Software Requirements Specification

for

<Health Care>

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

The purpose of compiling this software requirements specification is to clarify the detailed requirements of the project, provide users with confirmation of the function and performance of the project, and form a consistent understanding and confirmation with users, as a basis for further detailed software design.

1.2 Document Conventions

This SRS follows the IEEE template format. The **user** in this document represents the patient user only.

1.3 Intended Audience and Reading Suggestions

Intended Readers	Advice
project manager	After reading this document, the project manager can understand the expected functions of the product, analyze the user requirements of the product, and design and manage the project systematically.
developer	After reading this document, developers can analyze the requirements of the project and design the architecture of the front-end and back-end system of the project. Finally, according to the requirements and design, the project functions are realized and the user manual is written.
testing personnel	Document the expected functionality of the project and design test cases accordingly.
user	Understand the functionality of the project, negotiate with the developers about changes in requirements and the expected effects of the project.

1.4 Product Scope

The project we have implemented is called **Health Care**, which is a clinic appointment system for patients, aiming to help patients simplify the appointment process, save the time of seeing a doctor, and thus complete the treatment quickly and conveniently. This project is a website, which can be accessed through the PC or mobile terminal. In the program, users can check the doctor's information, find the nearest clinic to make an appointment and pay for it, upload some personal information for the doctor's reference, and have a brief online communication with the doctor.

1.5 References

1. https://www.perforce.com/blog/alm/how-write-software-requirements-specification-srs-document
2. https://asana.com/resources/software-requirement-document-template

2. Overall Description

2.1 Product Perspective

The program is a new, self-contained program for patients.

2.2 Product Functions

This product mainly has the following functions:
User (patient) registration and login
The user (patient) queries the doctor's information and clinic location
The user (patient) uploads the file
The user (patient) pays the order
The chat box

2.3 User Classes and Characteristics

Through the analysis of typical user scenarios, the following user requirements are obtained:

1.Mary ---- Patient:

Name	Mary
Gender	female
Age	26
Identity	Normal patient
Preferences	Busy working
Typical Scene	Mary has a cold, so she has a brief consultation with the doctor on the website by using chat box.

2.Tom ---- Patient:

Name	Tom
Gender	Male
Age	45
Identity	Normal patient
Preferences	Have enough time
Typical Scene	Tom felt discomfort in his eyes and checked the address of the clinic online through the website and completed the appointment.

3.Jerry ---- Patient:

Name	Jerry
Gender	Male
Age	65
Identity	Normal patient
Preferences	He has doctors and clinics he trusts.
Typical Scene	Jerry checks the free time of his trusted doctor on the website, and uploads X-rays from other medical institutions to let the doctor know in advance about his condition and make an appointment.

2.4 Operating Environment

Operating System: Windows
Database: MySQL
Browsers: Major browsers such as Google Chrome and Edge

2.5 Design and Implementation Constraints

Development environment Constraints
Web Framework: Django (front end)
Development languages: Python
Development tools: VSCode, PyCharm
Browser for development and testing: Google Chrome

Time constraints
The project needs to be completed within 1.5 months, so it is necessary to reasonably plan the project development plan and complete the required main functions.

Technical constraints
Project members are not proficient in the development framework and development language, so in the early stage of the project, they need to learn and practice the corresponding development skills. In the later stage, they need to speed up the development pace and complete the development tasks after they are skilled in the development skills.

2.6 Assumptions and Dependencies

The success of the project depends on the following conditions:
The project is well planned and the schedule meets the needs of all developers;
The difficulty of the project is as expected, and there is no requirement that cannot be solved by a developer;
The development task has no special circumstances, such as the sudden aggravation of curriculum pressure, the sudden emergence of other project development requirements, etc.;
The developer's learning ability meets the expectation, can master the corresponding development skills, and complete the development requirements on time.

3. System Features

3.1 User login

3.1.1 Description and Priority

If the user name and password are correctly entered, you can log in to the system normally. If the user name and password are incorrect, a prompt is displayed for you to effectively check and correct the incorrect input. If you have logged in to the system in a short period of time, you do not need to log in to the system again to reduce repeated operations.

3.1.2 Pre-condition

The user accesses the login interface of the system. The correct user information is obtained, and the login succeeds after being confirmed by the system database.

3.1.3 The basic flow

1. The user accesses the system login page

2. The user is required to enter a username and password

3. The system verifies the user name and password

4. If the user information is correct, the home page is displayed

5. If the user information is incorrect, an error message is displayed on the login page

3.2 Search

3.2.1 Description and Priority

The user enters a doctor's name in the search bar to find information about that doctor. An error message is displayed if the doctor does not exist.

3.2.2 Pre-condition

The user has accessed the details interface. And the doctor's information is stored in the database.

3.2.3 The basic flow

1. The user accesses the doctor information page

2. The user enters the doctor name in the search bar

3. The system verifies the doctor name

4. If the doctor name is correct, the information page is displayed

5. If the doctor name is incorrect, an error message is displayed on the doctor information page

3.3 Payment

3.3.1 Description and Priority

After successfully booking the medical service, users need to pre-pay for the order. After successful payment, they will get their detailed appointment information.

3.3.2 Pre-condition

The user completes the reservation process and accesses the payment interface. Also, the order has been successfully stored in the database.

3.3.3 The basic flow

1. The user accesses the payment page

2. The user clicks on the pay it button

3. The system stores the appointment information in database

4. If the payment successful, the appointment information page is displayed

5. If the payment is not successful, an error message is displayed on the payment page

4. Other Nonfunctional Requirements

4.1 Safety Requirements

Photos related to the patient's condition uploaded by the patient user will be reviewed and viewed by the doctor, but will not be used for any commercial purposes other than the medical treatment process.

4.2 Security Requirements

Patient users are required to enter the user name and password corresponding to their registration to log in.

4.3 Software Quality Attributes

1. Usability:
   The program should be easy and fast for older patient users, not limited to younger patient users.

2. Adaptability:
   The project should be applicable to all major browsers and suitable for mainstream electronic device screen display.

4.4 Business Rules

Admin users can disable certain features for certain patient users to inconvenience doctor visits.

5. Other Requirements

Add administrator interface to add, delete and modify user information and page information.