**1 | p a g e**

Software Requirements Specification

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**2 | p a g e**

**Introduction :**

This section gives an insight and overview of everything included in this SRS document. The purpose of this document has been incorporated here too.

* 1. **Purpose:**

The purpose of the Healthcare Comrade is to address the problems of the prevalent health facets of Bangladesh with tangible solutions. Due to the pandemic, fatal consequences have surfaced; people are failing to access the quintessential healthcare as the corridors of the hospitals are overflowing with patients. Many doctors have also closed their chambers in the pandemic and so the ratio of the doctor and patient indicates severe ramifications. Many lives were lost due to the unruly management systems of the hospitals. In rural areas, the healthcare system has witnessed a bloody melee of deaths due to poor management. Therefore, it’s high time our healthcare got equipped with some effective measures and the sole purpose of our Healthcare Comrade is to ensure this.

**1.2 Intended audience:**

The intended audiences for this document are the judge panel of the Hack NSU\_season 3. It will also be read by the project team of Team Aplomb.

* 1. **Product scope:**

Healthcare Comrade is equipped with eclectic features that can make access to healthcare facilities as easy as a pie. The primary attributes of Healthcare Comrade consist of properties like availing emergency healthcare facilities(along with providing plasma, covid tips, emergency ambulance services, 24/7 online pharmacy facilities etc). Moreover, it’s crucial to look out for the healthcare system in the rural areas. Our Healthcare Comrade comes with viable measures to ensure that the people living in rural areas can get access to all kinds of medical treatments. They would also be privy to appointments with renowned doctors according to their needs and specifications. To top it off, many people are in dire need of proper healthcare tips so that they do not fall prey to various rumours surrounding the symptoms and diagnosis of Covid complications.

A patient can look up a doctor according to their needs; the patient can find the details of the specialist according to the required category and can also set up appointments according to their conveniences. In case of people having problems with internet facilities or other inconveniences apropos finding the right doctor, our volunteer team would be more than happy to help out. This brings forth the concept of having a team of dedicated volunteers who would help out with even the most petty facets; what’s more, they would also deliver the necessary form of medications and vital treatments at the doorsteps of the patients who are unable to get hold of the medications themselves. Healthcare Comrade is a boon because it reduces the complex appointment system, lack of patient history of illness & medicine information. This application can make the medical ecosystem faster, easier & more efficient.

**2.1: Product perspective:**

The prevalent healthcare system is dotted with way too many hassles and hindrances and these hindrances need to be mitigated tactically. To top it off, the pandemic has increased the woes and misivings of the overall healthcare system.0

If we want to pinpoint the prime roles, then three fields would be highlighted: (i) Doctor (ii) Patient (iii) Volunteers.

**2.2: Product Functions:**

(i) Patient can look up the doctor according to their needs. There are various categories to choose from.

(ii) The patients are encouraged to make an account before looking up a doctor. That way, their details would be listed in a structured manner.

(iii) The doctors would be notified instantly when someone wants to set up an appointment. Someone who doesn't have any account on Healthcare Comrade, they too can set up an appointment with the doctor by scanning the QR. The QR would then direct the patients to set up an appointment with the doctor provided that the patients share their details

(iv) Volunteers would have some core jobs like managing intensive care and medical prerequisites(oxygen, blood and plasma). They would also ensure that the patients residing in rural areas can access proper healthcare facilties through means of campaigns and posters. If needed, the patients would be brought to camps to make an appointment with the doctor. The volunteers can also aid the patients to go to the nearest health facility provided that the patient's location is trackable on the google map.

(v) E pharma is associated with connected components. Firstly, if someone is trying to find the right form of medications for some particular ailments, they can easily look for recommendations and Healthcare Comrade would direct them to the nearest location as to where they can get hold of the medicines they are looking for. If some alternative medicines are available, then these medicines too would be recommended with proper medical consultation.

**2.3: User Classes and Characteristics:**

1. Doctor:

The doctor can check notifications whether someone has showed interest in making appointments with him/her. If the doctor accepts the request, an appointment would be set up virtually(most likely through a video conference call). The doctor can also have a say while fixing the time of the appointments.

**2. Patients:**

The patients has multiple options from where they can choose the type of doctor they need. The patients are encouraged to make an account to ease things while making an appointment. Howeverm if any patient is unable to create an account even then they can make an appointment with the doctor by scanning the QR. Integrating the USSD system facilitates directing the patient to setting up an appointment with the doctor provided that the patients share their contact details.

(iii) In the case of the patients living in rural areas, if they are unable to handle the options they can always seek help from the volunteers.

(iv) The patients can avail themselves of facilties like e-pharma, ambulance services and also emergency services.

(v) They can also get hold of various healthcare tips apropos COVID complications.

**3. Volunteers:**

(i)The volunteers would receive the location of the patients who are in dire need of help.

(ii) Separate notifications would be received from their ends depending on the urgency of the patients.

4. Service provider

Hospital authority, Ambulance

company, medicine store, medicine

company play an important role.

**2.4 Operating Environment:**

The application can operate in any web based environment.

**2.5 Design and implementation constraints**

**2.6: Assumptions and dependencies**

**3. External Interface requirements**:

User Interfaces: Here prototype user interface is used.

**3.1.1 Doctor user interface**

Doctor user interface provides a doctor about his/her patient information, appointment

schedule, scan patient QR code facility etc.

**3.1.2 Patient user interface:**

Patient user interface provides patient appointment facility. Patient also can get physical and

mental health emergency support using a single press.

**3.1.3 Volunteer User Interface**

Volunteer User Interface provides facility for the application service provider such as ambulance

company, medicine store etc.

**3.2 Hardware Interface:**

Laptop.

**3.3: Software Interfaces:**

Name: Windows 10

Version No: 2018

Source: Microsoft Corporation

Name: React(Backend)

Version No: 17.0.2

Name: Node(Backend)

Version No:14.17.4