MINI PROJECT - II

(2021-22)

REMOTE PASSWORD MANAGEMENT SYSTEM

MID TERM REPORT

Institute of Engineering & Technology

Team Members

Achal Paliwal
(181500032)

Prashant Agrawal
(181500486)

Shashank Gupta
(181500653)

Supervised By

Mrs. Harvinder Kaur
Technical Trainer
Department of Computer Engineering & Applications

Contents

Abstract

The project named "**Remote Password Management System"**, is a Web-based application created by using front end and back-end technologies like Node.js, Express, EJS. The purpose of this project is to provide user a platform where he or she can store their social platform passwords and important notes so that it can be easily available by just one login from anywhere. To maintain their privacy of passwords and notes we have implemented AES Encryption technique for storing password in encrypted format in the database. And for security concerns of account the mail verification method is implemented, on login time user have to verify the OTP sent on his/her mail.

1. Introduction

Today every person has generally many accounts on different online and offline platforms like Facebook, Google, Gmail, LinkedIn, Twitter and it is very difficult for a person to remember all the IDs and their passwords. Thorough this project we are providing facilitie to access all IDS, passwords and notes globally anytime anywhere by just one login with OTP.

In this project "*Remote Password Management System*" to maintain security and privacy we have implemented AES Encryption to store all password in encrypted format and to maintain the security email verification is used.

2. Objective

Objective of this project "REMOTE PASSWORD MANAGEMENT SYSTEM" is to provide Facility to a user to store IDS, password (Encrypted Format) of their social online platforms and make notes which can be easily access globally anytime anywhere with just login and to reduce the time taken in searching notes and password in offline or in disk.

3. Modules

The project is based on several modules:

3.1 Product perspective

1. User Interface: The application will have a user-friendly and menu-based interface. Following frames will be provided.
1. A registration frame for Registration Purpose.
2. A login frame for entering the username, the password will be provided. Access to main screen of the model.
3. There is a frame for *Adding Password* and *Notes*.
4. There is a frame for displaying *Passwords* and *Notes* and a frame to change the account password.

3.2 Product Functions

The Website Name "*Remote Password and Management*" allow access only to authorized users or the user who have registered themselves already in it. A summary of the major functions that the model will perform:

a. Provide functionality to store passwords and to make notes online.

b. User can access theses notes et. all by just login and verifying by email verification.

c. User has to register only single time then he can access it by username and password.

3.2.1 User

- ✓ Can login and get registered
- ✓ Can Add Password and Notes.
- ✓ Can Check Notes and Passwords.

3.2.2 Administration

- ✓ Maintaining Server.
- ✓ Maintaining Functionality like ***AES Encryption***.

3.3 User Characteristics

a. Educational level: Users should be comfortable with the English language.

b. **Experience:** No prior experience is required to operate this website it is user friendly.

c. **Skills:** Users should have basic knowledge and should be comfortable using general purpose applications on computers.

4. Specific Requirements

These specific requirements describe the specific constraints impost on the requirements:

- **Hardware Requirement**
    - Processor - Intel i5
    - Operating System – Windows /8/10, Linux, Mac OS
    - RAM – 4GB(minimum)
    - Hard disk – 64 GB
    - Hardware Devices – Computer System
- **Tools Required**
    - Visual Studio
    - Node.js
    - Express.
    - MongoDB (To store data)
    - JavaScript, EJS(Front-End).
    - AES Encryption (For Encryption purpose)

5. Implementation

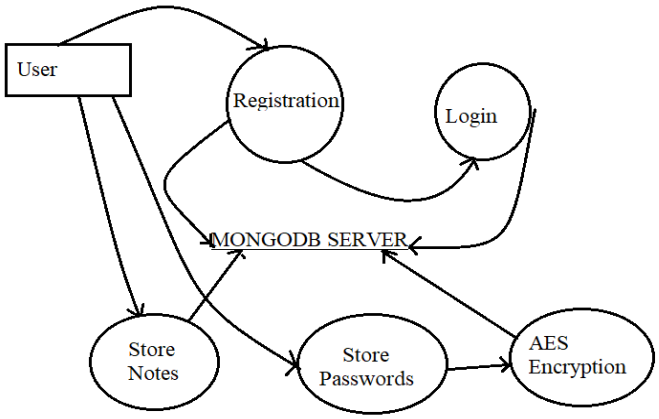

Fig.1 WorkFlow E-R Diagram of "RPMS"

PART 1. Making *Login and Registration page* and adding functionality of email verification for security-related.

PART 2. Designing Internal Interface of website to add password and store notes.

PART 3. Implementation of Encryption Technique like AES to store theses password in encrypted format.

PART 4. If User want, he/she can change their account password again.

PART 5. Testing.

6. Progress

Part 1 is completed

PART 1: Registration Page and Login Page

- Designing Registration Page for user.
- Designing Login Page for User.

Part 2 is completed

PART 2: Email Verification

- The email for otp verification on login time will be sent to the user

Part 3 is completed

PART 3: Internal Dashboard and Interface

- Designing Page to add password and notes.
- Designing page to change and see these password and notes.

Part 4 is pending.

PART 4: Selection of Encryption technique

- Experiment with various algorithms.
- AES (Advanced Encryption Standard) is used.

Part 5 is pending

PART 5: Testing

- Testing model to measure performance

7. Screenshots

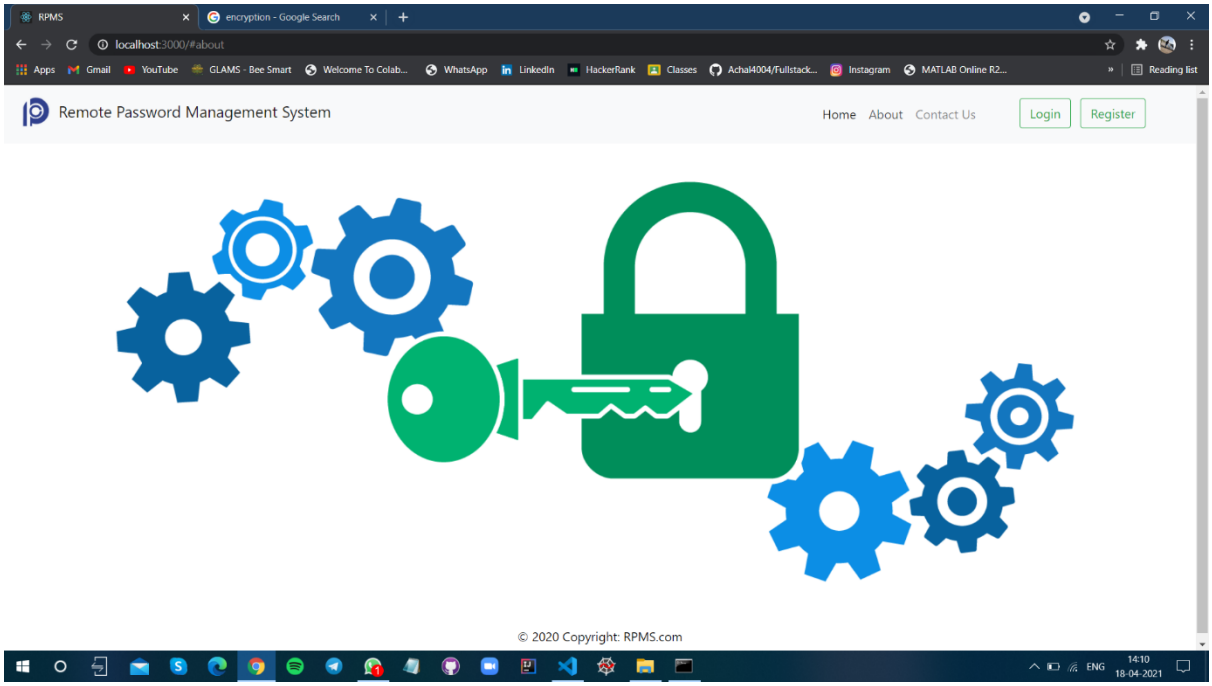

Fig.1

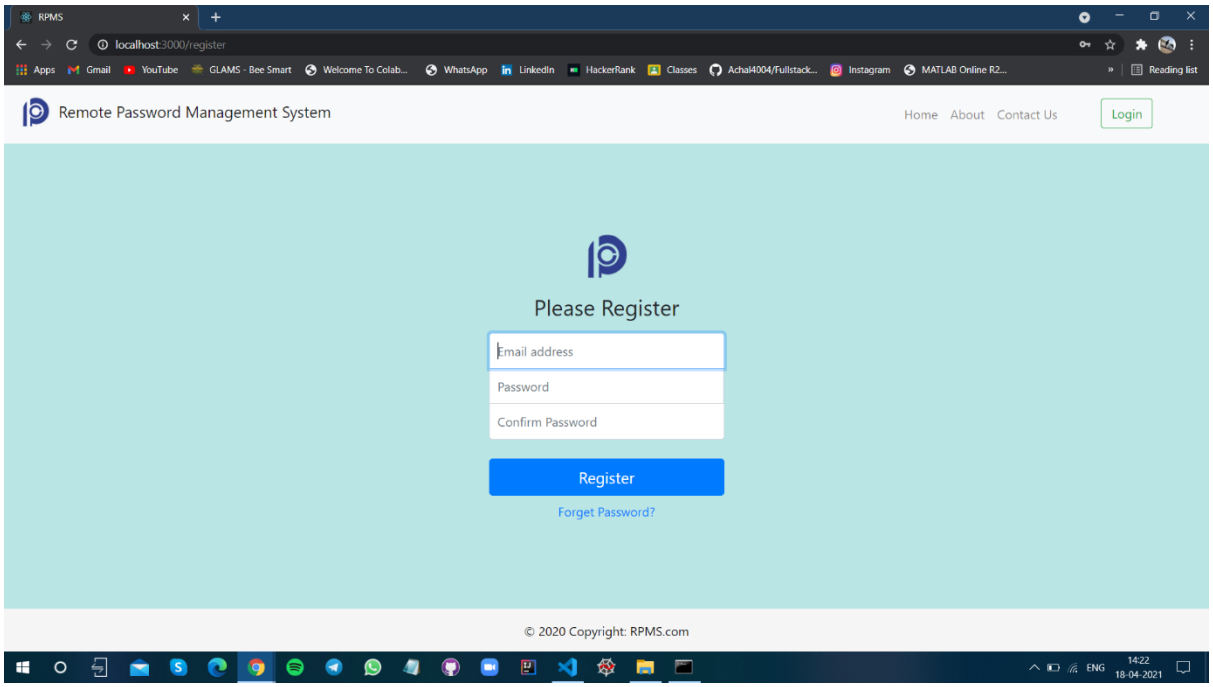

Fig.2

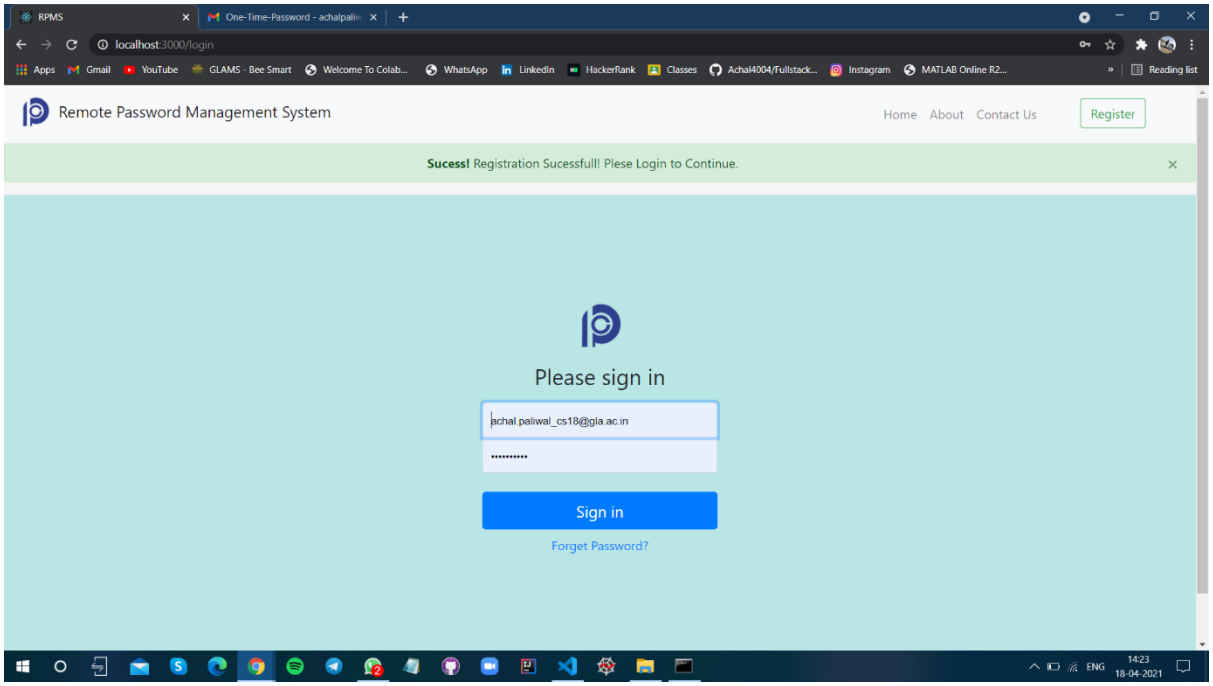
RPMS
One-Time-Password - achalpaliw
localhost:3000/login
Remote Password Management System
Home
About
Contact Us
Register
Sucess! Registration Sucessfull! Plese Login to Continue.
Please sign in
achal.paliwal_cs18@gla.ac.in
Sign in
Forget Password?

Fig .3

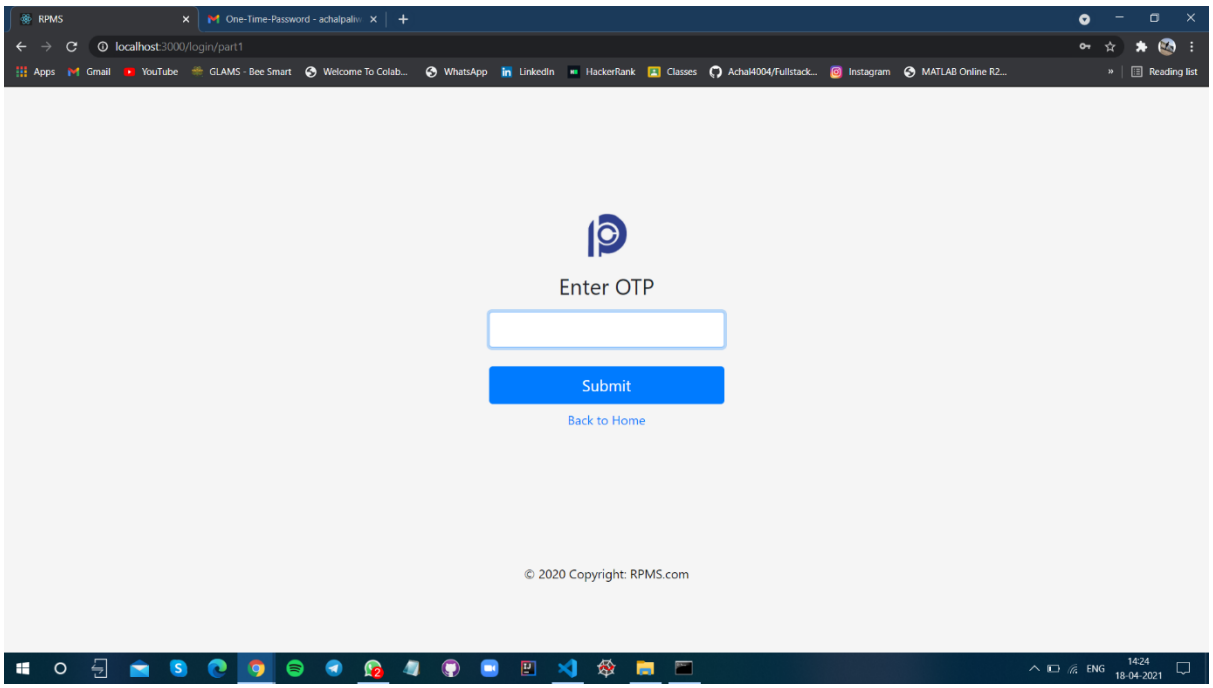
RPMS
One-Time-Password - achalpaliw
localhost:3000/login/part1
Enter OTP
Submit
Back to Home
© 2020 Copyright: RPMS.com

Fig.4

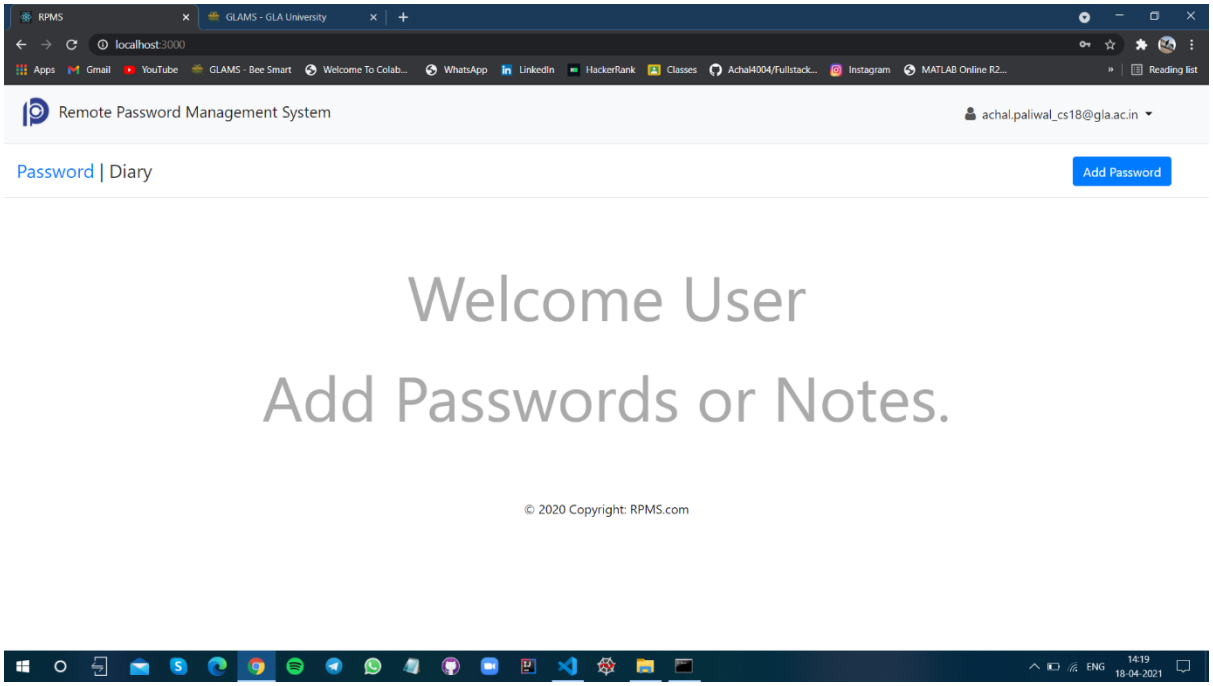
RPMS
GLAMS - GLA University
localhost:3000
Remote Password Management System
achal.paliwal_cs18@gla.ac.in
Password | Diary
Add Password
Welcome User
Add Passwords or Notes.
© 2020 Copyright: RPMS.com

Fig.5

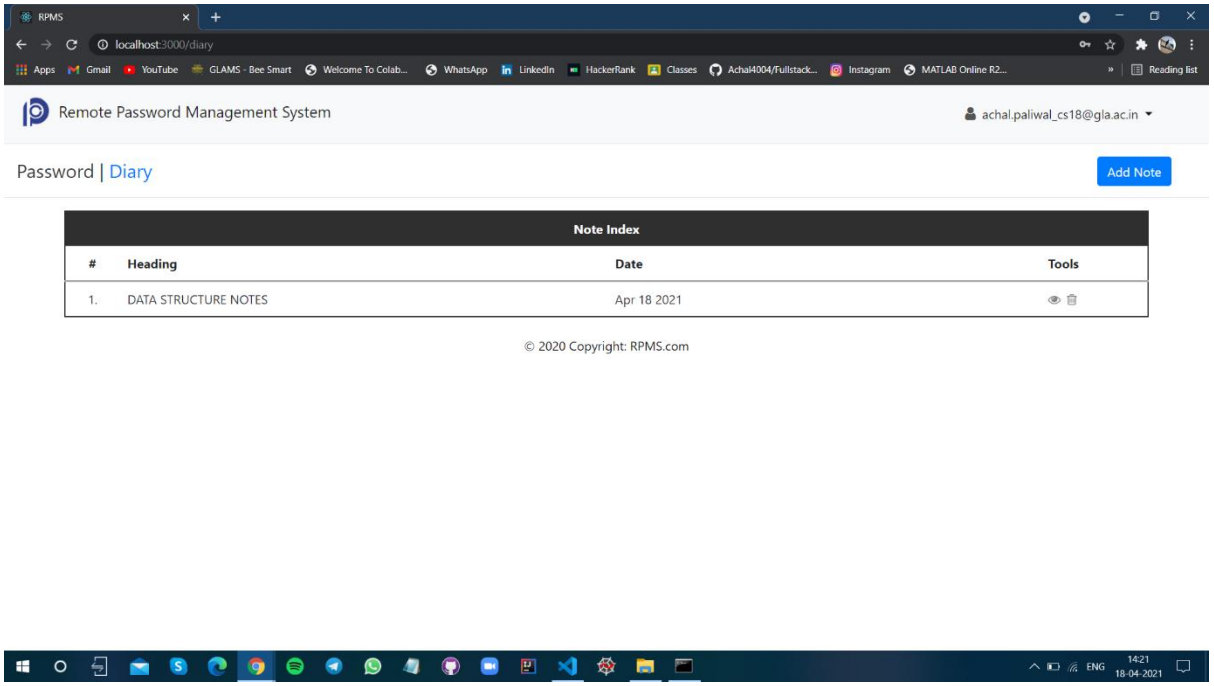
RPMS
localhost:3000/diary
Remote Password Management System
achal.paliwal_cs18@gla.ac.in
Password | Diary
Add Note
Note Index
Heading Date Tools
1. DATA STRUCTURE NOTES Apr 18 2021
© 2020 Copyright: RPMS.com

Fig.6

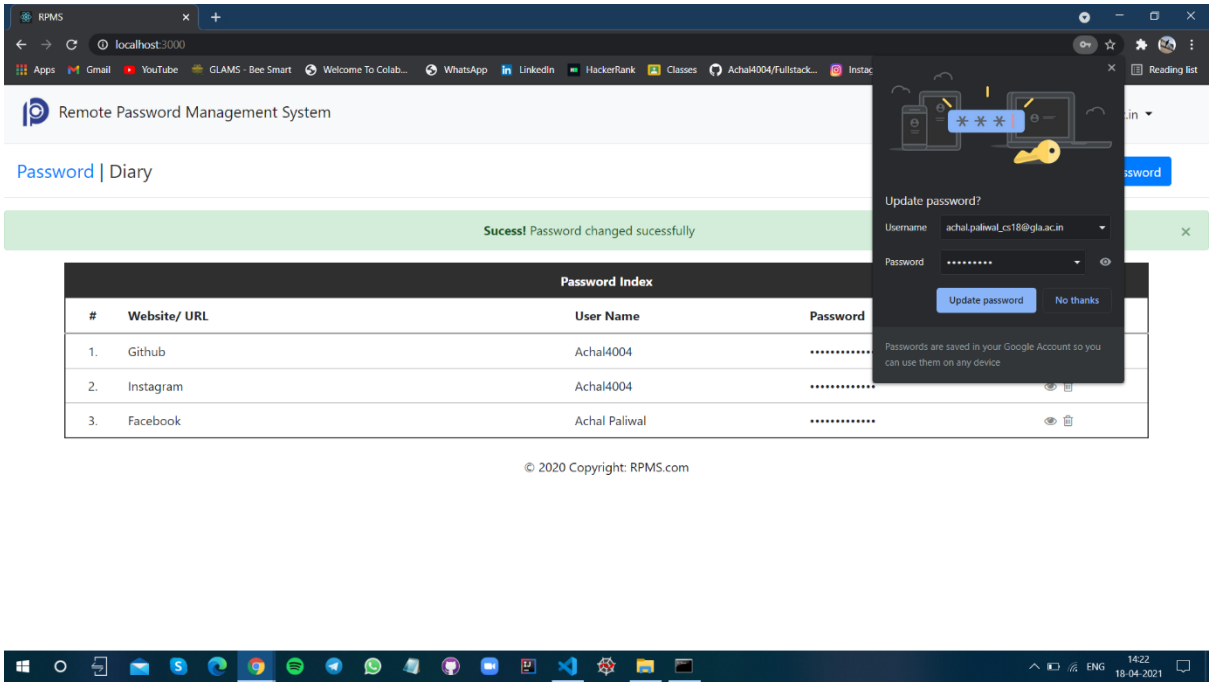
RPMS
localhost:3000
Remote Password Management System
Password | Diary
Sucess! Password changed sucessfully
Update password?
Username
achal.paliwal_cs18@gla.ac.in
Password
Update password
No thanks
Passwords are saved in your Google Account so you can use them on any device
Password Index
Website/ URL User Name Password
1. Github Achal4004
2. Instagram Achal4004
3. Facebook Achal Paliwal
© 2020 Copyright: RPMS.com

Fig.7

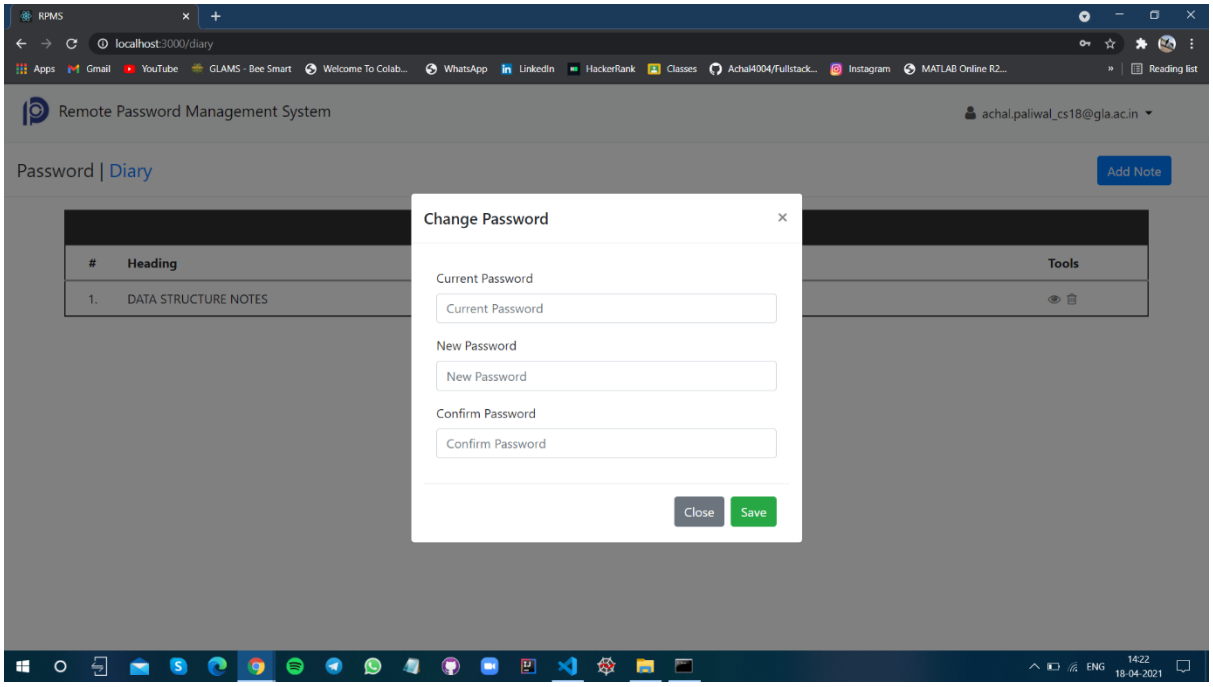
RPMS
localhost:3000/diary
Remote Password Management System
achal.paliwal_cs18@gla.ac.in
Password | Diary
Add Note
Change Password
Current Password
New Password
Confirm Password
Close
Save
Heading
Tools
1. DATA STRUCTURE NOTES

Fig.8

8. References

The following references were used in this project:

1. https: www.beta-labs.org
2. https://www.geeksforgeeks.org
3. https://www.Youtube.com
4. https://www.wikipedia.org
5. https://www.educative.io/