Software Requirement Specification document for

Project Clinic Information Management System

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1 Introduction

1.1 Purpose of this document

The purpose of this document is to present and simplify everything that will be created or implemented in the project, from function to nonfunctional requirements, including every detail about the project, the intended audience are small clinics look for a system to manage their patient and staff data.

1.2 Scope of this document

This project was created only by one person representing a whole team of specialists creating UML diagrams, code and unit testing every single bit of the code, there were no constraints in communication since the creator of this project is only one person, there were no costs since this is a free to make software.

1.3 Overview

This project was created to provide small clinics with the ability to create text files to record their patient's information or for clinics admins to record the staff information.

1.4 Business Context

There were no sponsors for this project as it is free and didn't cost anything to create, it is free and for everyone.

2 General Description
2.1 Product functions

Product function is about simplifying create a text file from the program to store/ record information about patients for the clinic or gives the admin of the clinic to also create text files that record the information about staff.

2.2 Similar System Information

This program is made to be stand-alone it doesn't require any interruption or work from any program, it can work independently from the start to the end.

2.3 User Characteristics

The users for this program are receptionists, clinic staff team and the admin of the clinic, it requires no experience with software programs or any coding experience as the program is completely user friendly.

2.4 User Problem Statement

System might but inaccurate sometimes and this barely happens, but it is possible as this system is created in 4 days and only made by one person.

2.5 User Objectives

User objectives are to have a simple to use program which satisfies all its need as a clinic management system program.

2.6 General Constraint

The constraint for this product was time as there was not enough time for the system to be created in GUI for a more friendly user interface.

3 Functional Requirements

Functional Name	Create_person()
Description	Gives the ability to create a person
Critically	Very critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	None
Pre-Condition	Staff cannot create a person
Post-Condition	Staff can create a person

Functional Name	Edit_person()
Description	Gives the ability to edit a person
Critically	Very critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Create Person
Pre-Condition	Staff cannot edit a person
Post-Condition	Staff can edit a person

Functional Name	Display_person()
Description	Gives the ability to display a person
Critically	Very critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Create Person
Pre-Condition	person cannot be displayed
Post-Condition	person can be displayed

Functional Name	Set_condition()
Description	Makes the user set condition for a patient
Critically	Important
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	A created person assigned to patient
Pre-Condition	Patient condition cant be set
Post-Condition	Patient condition can be set

Functional Name	Set_nov()
Description	Makes the user set number of visits for a patient
Critically	Important
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	A created person assigned to patient
Pre-Condition	Patient number of visits cant be set
Post-Condition	Patient number of visits can be set

Functional Name	Display_patient()
Description	Gives the ability to display patient information
Critically	Important
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Created patient
Pre-Condition	Patient information can not be displayed
Post-Condition	Patient information can be displayed

Functional Name	Display_meeting()
Description	Gives the ability to display meeting information
Critically	Important
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Created Meeting
Pre-Condition	Meeting information can not be displayed
Post-Condition	Meeting information can be displayed

Functional Name	Login()
Description	Gives the ability to login as a staff member
Critically	Super critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Created Staff Member
Pre-Condition	Staff can not login
Post-Condition	Staff can login

Functional Name	Logout()
Description	Gives the ability to logout as a staff member
Critically	Super critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Staff Member
Pre-Condition	Staff can not logout
Post-Condition	Staff can logout

Functional Name	Add Patient
Description	Gives the ability to add patient information inside a text file
Critically	Super critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Staff Member
Pre-Condition	Receptionist can not add a patient
Post-Condition	Receptionist can add a patient

Functional Name	Print receipt
Description	Gives the ability to printing a receipt for the patient
Critically	critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Staff Member
Pre-Condition	Receptionist can not print a receipt
Post-Condition	Receptionist can print a receipt

Functional Name	Create appointment
Description	Gives the ability to create an appointment
Critically	critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Staff Member
Pre-Condition	Receptionist can not create an appointment
Post-Condition	Receptionist can create an appointment

Functional Name	Add staff
Description	Gives the administrator the ability to create a new staff member
Critically	Very critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Admin
Pre-Condition	Admin can't create a new staff member
Post-Condition	Admin can create a new staff member

Functional Name	View staff
Description	Gives the administrator the ability to view all staff members
Critically	critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Admin
Pre-Condition	Admin can't view all existing staff members
Post-Condition	Admin can view all existing staff members

Functional Name	Creating Meeting
Description	Gives the administrator the ability to create a new meeting
Critically	critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Admin
Pre-Condition	Admin can't create a new meeting
Post-Condition	Admin can create a new meeting

Functional Name	View incoming patients
Description	Gives the doctor the ability to view the incoming patients to his office
Critically	critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Doctor
Pre-Condition	Doctor can not view incoming patients
Post-Condition	Doctor can view incoming patient

Functional Name	Print prescription
Description	Gives the doctor the ability to print a prescription
Critically	Very critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Doctor
Pre-Condition	Doctor can not print prescription
Post-Condition	Doctor can print prescription

Functional Name	Add incoming patient
Description	Gives the nurse the ability to add incoming patients to a text file
Critically	Very critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Nurse
Pre-Condition	Nurse can not Add incoming patient
Post-Condition	Nurse can Add incoming patient

Functional Name	Add incoming patient
Description	Gives the nurse the ability to add incoming patients to a text file
Critically	Very critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Nurse
Pre-Condition	Nurse can not Add incoming patient
Post-Condition	Nurse can Add incoming patient

Functional Name	Add vitals
Description	Gives the nurse the ability to add vitals of the patient into a text file
Critically	critical
Technical Issues	None
Cost and schedule	None
Risks	None
Dependencies with other requirements	Login Nurse
Pre-Condition	Nurse can not add vitals of a patient
Post-Condition	Nurse can add vitals of a patient

4   Interface Requirements

4.1 User Interfaces

4.1.2 CLI

5   Performance Requirement

Requires a PC with windows 8.1 or above, memory requirements are at least 1 GB or memory or more for the program to run smoothly with no lagging and Space of 512 MB is more than good.

6   Design Constraint

There was no design constraints for this program as it uses CLI.

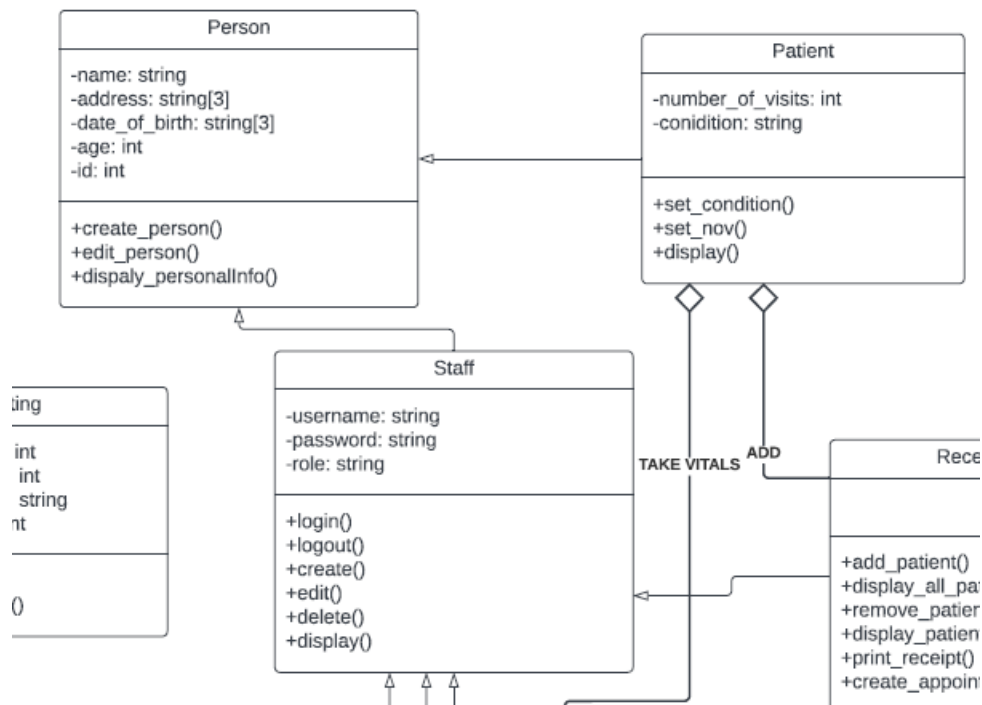## 7   Nonfunctional attributes

7.1 Security

A function called verify login is made so it secures the access to the system, only staff members included in the text files are allowed to login and do changes.

7.7 Reusability

This program is fully reusable as adding information doesn't automatically get deleted from the text files and while using the program you can do many stuff at once, you are not constrained with one function only.

8   Preliminary Object-Oriented Domain Analysis
8.1 Inheritance Relationships

8.2 Class description

A class represents a person as it us like representing it's name, address and more.

8.2.1   Class Name

Person

8.2.2   List of super classes

NONE

8.2.3   List of sub classes
1- Patient
2- Staff
8.2.4   Purpose

Makes access of attributes like name and address accessible for every class that can be a person too, so you don't have to re write these attributes again in the other classes.
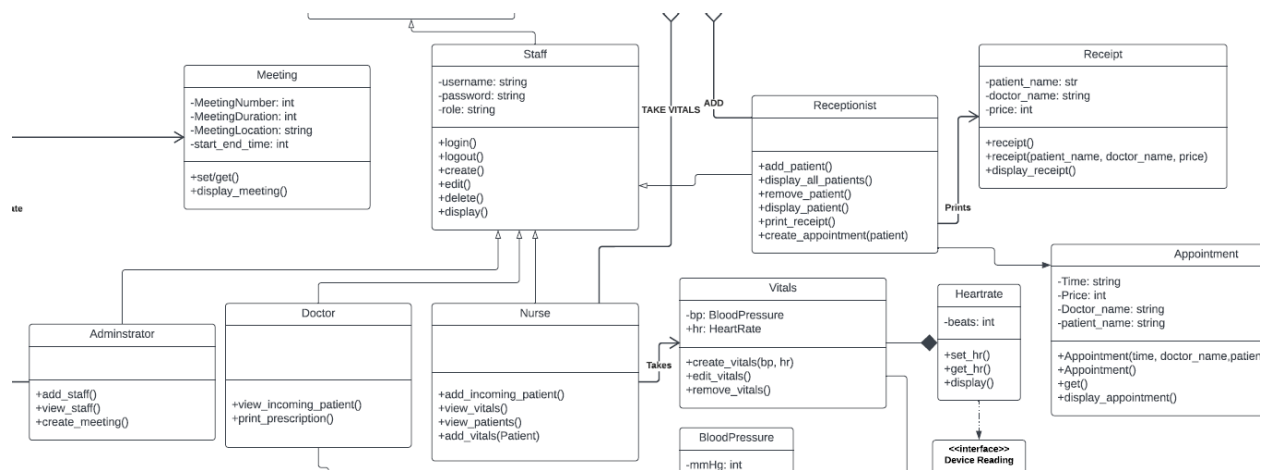
8.2.5   Collaboration

None

8.2.6   Attributes

1- Name
2- Address
3- Age
4- Date of birth
5- ID

8.2.7   Operations

1- CreatePerson(): void
2- DisplayPerson(): void
3- EditPerson(): void

8.2.8   Constraints

None

8.3 Class description

A class represents the staff as it us like representing it's username, password and role.

8.3.1   Class Name

Staff

8.3.2   List of super classes

Person

8.3.3   List of sub classes

          1- Doctor

          2- Nurse

          3- Receptionist

          4- Administrator

8.3.4 Purpose

Gives access to it's subclasses for attributes such as Username and password.

8.3.5 Collaboration

None

8.3.6 Attributes

          1- Username

          2- Password

          3- Role

8.3.7 Operations

          1- Login

          2- Logout

          3- Edit

          4- Create

          5- Display

          6- Delete

8.3.8 Constraints

None

9 Operation Scenarios

From the user perspective, once he/she runs the program, it will display a welcome screen asking the user either to start the program or quit, once they click on start it will proceed the to the login screen which will ask for username, password and role, depending on the role that the user will enter it will procced to the role's menu which is about different operations for each role, for nurses, they can add incoming patients, take patient vitals, for doctors they can print prescription and display incoming patients, for receptionists they can add patients into the system by storing their information in a text file, printing a receipt and even more, admins can create user so these users are recorded in a text file in which this file is read upon login function is called and if user enters username and password that matches one in the file they will proceed with using the program otherwise the user will be shown the login screen again which will be asked to login one more time.

10 Preliminary Schedule Adjusted

Initial version of the project is fully completed and implemented and ready to be used and contributed for a needing user.

11 Preliminary Budget adjusted

There was no cost for this project, it was completely free to make and to use.

12 Appendices

- NONE

13 References
- There are no references used for this project.