**BAHRIA UNIVERSITY (KARACHI CAMPUS**)

**Software Requirement Engineering (SEN- 211)**

**Assignment 01**

**Spring 2023**

**Class: BSE 3B Shift: Morning**

**Course Instructor: ENGR. BUSHRA FAZAL KHAN Due Date: 02 Nov 2023**

**Assignment Date: 26 Oct 2023 Marks: 03 Points**

**Student Name: ABDULLAH Registration #: 81962**



Question:

For the given scenario identify and list all Functional and Non-Functional Requirements. For each Non-Functional requirement identify the type of Non-functional, Goal, Objective, and Quantitative verifiable metric where possible to create proper non-functional statements.

Consider the following problem description: A private neighborhood health clinic wants to automate management of their operations by implementing an interactive web-based software system using the html5 standard, which should make the system run on tablets and smart phones as well as desktop and laptop machines. The Clinic Management System (CMS) is to be used by both patients and the clinic personnel (doctors, nurses, and administrative staff). A patient will be able to make on-line appointments for an examination, cancel an existing appointment, inspect lab results, check their outstanding balance, and make payments using their credit cards. A doctor will be able to record their schedules including the time periods they are busy and periods they have time off. They will also be able to browse their schedules for any appointments for examinations. The doctors could also ask to cancel appointments during a specified period, in case they become unavailable for unexpected reasons, subject to approval by the clinic director, who is also a doctor with management responsibilities. A doctor may browse a list of his/her patients, including past patients. Initially only some brief information is displayed for each patient, but the doctor may ask for details (including picture and patient records in chronological order). A nurse will be able to request time-off using CMS, subject to approval by the head nurse (head nurse herself/himself reports to the clinic director). The administrative staff can also help patients, doctors, and nurses to perform operations on their behalf, in situations where such a user does not have access to the Internet. The accounting of the clinic for both customers (balances due) and clinic personnel (their salaries and other compensation) are to be managed by an existing software module put in place by the clinic when they first started operation. User authentication is especially critical for such a system with sensitive information for both patients and clinic personnel. In addition, clinics currently have only about a couple of hundred active patients but as time goes by, especially after the automated system is in place, the clinic management expects to have at least thousands of patients if not more.

To attract more customers, the clinic management has also decided to put two types (silver and gold) of memberships in place with varying privileges. One can become a silver customer if they have used clinic facilities regularly for at least two years. A customer who has been a silver customer for at least two years gets to be a gold customer, assuming they have never failed to make payments past their due dates. Both silver and gold customers are provided with more flexible time slots for making appointments. Gold customers get additional privileges such as getting an SMS notification when their lab results are ready.

Answer: