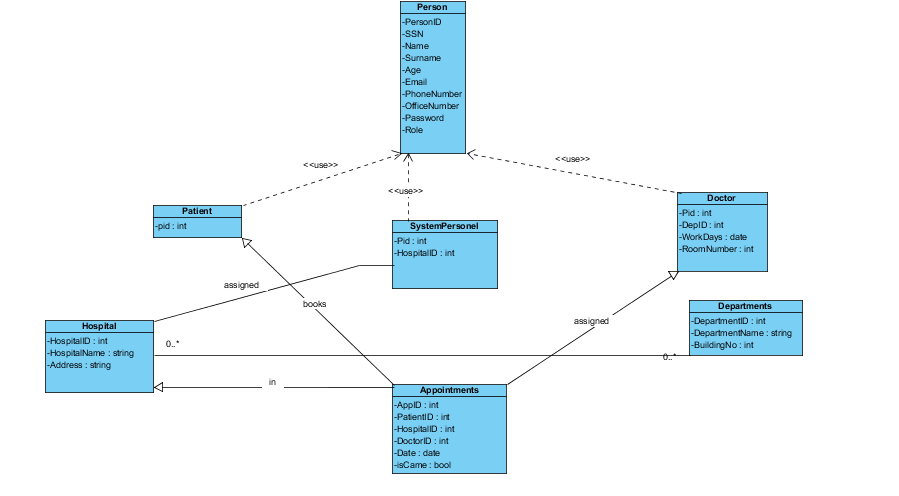
|  |
| --- |
| **Use case name:** Get an Appointment |
| **Participant actors:** Patient |
| **Flow of events:**   1. User authenticates on System. 2. He/she select appointment options then books appointment. 3. He/she select a hospital. 4. He/she select a department. 5. He/she select a doctor. 6. He/she select a date and hour. 7. User save appointment 8. Finally he/she log off |
| **Entry Condition:** User want to appointment according to own choose |
| **Exit Condition:** Users can not login. |

**Diagram**



### 

### Object model

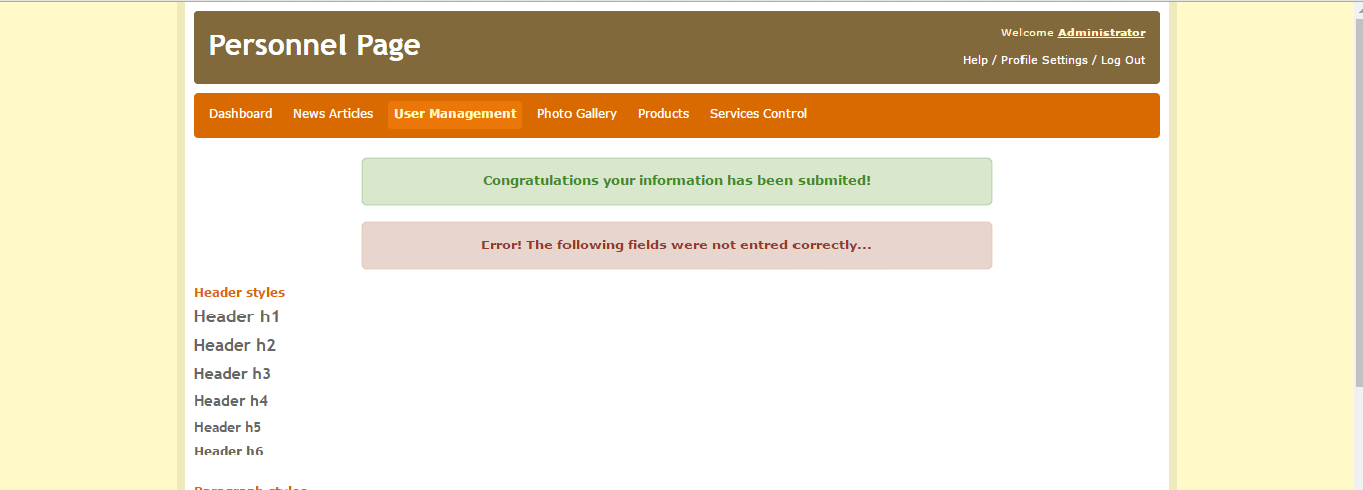


### Dynamic model

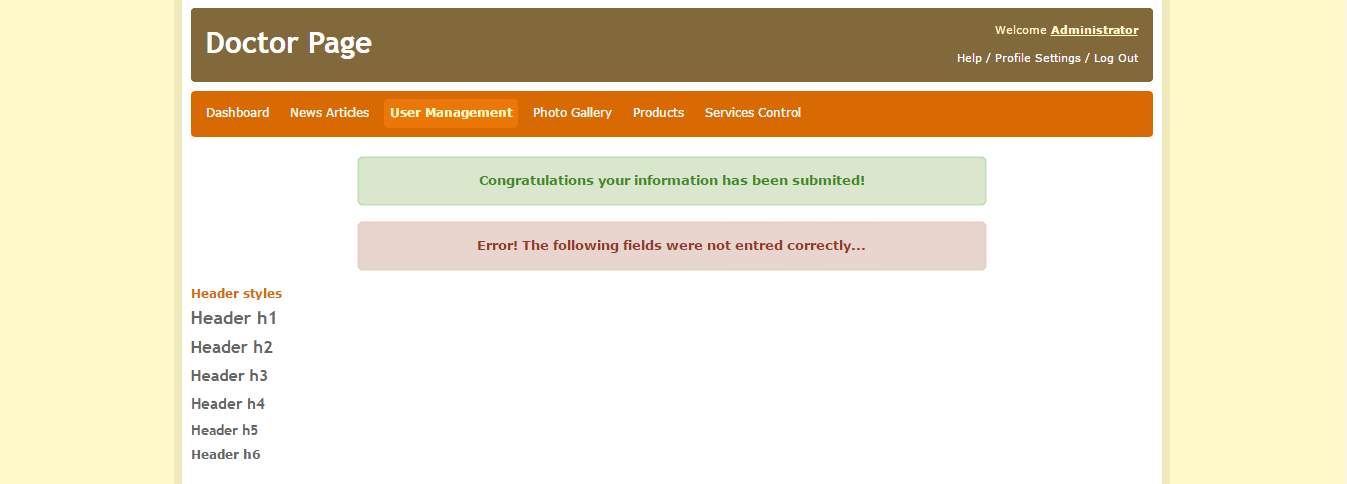
### This section will be added later.

*Interfaces*

*Personnel UI*

**

*Doctor & Patient UI*

**

*Visitor UI*

**

# Glossary

Online Hospital Appointment System: Patients use the system to get an appointment and they go to doctor from the system.

Personnel: Personnel’s take an monthly program to doctor and they record these information’s on the system. Also they can upload the information if it is neccesary.

Doctor: Patient get an appointment and go to the doctor that is to say doctor who treated patients.

Patient: Person who get an appointment to go to doctor to be treated .

Appointment: Operation or order which is necessary to doctor can examine the patient.

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# Project Plan

Not yet.