A

SOFTWARE REQUIREMENT SPECIFICATION

ON

Software Requirement Specification (SRS) For Web-Based Vaccination Registration System (WBVRS)

UNDER

NON SYLLABUS PROJECT

Submitted To:

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Chapter 1: Introduction of project

1. Objective of project

This document defines the Software Requirement Specification (SRS) for the Web-Based Vaccination RegistrationSystem (WBVRS). It serves as aguide for developers and as a validationdocument for clients. The WBVRS enables usersto registerfor vaccinations, scheduleappointments, andmanage vaccination records through a secure onlineplatform.

2. Scope:

This system allows users to register themselves for vaccination, book appointment slots, and receive notifications regarding their vaccination schedule. The administrator can manage vaccine centers, stock, and user records through the system.

3. Definitions:

WBVRS-Web-BasedVaccinationRegistration System SRS-SoftwareRequirement Specification
GUI - Graphical User Interface Stakeholder -A user involved in the system such asCitizen, Administrator, or Health Officer.

4. Overview:

This system provides an easy online plat form for citizens to register and book vaccination appointments without physically visiting healthcare centers. It ensures efficient management of vaccination schedules and reduces manual paperwork.

Chapter 2: Overall Description

1. Product Perspective:

The WBVRS aims to assist citizens who want to schedule their vaccinations online without visiting hospitals manually. The system manages data centrally for easy access by authorized personnel.

2. Product Functions:

•User Registration and Login
• Slot Booking and Cancellation
•Vaccination Certificate Generation
•Admin Management of Vaccine Centers
• Notification and Reporting Module

3. User Characteristics:

Users should be familiar with basic online registration and login procedures.

4. Principal Actors:

Two principalactors are Citizen and Administrator.

5. General Constraints:

Astable internet connection is requiredfor WBVRS operation.

6. Assumptions and Dependencies:

The WBVRS requires an active network connection and an operational webserver for proper functioning.

Chapter 3: Requirements Analysis

1. Functional Requirements:

The WBVRSwill have the following modules:

1. Registration-Citizens can register by entering personal details.
2. Login-Registered users can login securely.
3. Slot Booking -Users can select date and time slots for vaccination.
4. Notification-Users receive confirmation and reminders.
5. Certificate Generation-Users can download vaccination certificates.
6. Admin Management -Administrator canmanage centers, vaccines, and records.

2. Non-Functional Requirements:

•Security: Secure access to sensitive health data.
•Reliability: Continuous availability.
•Maintainability: Easy updates.
• Portability: Works on various browsers.
• Performance: Efficient data retrieval.

3. Performance Requirements:

The system should support multiple concurrent users booking vaccination slots simultaneously.

4. Technical Issues:

The system will run on a client-server architecture using technologies such as HTML,CSS, PHP, and MySQL, and will support common browsers like Chrome, Firefox, and Edge.

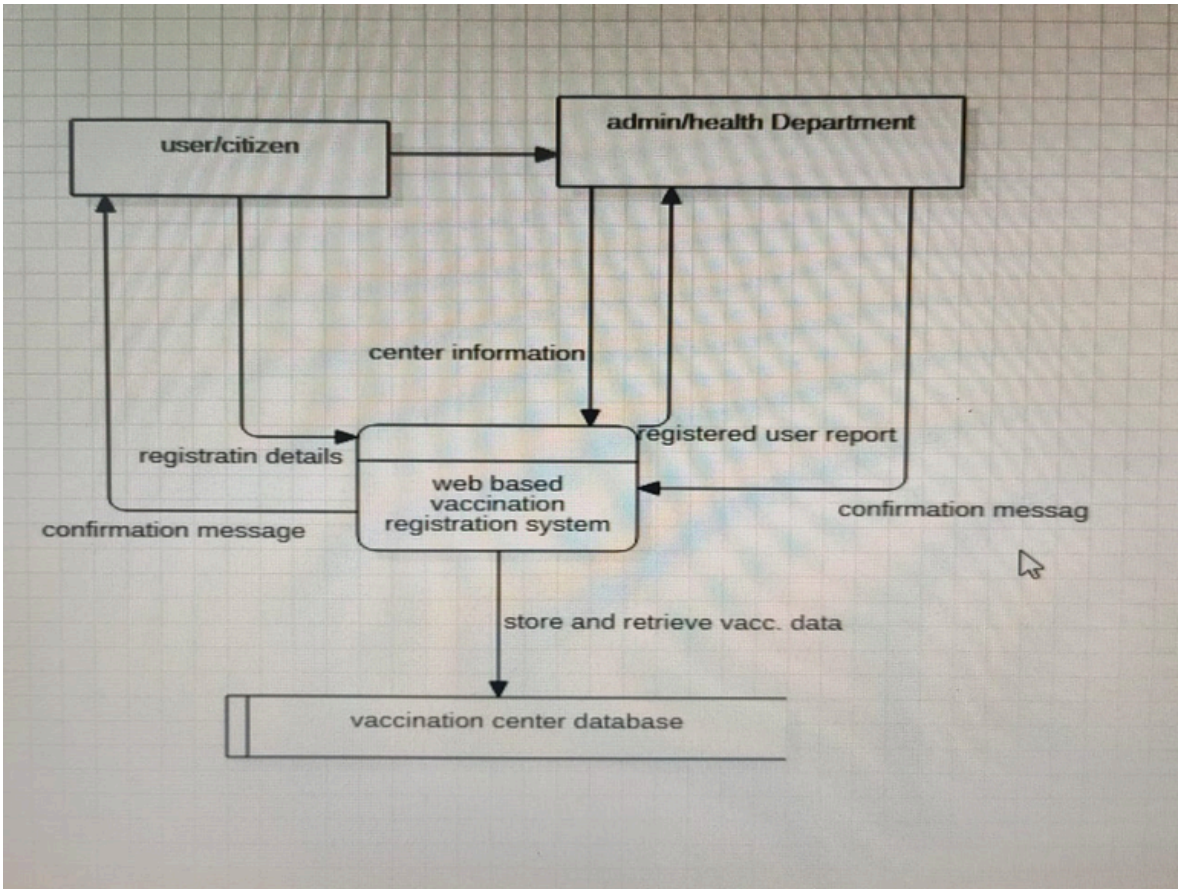
3. Interface Requirements:

•Login Page
•Registration Form
•Slot Booking Page
•Admin Dashboard
•Vaccination Certificate Page

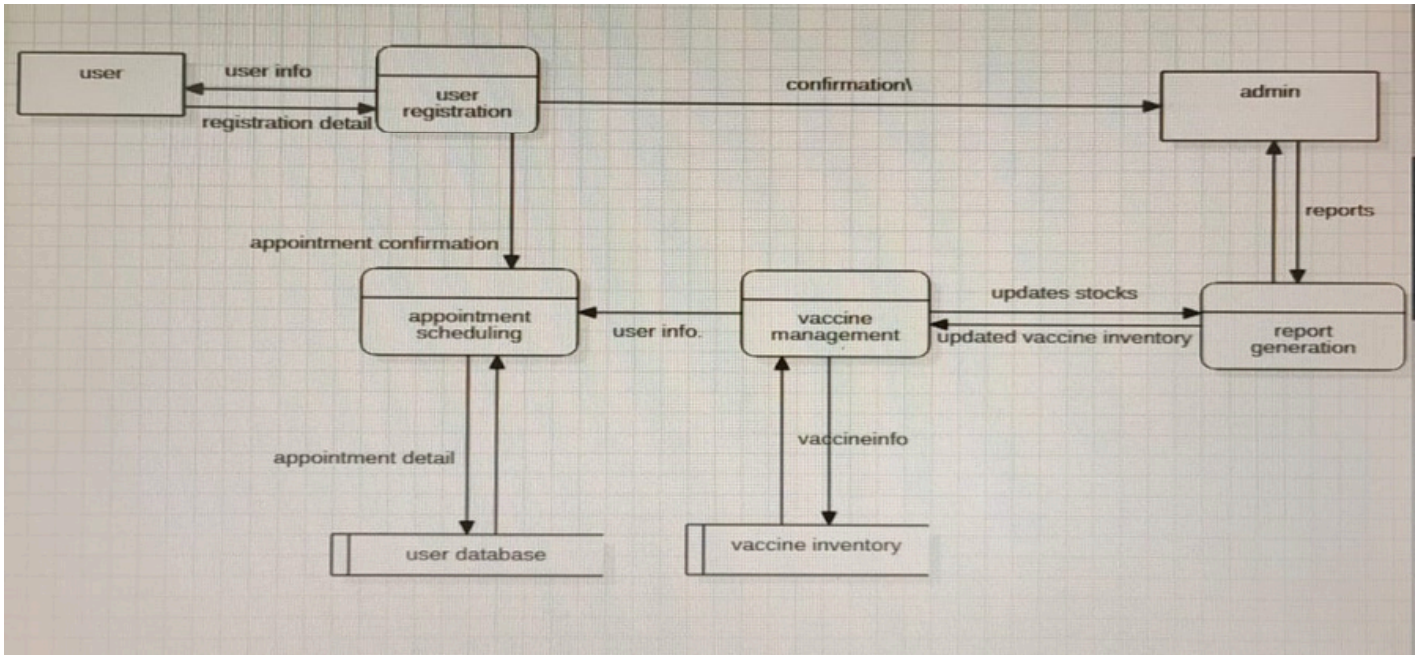
1. Architecture Design:

The Course Registration System shall be implemented using a Three-Tier Architecture to ensure separation of concerns, scalability, and maintainability. 1. Presentation Tier (Client): The user interface (GUI) developed using HTML, CSS (Tailwind/Bootstrap), and JavaScript (React/Vue/Angular). This tier handles user interaction and communicates asynchronously with the Application Tier. 2. Application Tier (Business Logic): A server-side application (e.g., Node.js/Express or Python/Django) that processes user requests, enforces business rules (prerequisite checks, capacity limits), and manages transactions. 3. Data Tier (Database): The dedicated database server (e.g., PostgreSQL). This tier is responsible for secure, persistent storage of all academic, user, and course catalog data. Direct access from the Presentation Tier is strictly forbidden.

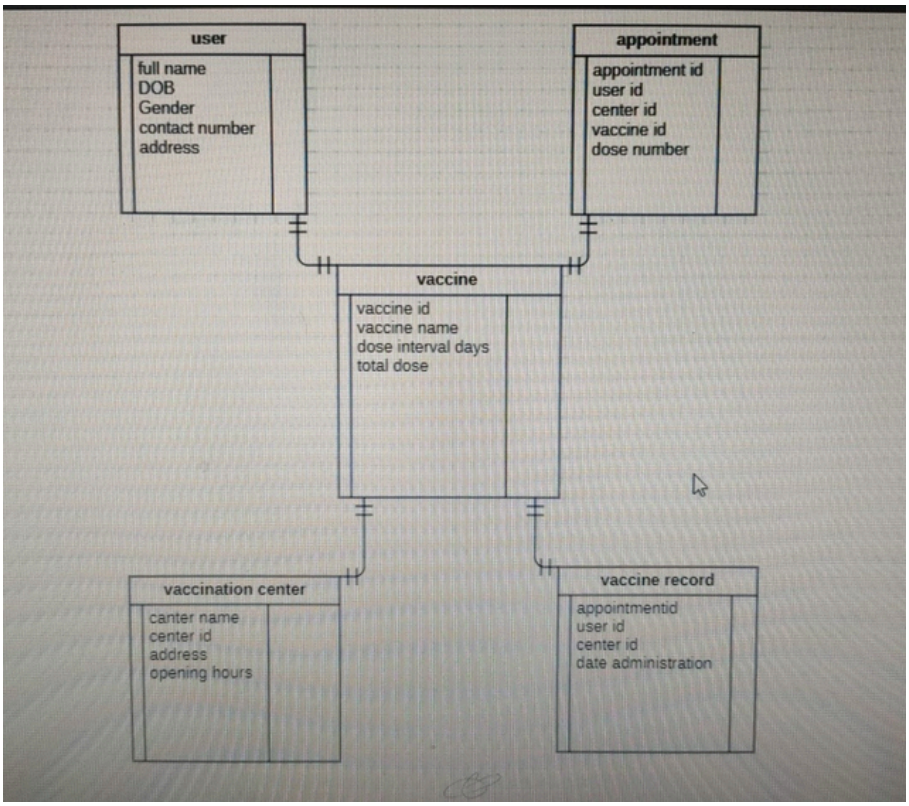
LEVEL 0 DATA FLOW DIAGRAM (DFD)



LEVEL 1 DATAFLOW DIAGRAM (DFD)



E-R DIAGRAM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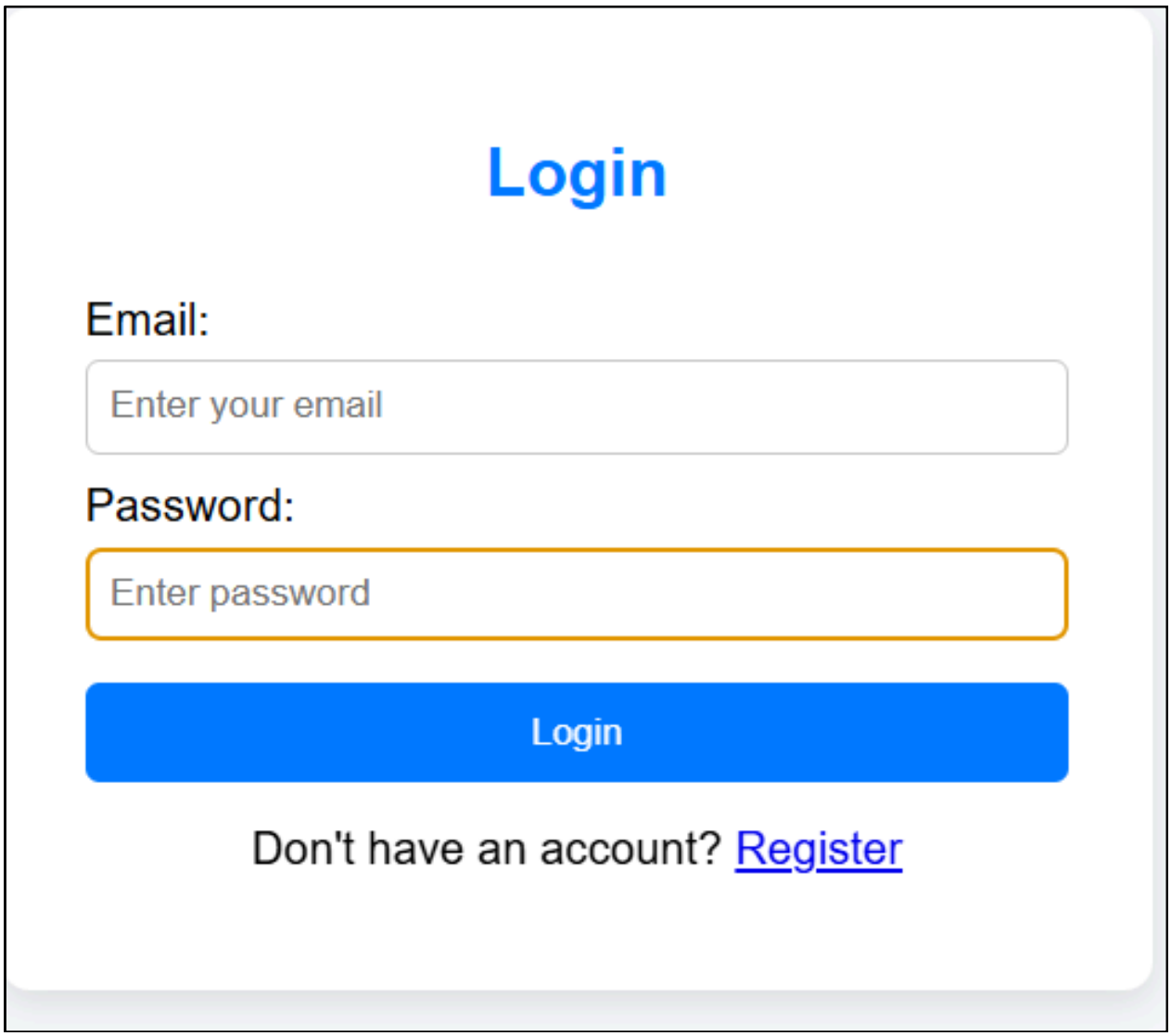
center id
address
opening hours
vaccine record
appointmentid
user id
center id
date administration

1. REFERENCES –

•IEEESRS standard documentation (IEEE Std 830-1998).
•Science Direct –Articles on vaccine management.
•WHO(World Health Organization) –digital records and co-win implementation.
•Research Gate –research papers and case studies on web –based vaccination system.
•GITHUB –reference for the code.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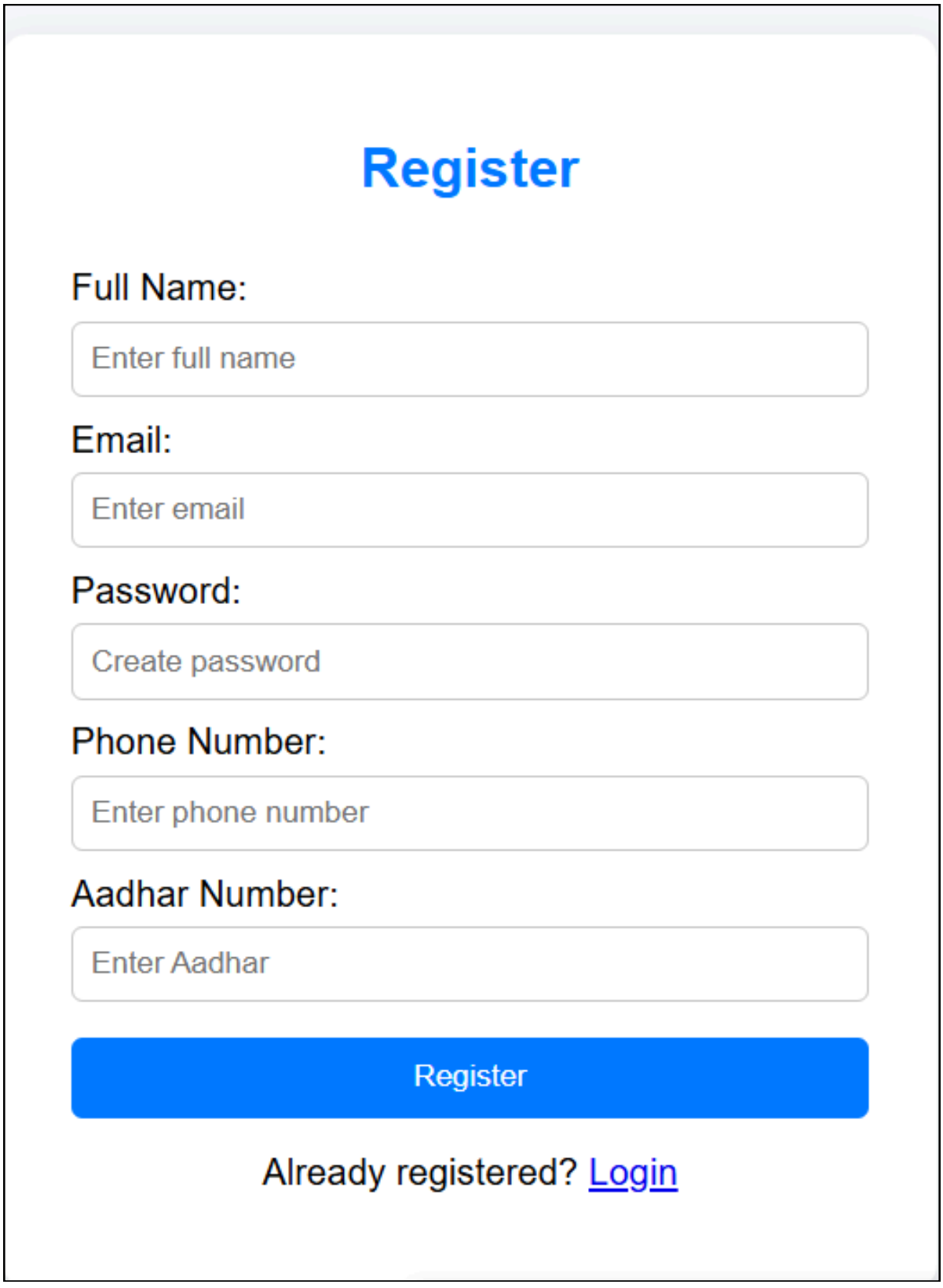
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