

# Configuration Manual

MSc Research Project Masters in Cyber Security

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## **National College of Ireland**



# **MSc Project Submission Sheet**

# **School of Computing**

Student Name:	Pankaj Ramcharitra Yadav	
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Programme:	Masters in cyber security Year: 2024	
Module:	Practicum	
Lecturer:	Joel Aleburu	
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Project Title:	Strengthening IOHT security by multi factor authentication solutions and with future directions	
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Signature:	Pankaj	
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# Configuration Manual

### Pankaj Ramcharitra Yadav X23205458

#### 1 Introduction

This manual provides detailed information about how to configure and deploy a secure platform for Internet of health care things. This platform uses multifactor authentication with Amazon web service to enhance its security and protect from cyber-attacks.

# 2 Prerequisites

#### 2.1 Hardware requirements

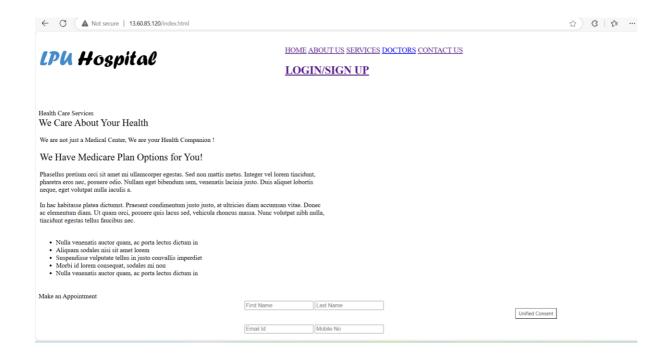
A laptop with internet access and a server for hosting the web application on amazon web service.

#### 2.2 Software Requirements

- 1. Account on Amazon web service.
- 2. PHP, MySQL, HTML and CSS for developing a website.
- 3. Web browser such as Firefox or chrome.
- 4. Snyk for vulnerability testing.
- 5. XAMP

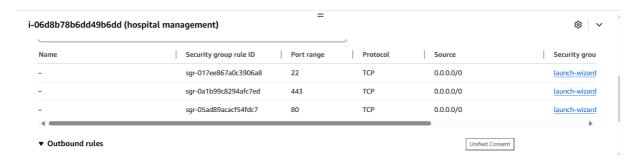
# 3 Web application development

- 1. For frontend, I have use PHP, HTML and CSS to develop a website and then given a doctors and patients a role specific dashboard.
- 2. For backend, I have use PHP to handle authentication and also to secure data transmission.



#### Hosting and Integration

- 1. I have login to AWS to access AWS management Console.
- 2. Then navigate to EC2 dashbiard to launch a new instance by using Amazon Linux 2.
- 3. While configuring assign a key pair of SSH and allocate a storage of 20GB.
- 4. I have allows inbound traffic on port number 22 for SSH, 80 for HTTP and 443 HTTPS and restrict other ports for security.



- 5. Then navaigte to the IAM dashboard to activate all multificator authentication for all the users and after this open KMS dashboard to create a customer managed key for enhancing security.
- 6. Transfer website files o the EC2 and set up a web server to host the application.

7. Use the public IP addres to get access on the website.



