Faculty of Computing and Information Technology
University of the Punjab

Department of Software Engineering

PROJECT-D3

Class: BS-SE
Section: Morning

Project: COVID Management System
Type: Software Requirements Specifications (SRS) File

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1. Introduction

This is a web-based software application used to co-operate with Govt. to keep their public up-to-date about Corona pandemic. This software application will not only facilitate the Govt. but also provide the public with 1st hand information about latest vaccines for Covid patients, facilitate them to find nearest vaccination centers from their homes using global positioning system (GPS). This software product will facilitate people to register them for vaccine and will provide them tentative schedules. They will be able to select the schedule of their own choice according to their ease!

This web-application will also share latest research on Covid disease. Its ever-changing symptoms due to new militant variants. Latest vaccines developed by different pharmaceutical companies, like AstraZeneca **IgA** (Immunoglobin A) and Novavax etc.

People will be able to view feedback on vaccines and they will also be able to post their reviews about vaccines and complains pertaining to attitude of servants of vaccination centers.

This software will facilitate govt. to declare track and deliver vaccine to desired vaccination centers. After proper login vaccination centers will be allowed to order for vaccine and will collaborate with govt. They will also be able to share their opinions on vaccines' qualities and their reaction on public after successful inoculation.

2. Problem Statement

1. We will update an international stats feature of our website to make ensure the functionality of this feature should be efficient.
2. We will include Diet Plan and Exercise Plan for the citizens of the state. This will increase the job vacancies for nutritionists and professional physical trainers. Govt. will earn revenue for providing this functionality.
3. Information about vaccines page needs to be more functional and needs to update it according to latest researches.

3. System Scope

This system is manufactured to assist the government for managing COVID-19 pandemic countrywide. This system can assist:
- ➤ Policy Makers
- ➤ Social Media Analysts
- ➤ General Public etc.
    To get up-to-date knowledge about Coronavirus, its changing behaviors, latest researches and preventive measures.

This system will also provide following facilities:
- ➤ Registration for vaccination
- ➤ Schedule selection for vaccination
- ➤ Issuance of vaccination certificates via online and offline channels.
- ➤ Verification of vaccine certificates

4. Assumptions

5. Functional Requirements

1. Display COVID stats of both **countrywide cases** and **cases in major cities** including:
   a) Total number of COVID tests performed
   b) Total reported COVID positive cases
   c) Corona recovery cases
   d) COV-19 critical patients
   e) Total death cases

2. Display information about COVID-19 virus
   a) Its preventive measures (SOPs)
   b) Its ways of spread
   c) Its new militant variants.

3. Register citizens for vaccination.
4. Providing the choice of selecting schedule of their own choice. So that, people don't create rush at vaccination centers. [This is a new Functionality]
5. Providing 'Centers near me' facility to check nearby vaccination centers.
6. Generating verifiable vaccination certificates to successfully vaccinated citizens.
7. Section of FAQs and to submit feedback about vaccination centers and the attitude of their employees.
8. Creating diet plan and exercise plan for those who want to boost their immunity without any kind of medicine. [Business Model]

6. Non-Functional Requirements

1. Fully responsive and continually updating.
   a) Functional display that is compatible on all devices.
   b) Easy to access. Just require a browser and internet.

2. User friendly environment involves:
   a) Easy to understand layout with the help of Professional Designers.
   b) Transfer of language mode. [Urdu ⇔English]
   c) Embedded videos, links and images for information sharing.

3. Security Features:
   a) Use of encryption protocols such as https protocol to secure data transmission.
   b) Initial checks to control junk inputs. So that speed of website cannot affect due to heavy traffic.

7.Business Rules

8.Software Process Model

9.Context Diagrams

10.   Overview Diagrams

11.   Use-Case Diagrams

12.   Sub Use-Case Diagrams

13.   Activity Diagrams