

# **STUDENTS ONLY ACCESSIBLE CLOUD STORAGE WITH AI AUTHENTICATON**

**A Project work submitted to the Madurai Kamaraj University  
In the partial fulfillment of the requirements for the reward of the degree  
BACHELOR OF COMPUTER APPLICATIONS**

**Submitted by**

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**Under the Guidance of**

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**BACHELOR OF COMPUTER APPLICATIONS**

**PKN ARTS AND SCIENCE COLLEGE**

**(Affiliated to Madurai Kamaraj University)**

**THIRUMANGALAM**

**April 2023**

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**BONAFIDE CERTIFICATE**

This is to certified that the project entitled "**STUDENTS ONLY ACCESSIBLE CLOUD STORAGE WITH AI AUTHENTICATION**" is bonafide work done by **S.VARATHARAJ (C0S18912)** under the guidance and supervision of **Mr.R.RAMACHANDIRAN MCA., M.Phil.,** in partial fulfillment for the requirement of the **DEGREE IN BACHELOR OF COMPUTER APPLICATIONS.**

**PROJECT GUIDE**

**HEAD OF THE DEPARTMENT**

Submitted for viva-voce examination held on \_\_\_\_\_ in P.K.N ARTS & SCIENCE COLLEGE, thirumngalam.

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

# **BACHELOR OF COMPUTER APPLICATIONS**

## **PKN ARTS AND SCIENCE COLLEGE**

**(Affiliated to Madurai Kamaraj University)**

**THIRUMANGALAM**

**April 2023**



### **DECLARATION**

I hereby declare that the project report entitle "**STUDENTS ONLY ACCESSIBLE CLOUD STORAGE WITH AI AUTHENTICATION**" in P.K.N ARTS AND SCIENCE COLLEGE, Thirumangalam submitted to the Madurai Kamaraj university in the partial fulfillment of the requirement for the awarded of **BACHELOR OF COMPUTER APPLICATIONS** is record of original project work is completely finished by me, under the supervision and guidance of **Mr.R.RAMACHANDIRAN MCA., M.Phil.,** P.K.N ARTS AND SCIENCE COLLEGE, thirumangalam.

**Place: Thirumangalam**

**Date:**

**S.VARATHARAJ**

**(C0S18912)**

## **ACKNOWLEDGEMENT**

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I wish to thanks to my respected **HEAD OF THE DEPARTMENT** in **Mrs.A.JANITA M.Sc., M.Phil., P.K.N ARTS AND SCIENCE COLLEGE**, Thirumangalam to whom I extend my sincere thanks and whom advice was precious of during the course of my project .

The project work enjoyed the good office of my internal guide of **Mr.R.RAMACHANDIRAN MCA., M.Phil.,** P.K.N ARTS AND SCIENCE COLLEGE, Thirumangalam to whom I extend my sincere thanks and whom advice was precious of during the course of my project .

"Motives are the best key to open the door of success". Our heart full thanks to our department staffs

- **Mrs.A.JANITAM.Sc., M.Phil.,**
- **Mr.R.RAMACHANDIRAN MCA., M.Phil.,**
- **Mrs.M.GENGAMCA.,**

I extend my thanks and gratitude to my parents, friends and those who helped directly and indirectly for the successful of the completion of this project.

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# **INTRODUCTION**

# INTRODUCTION

## ABSTRACT

Students only Accessible Cloud storage With AI Authentication is a fully paid free cloud service system only for students. we are able to find the user as a student or not. So we overcome that with Artificial Intelligence (AI) to scan user's Identity card of both school or college valid Identity card. The main aim of this project to create a website to interact with Firebase cloud service. Even a child also can accessible easily folder and file type. This web site able to stored your unstructured data the term multiple file format supports like image, audio, video and document. The feedback is one of the additional features on it using through the contact section provided in the top of the Navigation Bar, In this service I am using E-Mail JS library. It helps to deliver the user's feedback on my given mail address. The CSS framework Bootstrap is used in this project. The Bootstrap helps to switch this website as fully responsible So we can use any devices The Web page is automatically adopt that Layout. The Sweet Alert library used for all pop up alerts to improve Toasts.

## **ABOUT THE PROJECT**

Convenient and cost-effective way to store and access data from anywhere in the world. However, security remains a major concern for cloud storage users, especially when it comes to unauthorized access to their sensitive data.

To address this issue, AI authentication has emerged as a powerful tool to ensure secure access to cloud storage. AI authentication uses machine learning algorithms to analyze user behavior and determine if the login attempt is legitimate. It can detect unusual login patterns, including attempts from unknown devices, and block access to the account if necessary.

For students, AI authentication provides an extra layer of security that can help protect their academic and personal data from cyber threats. It ensures that only authorized users have access to their cloud storage, providing peace of mind knowing that their files are safe.

Overall, using AI authentication for cloud storage is an excellent way for students to ensure the security of their data while enjoying the benefits of cloud storage.



# **SYSTEM IMPLEMENTATON**

# SYSTEM IMPLEMENTATION

## MODULES

- User authentication
- AI Authentication
- Contact Section
- File Storage and retrieval
- File Sharing
- Logout Process

## MODULES DESCRIPTION

### 1. User Authentication :

The user authentication module is critical for ensuring the security of the project. A well-designed user authentication module can greatly enhance the security of the project. So that in this project we use Firebase Authentication with the E-mail and password .

### 2. AI Authentication :

The AI authentication module is a cutting-edge solution for ensuring the security of the project. An AI powered authentication system can greatly improve the user experience with faster and more secure authentication. In this project we use open CV library to scan the valid student identity card.

### 3. Contact Section :

The feedback module in the contact page allows users to directly communicate with the project team. contact page is a valuable tool for gathering user opinions and suggestions. Investing in a user-friendly feedback module can increase the transparency and responsiveness of the project team. In this project we use E-Mail JS library for the

users feedback report service with getting Name, Email Address and some Messages . This all inputs are collected on the project team head's mail address.

#### **4. File Storage and retrieval :**

The file storage and retrieval module is critical for managing and organizing the project's data. A well-designed file storage and retrieval module can greatly enhance the accessibility and reliability of the project's data. In this project we use Firebase as a Back-End database.

#### **5. File Sharing :**

An accessible and easy-to-use file sharing module can greatly enhance the collaboration and information sharing within the project. A file sharing module is essential for efficient collaboration and information sharing within the project.

#### **6. Logout Process :**

The logout module is an important aspect of the project's security and privacy features. Investing in a secure and user-friendly logout module can increase user trust and confidence in the project. If the user pressed logout button to remove the currently logged in ID from the Browser's Local Storage.

# **SYSTEM ANALYSIS**

# SYSTEM ANALYSIS

## EXISTING SYSTEM:

### **Amazon Web Services (AWS) :**

AWS is the most popular cloud computing platform and offers a comprehensive range of services, including compute, storage, databases, analytics, machine learning, and more. AWS is known for its scalability, reliability, and security, making it a top choice for businesses of all sizes.

### **Microsoft Azure :**

Azure is a cloud computing platform provided by Microsoft, which offers a wide range of services for building, deploying, and managing applications and services. Azure includes infrastructure-as-a-service (IaaS), platform-as-a-service (PaaS), and software-as-a-service (SaaS) offerings and is known for its integration with Microsoft's other services.

### **Google Cloud Platform (GCP) :**

GCP is a suite of cloud computing services provided by Google, which includes computing, storage, networking, data analytics, and machine learning services. GCP is known for its cutting-edge technology and innovation and is popular among businesses looking to take advantage of Google's vast resources.

### **IBM Cloud :**

IBM Cloud is a set of cloud computing services provided by IBM that includes infrastructure-as-a-service, platform-as-a-service, and software-as-a-service offerings. IBM Cloud is known for its security and reliability, as well as its integration with IBM's other services.

### **Oracle Cloud :**

Oracle Cloud is a cloud computing platform provided by Oracle that offers a range of services, including infrastructure, platform, and software as a service. Oracle

Cloud is known for its scalability, reliability, and security, and is popular among businesses in the finance, healthcare, and government sectors.

**Alibaba Cloud :**

Alibaba Cloud is a cloud computing platform provided by Alibaba Group, which offers a range of services, including computing, storage, databases, networking, security, and more. Alibaba Cloud is known for its reliability, scalability, and security, and is particularly popular in China and other parts of Asia.

Overall, these six cloud websites offer a wide range of services to meet the needs of businesses of all sizes and industries. Whether you're looking for scalability, reliability, security, or cutting-edge technology, there's a cloud computing platform that can meet your needs.

## **PROPOSED SYSTEM:**

The proposed system is a cloud storage service that is exclusively available to students. The system uses AI authentication to grant access to the cloud storage based on identity card scanning. The purpose of this system is to provide a secure and reliable cloud storage service that is only accessible to students, ensuring that their data is safe and protected from unauthorized access.

## **SYSTEM REQUIREMENTS:**

**Identity Card Scanner:** The system requires an identity card scanner to scan the student's identity card for authentication using webcam.

**AI Authentication System:** The system requires an AI authentication system to verify the student's identity based on the scanned identity card using opencv.js library.

**Cloud Storage:** The system requires a cloud storage service to store the student's data securely using firebase version 9 cloud storage.

**User Interface:** The system requires a user interface that is easy to use and allows students to upload, download, and manage their data created with react js.

**Security Measures:** The system requires security measures to protect the student's data from unauthorized access, such as encryption and firewalls.

## **FUNCTIONALITIES:**

**Identity Card Scanning:** The system allows students to scan their identity cards for authentication.

**AI Authentication:** The system uses AI authentication to verify the student's identity based on the scanned identity card.

**Cloud Storage:** The system allows students to store their data securely in the cloud storage service.

**Data Management:** The system allows students to upload, download, and manage their data easily through the user interface.

**Security Measures:** The system uses encryption and firewalls to protect the student's data from unauthorized access.

## **BENEFITS:**

**Secure:** The system provides a secure cloud storage service that is only accessible to students.

**Reliable:** The system provides a reliable cloud storage service that ensures the student's data is safe and protected.

**Convenient:** The system provides a convenient cloud storage service that allows students to access their data anytime, anywhere.

**Efficient:** The system provides an efficient cloud storage service that allows students to upload, download, and manage their data easily.



# **SYSTEM SPECIFICATION**

# **SYSTEM SPECIFICATION**

## **HARDWARE SPECIFICATION**

- Processor : Intel Pentium
- RAM : 4 GB
- Hard Disk : 512 GB
- Mouse : Normal type
- Keyboard : Normal

## **SOFTWARE SPECIFICATION**

- Operating System : windows 10
- Front End : React JS
- Style Framework : Bootstrap 5
- Back End : Firebase Version 9  
( Cloud Storage , Authentication )

## **ABOUT SOFTWARE**

### **ABOUT REACT**

ReactJS, also known as React, is a JavaScript library that is used for building user interfaces. Developed by Facebook, React has become one of the most popular frontend frameworks in recent years. In this article, we'll explore what React is, why it's popular, and how it works.

## **WHAT IS REACTJS?**

ReactJS is a JavaScript library that is used for building user interfaces. It allows developers to build reusable UI components and create complex UIs by combining these components. React uses a declarative programming style, which means that developers can describe how the UI should look and React takes care of rendering the UI.

## **WHY IS REACTJS POPULAR?**

ReactJS has become popular for several reasons. Firstly, React makes it easier to build complex UIs by breaking them down into smaller, reusable components. This means that developers can write less code and make changes to the UI more easily. Secondly, React's virtual DOM (Document Object Model) allows it to update the UI more efficiently, resulting in faster performance. Finally, React has a large and active community, which means that there is a lot of support and resources available for developers.

## **HOW DOES REACTJS WORK?**

ReactJS works by using a virtual DOM. When a developer makes a change to the UI, React updates the virtual DOM, which is a lightweight representation of the actual DOM. React then compares the virtual DOM to the actual DOM and only updates the parts of the DOM that have changed. This makes the updating process more efficient and faster.

React also uses JSX, which is a syntax extension that allows developers to write HTML-like code in JavaScript. This makes it easier to create UI components and helps to keep the code organized and easy to read.

## **SOME OF THE BENEFITS OF USING REACT INCLUDE:**

### **1. Reusability:**

React components can be reused across an application, making it easier to build and maintain a consistent UI.

### **2. Performance:**

React use of a virtual DOM allows it to efficiently update the UI, leading to better performance.

### **3. Test ability:**

React is a component-based architecture makes it easy to test individual components in isolation.

### **4. Flexibility:**

React can be used with a wide range of libraries and frameworks, making it a flexible choice for building web applications.

### **5. Community:**

React has a large and active community, with many resources and libraries available to help developers build better applications.

Overall, React is a powerful and popular library for building user interfaces in web applications. Its component-based architecture and use of a virtual DOM make it a performance and flexible choice for developers.

## WHAT IS JSX?

JSX is a syntax extension for JavaScript that allows developers to write HTML-like code in their JavaScript files. It was developed by Facebook to be used with React, but it can be used with other JavaScript frameworks and libraries as well. JSX allows developers to write code that is more readable and easier to understand than traditional JavaScript.

## HOW DOES JSX WORK?

JSX works by allowing developers to write HTML-like code in their JavaScript files. This code is then transformed into JavaScript using a transpiler such as Babel. When the code is executed, it is rendered as HTML by the browser. This allows developers to write code that looks like HTML but is actually JavaScript.

## BENEFITS OF JSX:

**Readability:** JSX makes it easier to write and read code, as it looks similar to HTML and is more familiar to web developers.

**Reusability:** JSX allows developers to create reusable components, which can save time and effort when building complex UIs.

**Integration with JavaScript:** JSX can be easily integrated with JavaScript, making it easy to use with other JavaScript frameworks and libraries.

**Performance:** JSX can be optimized for performance, as it allows developers to write code that is more efficient than traditional JavaScript.

## **ABOUT FIREBASE**

Firebase Cloud Storage is a cloud-based object storage service provided by Google as part of the Firebase suite of services. It allows developers to store and serve user-generated content, such as images, videos, and other files, in a secure and scalable way.

Firebase Cloud Storage provides a simple API for uploading and downloading files, as well as advanced features such as file metadata, security rules, and access controls. Files can be stored in buckets, which are containers for objects that can be accessed using a unique URL or through the Firebase SDK.

Firebase Authentication is a user authentication and identity management service provided by Google as part of the Firebase suite of services. It allows developers to easily integrate user authentication into their applications, including support for various authentication providers such as Google, Facebook, Twitter, and email and password authentication.

Firebase Authentication provides secure authentication and user management, including features such as email verification, password reset, and multi-factor authentication. It also integrates with Firebase Cloud Storage, allowing developers to restrict access to files based on user authentication and authorization.

Together, Firebase Cloud Storage and Firebase Authentication provide a powerful set of tools for building secure and scalable web and mobile applications. With Firebase Cloud Storage, developers can easily store and serve user-generated content, while Firebase Authentication provides a simple and secure way to manage user authentication and access controls.

## **FIREBASE CLOUD STORAGE**

Firebase version 9 Cloud Storage is the latest version of Firebase's cloud storage service. It offers several new features and enhancements designed to make it easier for developers to build and manage their applications. One of the most significant changes in version 9 is the introduction of a new modular SDK, which allows developers to use only the Firebase features they need, resulting in smaller app sizes and faster performance.

### **FEATURES AND ENHANCEMENTS IN FIREBASE CLOUD STORAGE?**

**Modular SDK:** Firebase version 9 introduces a modular SDK, which allows developers to use only the Firebase features they need. This results in smaller app sizes and faster performance.

**Faster Uploads:** Firebase version 9 Cloud Storage offers faster uploads, thanks to the new resumable upload feature. This feature automatically resumes file uploads if they are interrupted, making the process faster and more reliable.

**Improved Security:** Firebase version 9 Cloud Storage offers improved security features, such as default encryption for all data at rest and the ability to configure access controls for specific files and folders.

**Custom Metadata:** Firebase version 9 Cloud Storage allows developers to add custom metadata to their files, making it easier to organize and search for content.

**Improved SDK Compatibility:** Firebase version 9 Cloud Storage is fully compatible with the latest versions of popular mobile and web development frameworks, such as React Native and Angular.

## WHAT IS FIREBASE AUTHENTICATION?

Firebase Authentication is a service that provides backend services for user authentication in applications. It offers a variety of authentication methods, including email and password, phone number, and social media platforms such as Google, Facebook, Twitter, and more. Firebase Authentication also provides a way to manage user accounts and identities in a secure and convenient way.

## HOW DOES FIREBASE AUTHENTICATION WORK?

Firebase Authentication works by authenticating users using a secure token system. When a user signs in to an application, Firebase Authentication generates a secure token that is used to identify the user. This token is then sent to the server, where it is verified before the user is granted access to the application. Firebase Authentication also provides a way to manage user accounts and identities, including account creation, password reset, and account deletion.

## BENEFITS OF FIREBASE AUTHENTICATION:

**Security:** Firebase Authentication provides a secure way to manage user authentication, with encryption and other security measures to protect user data.

**Convenience:** Firebase Authentication makes it easy for developers to integrate user authentication into their applications, with support for a variety of authentication methods and user management features.

**Scalability:** Firebase Authentication can scale to handle millions of users, making it suitable for applications of all sizes.

**Integration with Other Firebase Services:** Firebase Authentication is part of the Firebase suite of services, which includes other tools such as cloud storage, real-time database, and analytics. This allows developers to easily integrate Firebase Authentication with other Firebase services.



## **CHANGES IN FIREBASE VERSION 9:**

Firebase Version 9 introduced a number of changes to the Firebase Authentication API, including a new modular approach to the SDK. The new modular SDK is designed to make it easier for developers to use only the parts of Firebase that they need, reducing the size of the SDK and improving performance.

One of the biggest changes in Firebase Version 9 is the introduction of a new Auth package. The Auth package includes all of the authentication related APIs, including the Auth object, which is used to create and manage user authentication state. The new Auth package is designed to be more flexible and to make it easier to work with authentication data.

Firebase Version 9 also introduces a new syntax for initializing Firebase Authentication. Instead of initializing Firebase Authentication with a separate config object, the new syntax allows developers to pass authentication configuration directly to the `initializeApp` function. This makes it easier to initialize Firebase Authentication and reduces the amount of code needed to set up authentication.

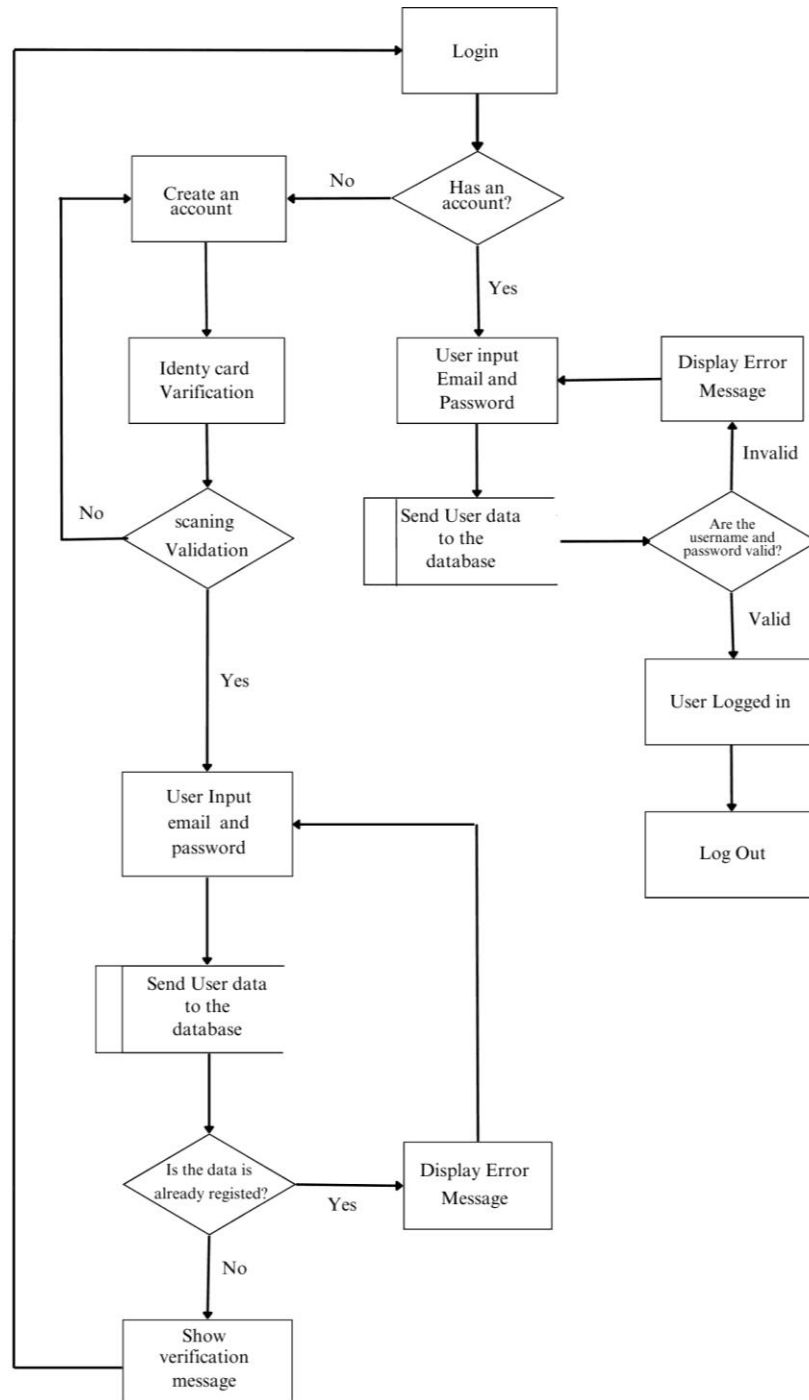
Another important change in Firebase Version 9 is the introduction of a new set of pre-built UI components for authentication. These UI components make it easier to add authentication to your app and provide a consistent and secure user experience across platforms. The new UI components include components for sign-in, sign-up, and password recovery, among others.

## **SYSTEM DESIGN**

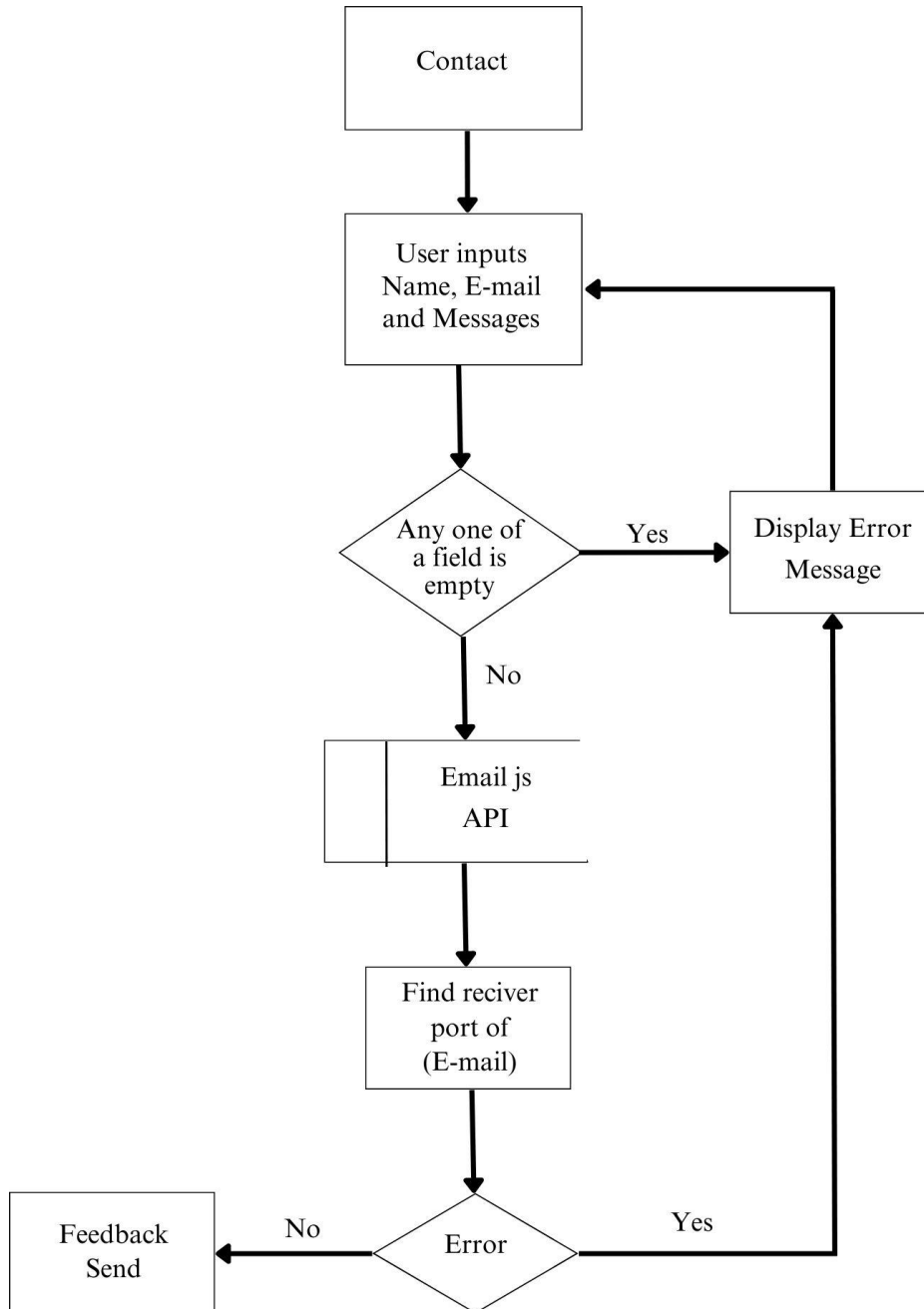
# SYSTEM DESIGN

## DATA FLOW DIAGRAM

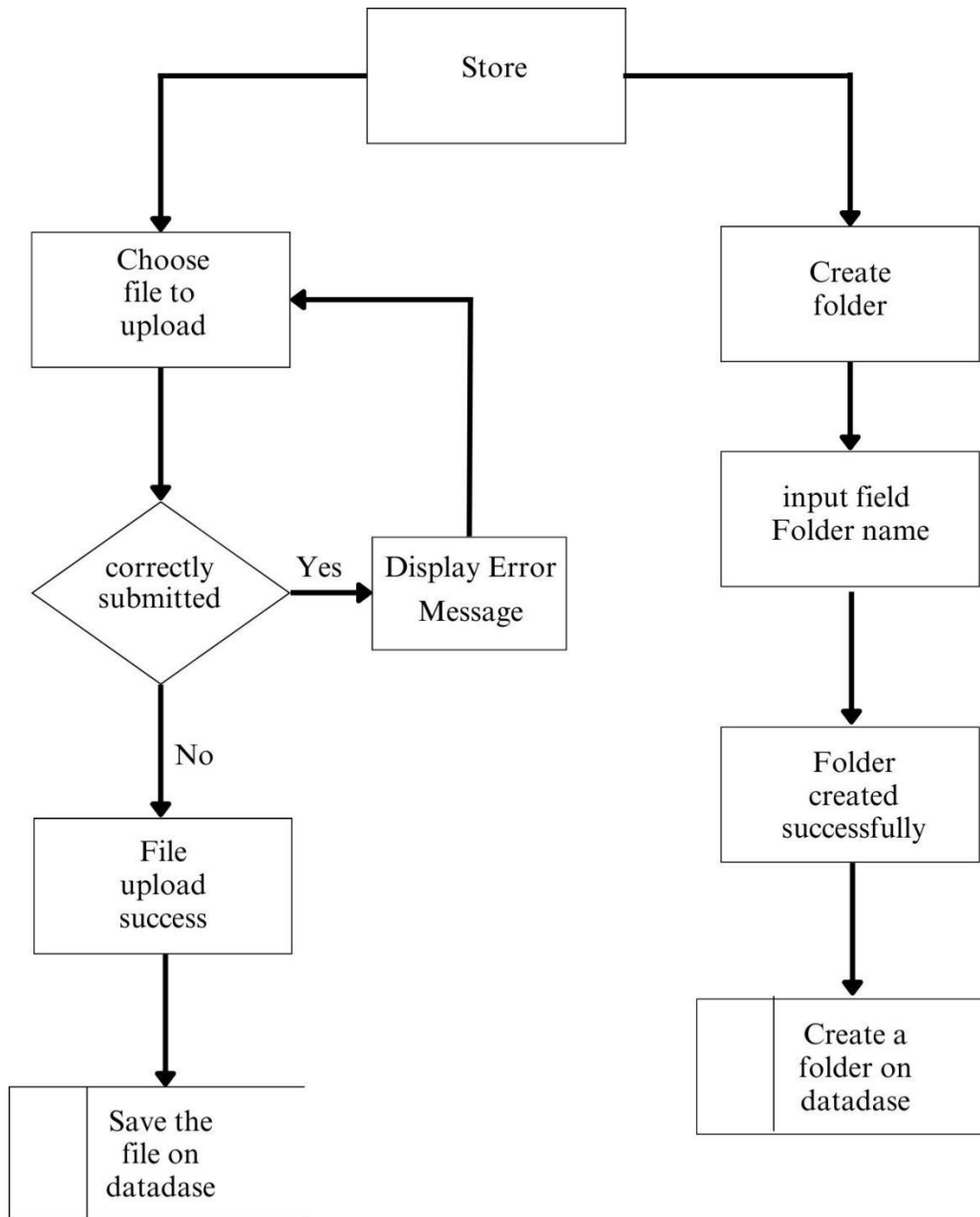
### AUTHENTICATION



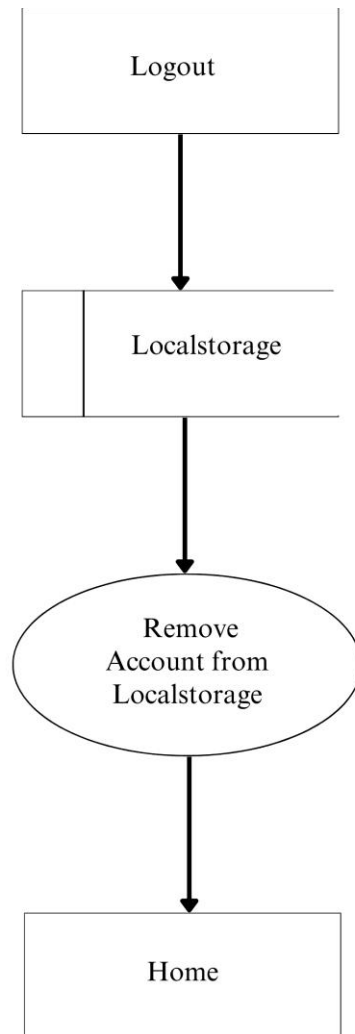
## CONTACT PROCESS



## FILE UPLOAD



## LOGOUT PROCESS



## **SYSTEM TESTING**

# **SYSTEM TESTING**

## **UNIT TEST:**

Unit testing involves testing individual components of the system, such as functions or classes, in isolation from the rest of the system. For instance, unit tests could be created to test the login functionality or the cloud storage integration. Unit tests can help identify any issues or bugs in individual components of the system.

## **INTEGRATION TESTING:**

Integration testing involves testing how different components of the system interact with each other. In the case of a React JS login and cloud storage system, integration testing could involve testing how the login component interacts with the cloud storage component. Integration testing can help identify any issues or bugs that arise from the interaction between different components.

## **ACCEPTANCE TESTING:**

Acceptance testing involves testing the system as a whole to ensure that it meets the requirements and specifications of the system. For instance, acceptance tests could be created to ensure that the login and cloud storage integration functions as intended and that all user requirements are met. Acceptance testing can help ensure that the system meets user expectations and is ready for deployment.

## **VALIDATION TESTING:**

Test the system's ability to authenticate users using Firebase API authentication. Check that the system allows users to sign up, sign in, and reset their passwords. Also, test that the system prevents unauthorized access to Firebase services.



## **SAMPLE CODING**

## SAMPLE CODING

### HOME PAGE

```
import React from 'react';
import './Home.css';
import 'bootstrap/dist/css/bootstrap.min.css';
import 'bootstrap/dist/js/bootstrap.bundle.min';
import {Button,Container} from 'react-bootstrap';
import {Link} from 'react-router-dom';

import TopNav from '../TopNav/TopNav';

import homeimg from '../../assets/home.jpg';

const Home = () =>{
  return (
    <div id='home'>
      <div>
        <TopNav/>
      </div>
      <Container fluid className="col-10">
        <div className="row">
          <div className="col-lg-6 col-md-6 col-12 order-1 pt-5">
            <h1className="display-4">Welcome to <br/><span>StorageApp</span></h1>
            <p className="my-lg-2 my-3">
              This is a fully (paid free) cloud storage
              service, only for students with their
              Identi card Verification using Artificial
              Inteligence</p>
            <Link to="/Login">
```

```
<Button variant="primary" className="my-lg-3 my-3"> Get Started</Button>
```

```
</Link>
```

```
</div>
```

```
<div className="col-lg-6 col-md-6 col-12 py-lg-0 py-4 order-sm-2">
```

```
<img src={homeimg} alt="React Logo" className="img-fluid" />
```

```
</div>
```

```
</div>
```

```
</Container>
```

```
</div>
```

```
);
```

```
};
```

```
export default Home;
```

## SIGNUP PAGE

```
import React,{ useState } from 'react';
import './SignIn.css';
import 'bootstrap/dist/css/bootstrap.min.css';
import 'bootstrap/dist/js/bootstrap.bundle.min';
import { Form, Button,Container } from 'react-bootstrap';
import { Link } from 'react-router-dom';
import { FontAwesomeIcon } from '@fortawesome/react-fontawesome';
import { faCamera } from '@fortawesome/free-solid-svg-icons';
import logging from '../assets/logging.png';
import TopNav from '../TopNav/TopNav';
import { useNavigate } from 'react-router-dom';
import swal from 'sweetalert2';
import auth from '../firebase';

import { createUserWithEmailAndPassword } from 'firebase/auth';

const SignIn = () =>{
  const [email, setEmail] = useState("");
  const [password, setPassword] = useState("");
  const navigate = useNavigate();

  const handleEmailChange = (e) => {
    setEmail(e.target.value);
  };

  const handlePasswordChange = (e) => {
    setPassword(e.target.value);
  };

  const handleSignup = async (e) => {
    e.preventDefault();
```

```

try {
  await createUserWithEmailAndPassword(auth, email, password);

  swal.fire({
    title: `Signup Successfully`,
    icon : 'success'
  });
  navigate('/terms');
} catch (error) {
  swal.fire({
    title : error,
    icon : 'error'
  });
}
};

return (
<div id="signPage">
<div>
<TopNav/>
</div>
<Container fluid className="col-10">
<div className="row">
<div className="col-lg-6 col-md-6 col-12 py-lg-0 py-1 " id="firstcol">
<img src={logimg} class="img-fluid mt-5 lg-mt-0" id='mainimga' alt="signimg"/>
</div>
<div className="col-lg-6 col-md-6 col-12 ">
<h6>Signup</h6>
<hr className="mb-3"/>


Scan your Id Card


<Link to="/scanner">

```

```

<Button variant="primary" className="shadow my-1">
<FontAwesomeIcon icon={faCamera} className="icon"/>
</Button>
</Link>
<Form className="my-lg-2 my-3" onSubmit={handleSignup}>
<Form.Group className="mb-2" controlId="formBasicEmail">
<Form.Label>Email address</Form.Label>
<Form.Control
    type="email"
    placeholder="Enter email"
    onChange={handleEmailChange}
/>
<Form.Text className="text-muted">
    We'll never share your email with anyone else.
</Form.Text>
</Form.Group>

<Form.Group className="mb-3" controlId="formBasicPassword">
<Form.Label>Password</Form.Label>
<Form.Control
    type="password"
    placeholder="Password"
    onChange={handlePasswordChange}
/>
</Form.Group>

<Button variant="primary" type="submit" className="px-4 py-2 mb-2">
    Signup
</Button>

<Form.Group>

```

```
<b>Already have an account?<Link to="/Login">
<u style={{color:'red'}}> Login</u></Link></b>
</Form.Group>
</Form>
```

```
</div>
```

```
</div>
```

```
</Container>
```

```
</div>
```

```
);
```

```
};
```

```
export default SignIn;
```

## LOGIN PAGE

```
import React, { useState } from 'react';
import './LogIn.css';
import 'bootstrap/dist/css/bootstrap.min.css';
import 'bootstrap/dist/js/bootstrap.bundle.min';
import { Form, Button, Container } from 'react-bootstrap';
import { Link } from 'react-router-dom';
import TopNav from '../TopNav/TopNav';
import logimg from '../assets/logimg.png';
import { useNavigate } from 'react-router-dom';
import swal from 'sweetalert2';
import auth from '../firebase';
import { signInWithEmailAndPassword, sendPasswordResetEmail } from 'firebase/auth';
const LogIn = () => {
  const [email, setEmail] = useState("");
  const [password, setPassword] = useState("");
  const navigate = useNavigate();

  const handleEmailChange = (e) => {
    setEmail(e.target.value);
  };

  const handlePasswordChange = (e) => {
    setPassword(e.target.value);
  };

  const handleSignIn = async (e) => {
    e.preventDefault();
    try {
      await signInWithEmailAndPassword(auth, email, password);
```



```

    swal.fire({
      title: `Login successfully`,
      icon : 'success'
    });
    navigate('/storepage');
  } catch (error) {
    alert('wrong');
    swal.fire({
      title : error,
      icon : 'error'
    });
  }
};

```

```

const handleResetPassword = (event) => {
  event.preventDefault();

```

```

swal.fire({
  title: "Forgot Password",
  text: "Please enter your email address",
  input: "email",
  inputAttributes: {
    autocapitalize: "off",
  },
  showCancelButton: true,
  confirmButtonText: "Submit",
  showLoaderOnConfirm: true,
  preConfirm: (email) => {
    return email;
  },

```

```

allowOutsideClick: () => !swal.isLoading(),
}).then((result) => {
  if (result.isConfirmed) {
    const email = result.value;
    // handle password reset with email

    sendPasswordResetEmail(auth, email)
    .then(() => {
      swal.fire({
        icon: "success",
        title: "Password reset email sent",
        text: "Please check your email inbox to reset your password.",
      });
    })
    .catch((error) => {
      swal.fire({
        icon: "error",
        title: "Error",
        text: error.message,
      });
    });
  }
});

return (
<div id="LoginPage">
<div>
<TopNav/>
</div>
<Container fluid className="col-10">
<div className="row">

```

```

<div className="col-lg-6 col-md-6 col-12 py-lg-0 py-1 " id="firstcol">
<img src={logimg} class="img-fluid" id='mainimga' alt="logimg"/>
</div>
<div className="col-lg-6 col-md-6 col-12 ">
<h6>LogIn</h6>
<hr/>

```

```

<Form className="my-lg-2 my-3" onSubmit={handleSignIn} >
<Form.Group className="mb-2" controlId="formBasicEmail">
<Form.Label>Email address</Form.Label>
<Form.Control
    type="email"
    onChange={handleEmailChange}
    placeholder="Enter email"
  />
<Form.Text className="text-muted">
    We'll never share your email with anyone else.
</Form.Text>
</Form.Group>

```

```

<Form.Group className="mb-1" controlId="formBasicPassword">
<Form.Label>Password</Form.Label>
<Form.Control
    type="password"
    placeholder="Password"
    onChange={handlePasswordChange}
  />
</Form.Group>

```

```

<Form.Group className="mb-4">
<Form.Text><u style={{color:'blue'}}>

```

```

        onClick={handleResetPassword}>
        Forgot password?
    </u></Form.Text>
</Form.Group>
<Button variant="primary"
        type="submit"
        className="px-4 py-2 mb-2"
    >
        Login
    </Button>
</Form.Group>
<b id="boldq"> Don't have an account?
<Link to="/Signup">
<u style={{color:'red'}}>Register</u>
</Link>
</b>
</Form.Group>
</Form>
</div>
</div>
</Container>
</div>
    );
};
export default Login;

```

## UPLOAD PAGE

```
import React, { useState,useRef } from 'react';
import './StorePage.css';
import 'bootstrap/dist/css/bootstrap.min.css';
import 'bootstrap/dist/js/bootstrap.bundle.min';
import { Container,Button} from 'react-bootstrap';
import { FontAwesomeIcon } from '@fortawesome/react-fontawesome';
import { faFileUpload,faFolderPlus } from '@fortawesome/free-solid-svg-icons';
import Swal from 'sweetalert2';
import { storage } from '../firebase';
import { ref, uploadBytes, getDownloadURL } from 'firebase/storage'
import TopNav from '../TopNavtwo/TopNav';
import CreateFolder from '../createfolder/CreateFolder';
```

```
const StorePage = (props) =>{
```

```
  const fileInputRef = React.useRef(null);
```

```
  const handleButtonClick = () => {
    fileInputRef.current.click();
  };
```

```
  const handleFileInputChange = (event) => {
    setImageUpload(event.target.files[0]);
  };
```

```
  const [imageUpload, setImageUpload] = useState();
```

```

const uploadFile = () =>{
  if(!imageUpload) return;

  const imageRef = ref(storage, 'storageapp/images/${imageUpload.name}');
  {
    uploadBytes(imageRef, imageUpload).then((snapshot) =>{
      getDownloadURL(snapshot.ref).then((url) =>{
        console.logf(url);
      });
    });
  }

}

const [inputValue, setInputValue] = useState("");
const [components, setComponents] = useState([]);
const fileInput = useRef(null);

const handleFolderButtonClick = () => {

  Swal.fire({
    title: "Folder name",
    input: "text",
    inputValue: inputValue,
    showCancelButton: true,
    inputValidator: (value) => {
      if (!value) {
        return "You need to write something!";
      }
    }
  })
}

```

```

    }).then((result) => {
      if (result.value) {
        setInputValue(result.value);
        setComponents([...components, <CreateFolder name={result.value}/>]);
        Swal.fire("The Folder has been Successfully Created", "StorageApp", "success");
      }
    });
  };

  return (
    <div id="storepage">

      <TopNav/>

      <Container fluid className="col-lg-6"
        style={{ backgroundColor: '#B1B1B1', marginTop: '66px' }} >

        <Button
          onClick={ ()=>{handleButtonClick(); uploadFile();}}
          type="file"
          ref={fileInput}
          id="plusbtn1 "
          style={{ color: '#fff', fontSize: '25px' }}
        >
        <FontAwesomeIcon icon={faFileUpload}/>
      </Button>
      <input
        ref={fileInputRef}
        type="file"
        accept={props.accept}
        style={{ display: 'none' }}

```

```

        onChange={handleFileInputChange}
      />
    <Button
      id="plusbtn2"
      style={{color:'#fff',fontSize:'25px'}}
      onClick={handleFolderButtonClick}>
    <FontAwesomeIcon icon={faFolderPlus} />
    </Button>
    {components}
  </Container>
</div>
);
};

export default StorePage;

```

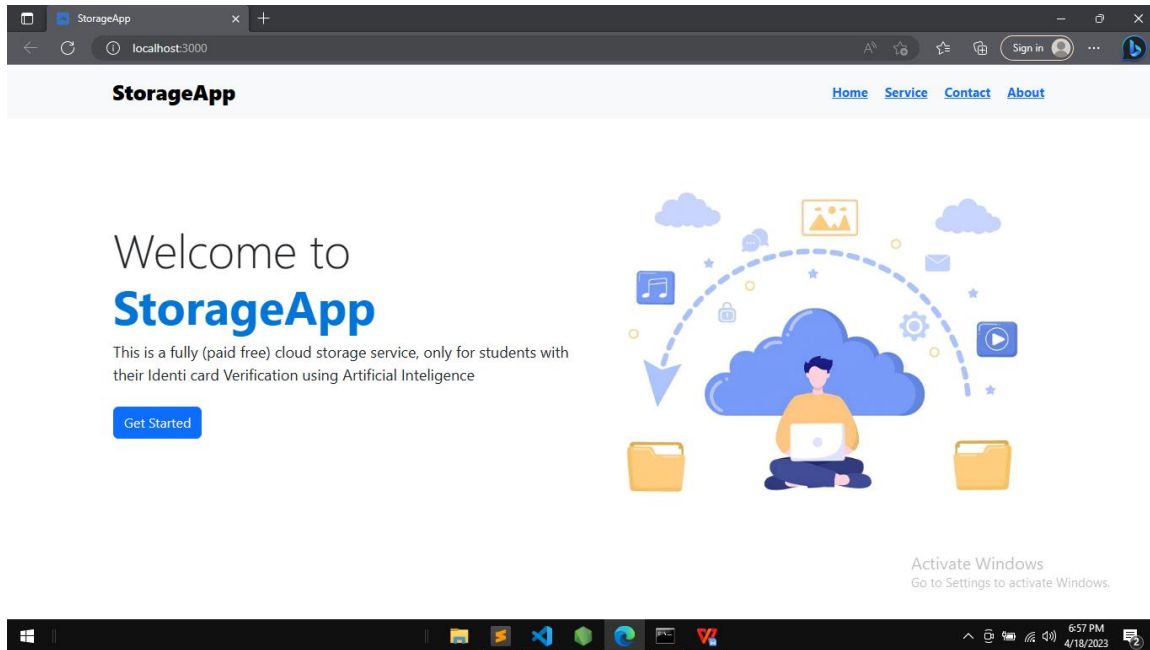


## **APPENDIX**

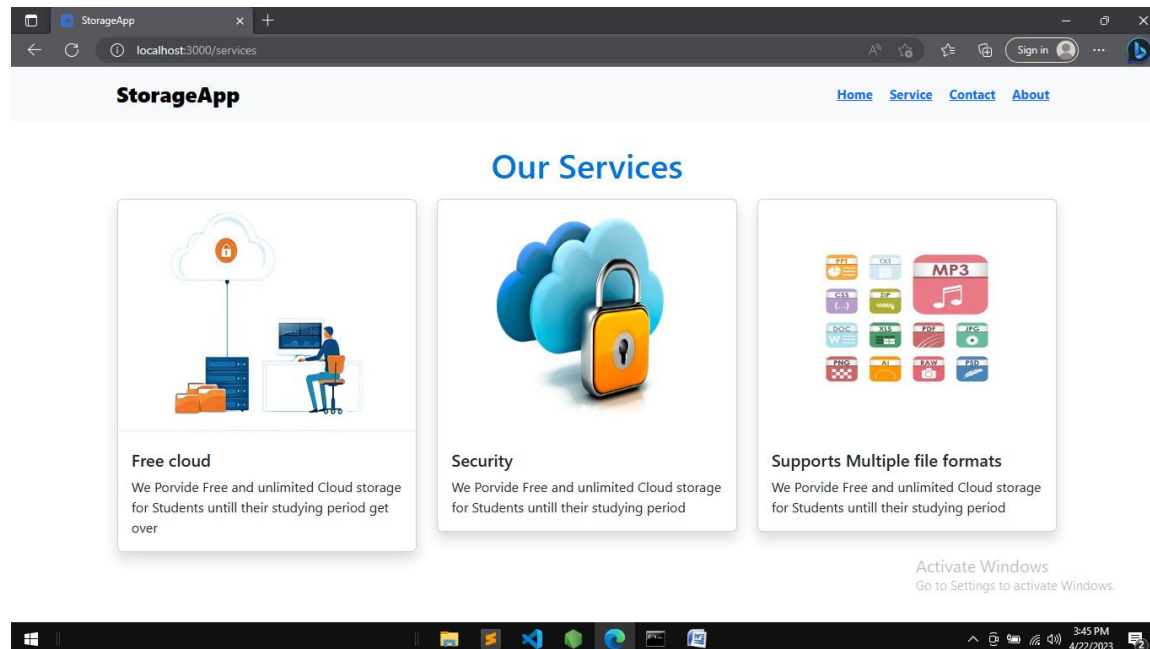
# APPENDIX

## SCREENSHOTS

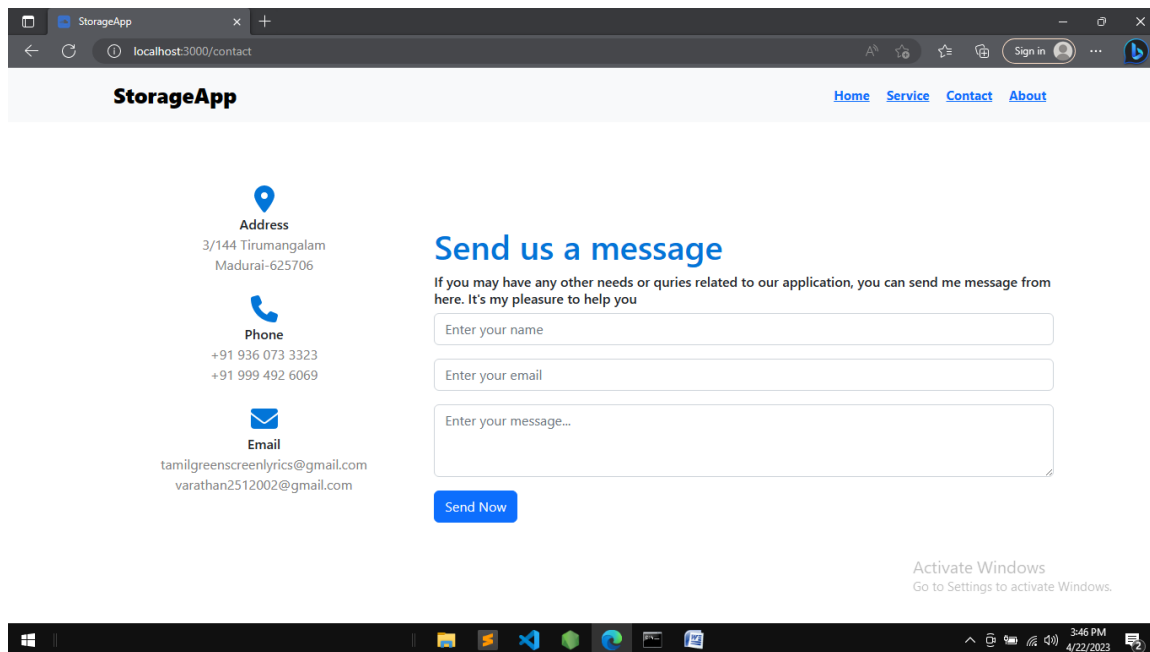
### HOME PAGE



### SERVICE PAGE

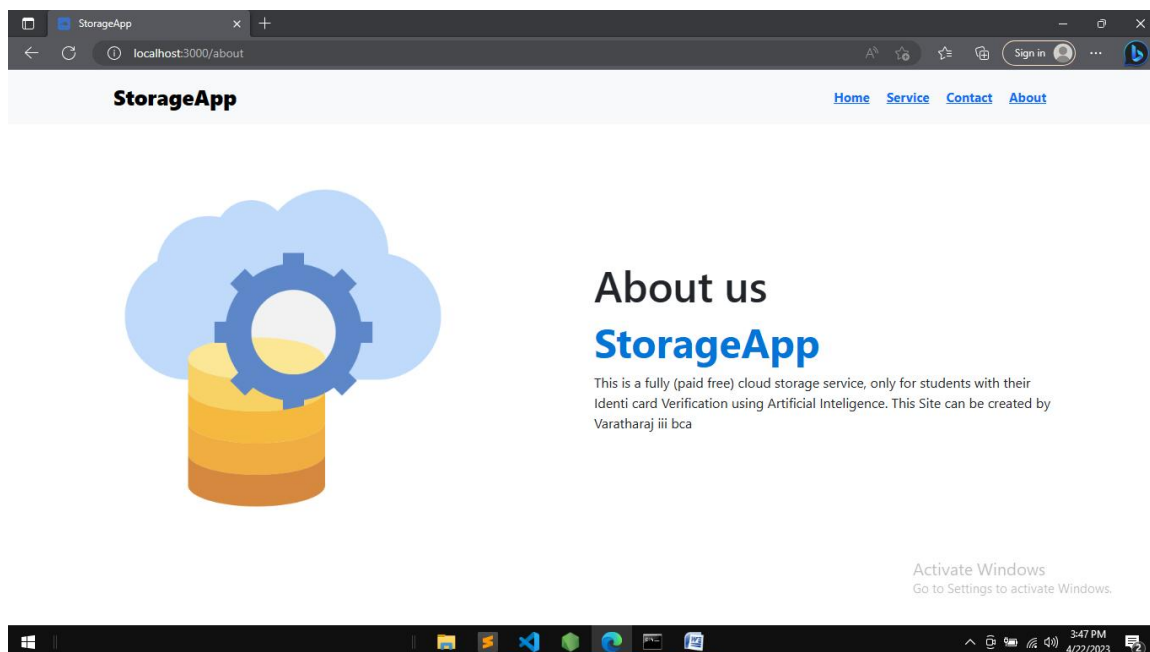


## CONTACT PAGE

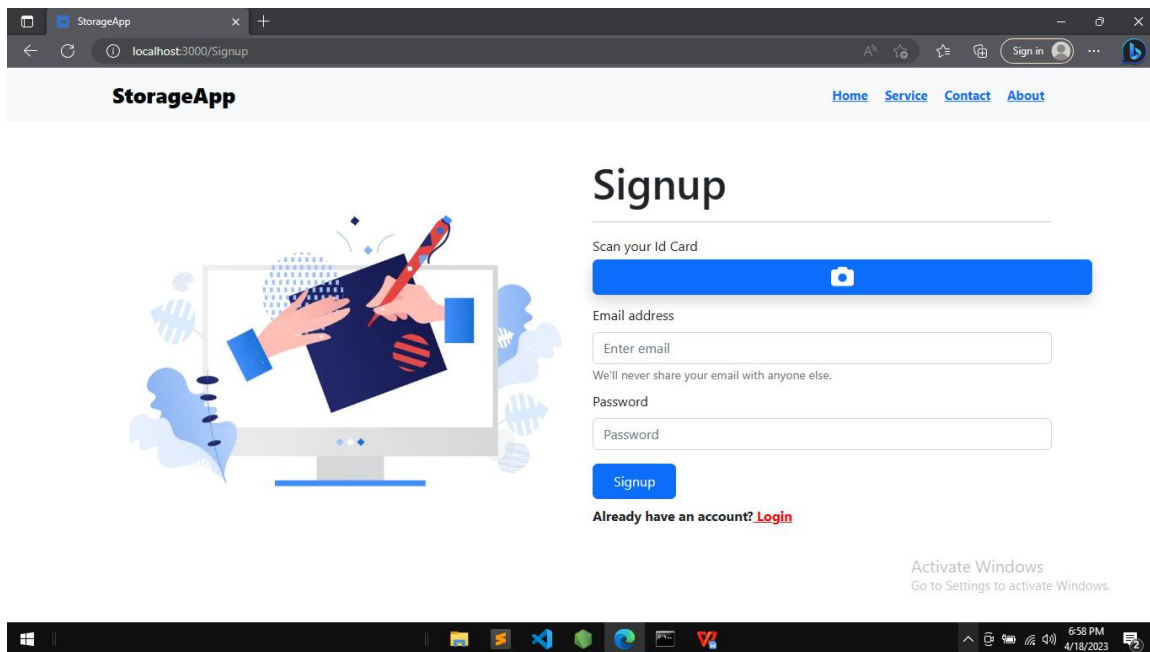


The screenshot shows a web browser window with the URL `localhost:3000/contact`. The page has a header with the **StorageApp** logo and navigation links: [Home](#), [Service](#), [Contact](#), and [About](#). On the left, contact information is displayed with icons: a location pin for **Address** (3/144 Tirumangalam, Madurai-625706), a phone for **Phone** (+91 936 073 3323, +91 999 492 6069), and an envelope for **Email** (tamilgreenscreenlyrics@gmail.com, varathan2512002@gmail.com). The main content area is titled **Send us a message** and includes a sub-header: "If you may have any other needs or queries related to our application, you can send me message from here. It's my pleasure to help you". Below this are three input fields: "Enter your name", "Enter your email", and "Enter your message...". A blue **Send Now** button is at the bottom of the form. An "Activate Windows" watermark is visible in the bottom right corner of the page content.

## ABOUT PAGE



## SIGN UP PAGE



The screenshot shows a web browser window with the address bar displaying 'localhost:3000/Signup'. The page has a header with the 'StorageApp' logo and navigation links for 'Home', 'Service', 'Contact', and 'About'. The main content area features an illustration of a hand holding a pen and writing on a tablet, with a computer monitor in the background. To the right of the illustration is the 'Signup' form. The form includes a 'Scan your Id Card' section with a blue button containing a camera icon. Below this is an 'Email address' section with a text input field labeled 'Enter email' and a note: 'We'll never share your email with anyone else.' The 'Password' section has a text input field labeled 'Password'. At the bottom of the form is a blue 'Signup' button. Below the button is a link: 'Already have an account? [Login](#)'. In the bottom right corner, there is a Windows activation watermark that says 'Activate Windows Go to Settings to activate Windows.'

StorageApp

Home Service Contact About

### Signup

Scan your Id Card

Email address

Enter email

We'll never share your email with anyone else.

Password

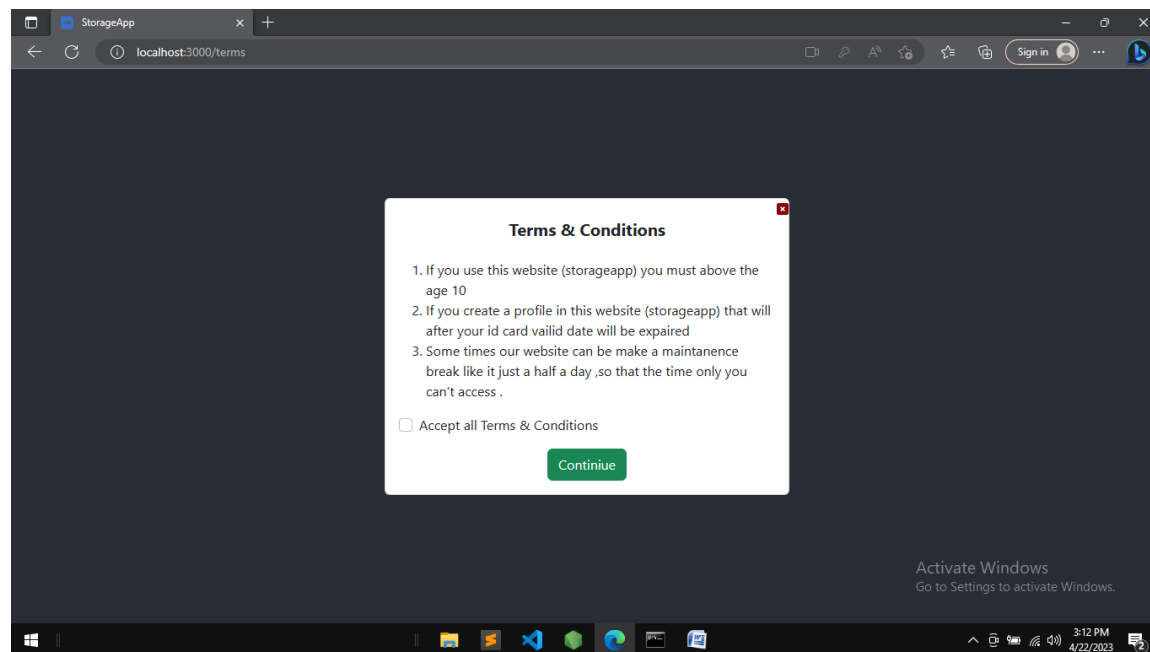
Password

Signup

Already have an account? [Login](#)

Activate Windows  
Go to Settings to activate Windows.

## TERMS AND CONDITION



The screenshot shows a web browser window with the address bar displaying 'localhost:3000/terms'. The page is dark-themed. A white modal dialog box is centered on the screen, titled 'Terms & Conditions'. The dialog contains three numbered terms: 1. 'If you use this website (storageapp) you must above the age 10', 2. 'If you create a profile in this website (storageapp) that will after your id card vailid date will be expired', and 3. 'Some times our website can be make a maintenance break like it just a half a day ,so that the time only you can't access .'. Below the terms is a checkbox labeled 'Accept all Terms & Conditions'. At the bottom of the dialog is a green 'Continue' button. In the bottom right corner of the browser window, there is a Windows activation watermark that says 'Activate Windows Go to Settings to activate Windows.'

StorageApp

localhost:3000/terms

Sign in

### Terms & Conditions

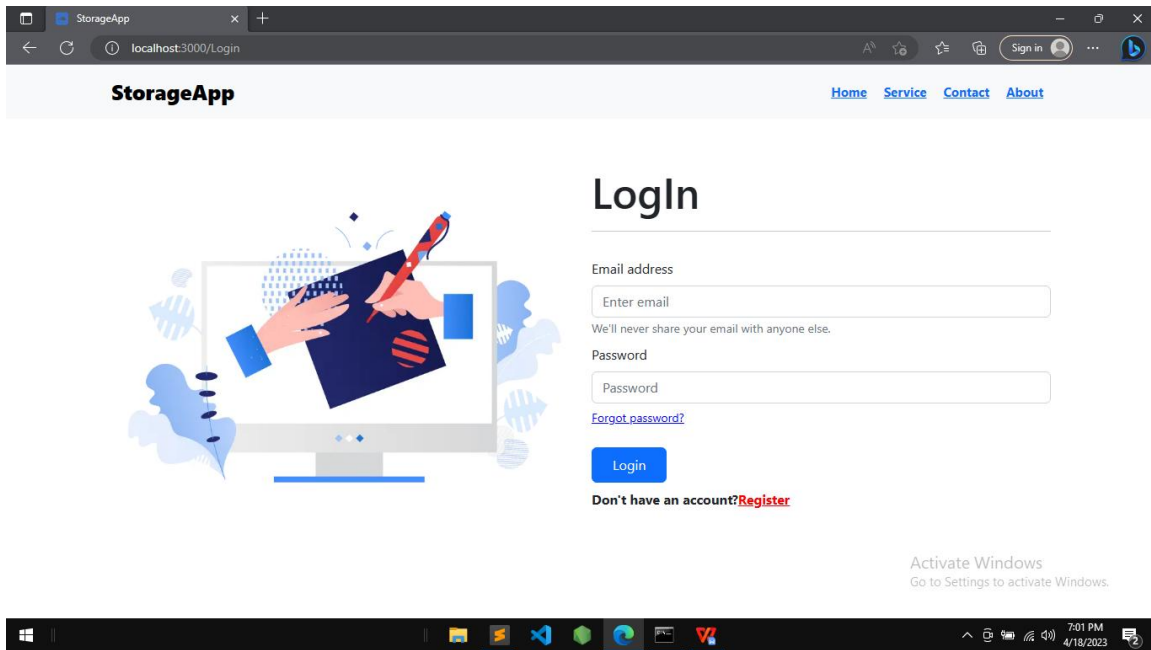
1. If you use this website (storageapp) you must above the age 10
2. If you create a profile in this website (storageapp) that will after your id card vailid date will be expired
3. Some times our website can be make a maintenance break like it just a half a day ,so that the time only you can't access .

☐ Accept all Terms & Conditions

Continue

Activate Windows  
Go to Settings to activate Windows.

## LOG IN PAGE



The screenshot shows a web browser window with the title "StorageApp". The address bar displays "localhost:3000/Login". The page has a header with the "StorageApp" logo and navigation links: "Home", "Service", "Contact", and "About". The main content area features a large illustration of a hand pointing at a computer screen with a red pen. To the right of the illustration is the "Login" section, which includes a form with two input fields: "Email address" (placeholder: "Enter email") and "Password" (placeholder: "Password"). Below the password field is a link for "Forgot password?". A blue "Login" button is positioned below the form. At the bottom of the login section, there is a link that says "Don't have an account? Register". The Windows taskbar at the bottom shows the time as 7:01 PM on 4/18/2023.

StorageApp

Home Service Contact About

### Login

Email address

We'll never share your email with anyone else.

Password

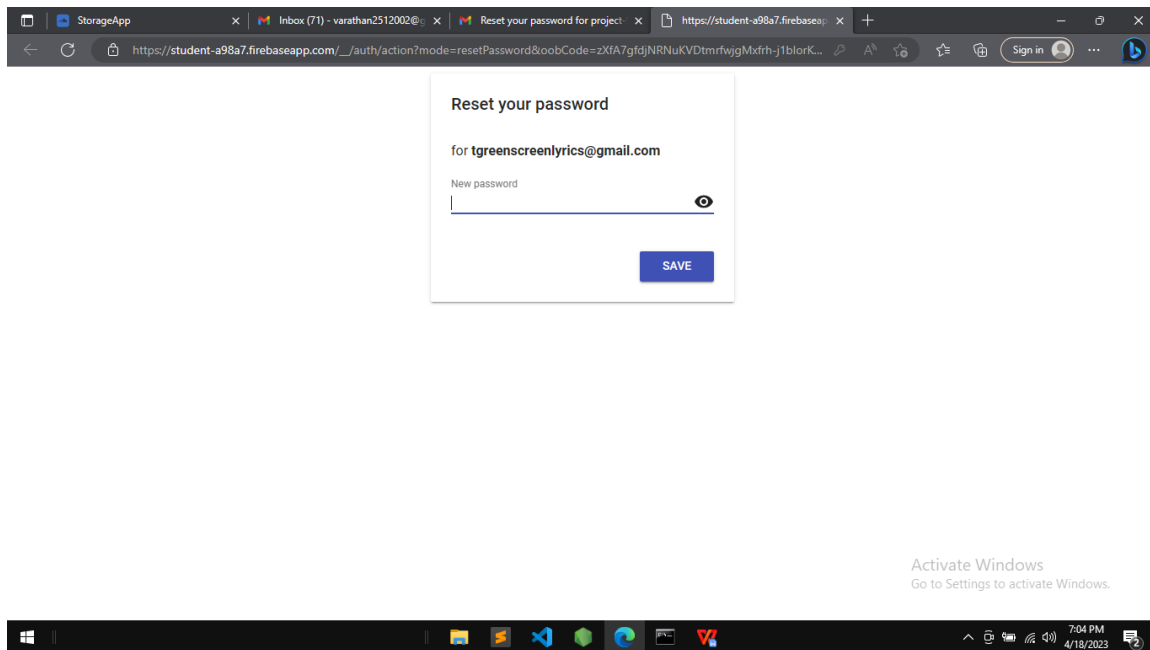
[Forgot password?](#)

Login

Don't have an account? [Register](#)

Activate Windows  
Go to Settings to activate Windows.

## PASSWORD RESET PAGE



The screenshot shows a web browser window with multiple tabs. The active tab is titled "Reset your password for project..." and the address bar shows a URL from "https://student-a98a7.firebaseio.com". The main content area displays a "Reset your password" form. The form includes the text "for tgreenscreenlyrics@gmail.com" and a "New password" input field with a toggle icon. A blue "SAVE" button is located at the bottom of the form. The Windows taskbar at the bottom shows the time as 7:04 PM on 4/18/2023.

Reset your password

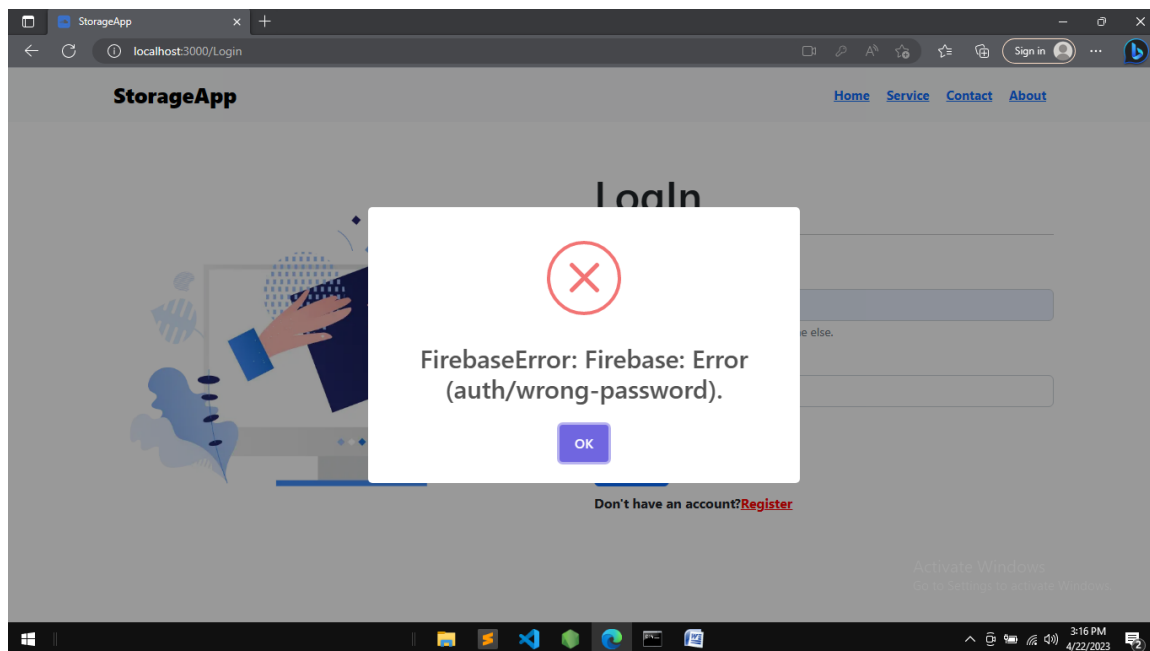
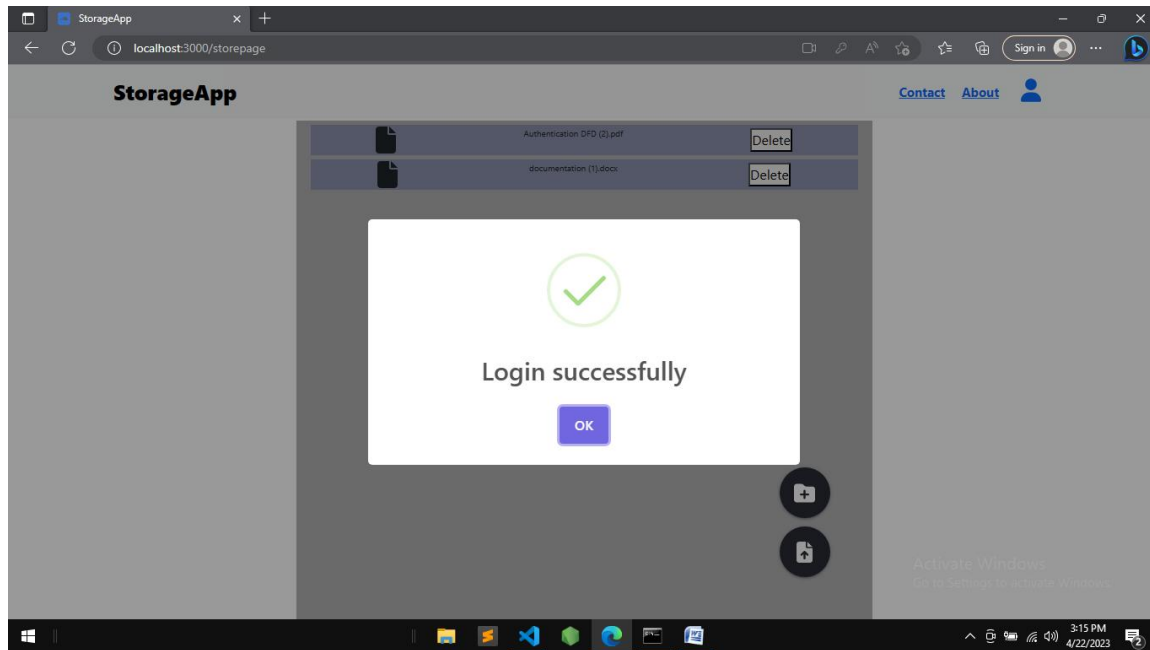
for tgreenscreenlyrics@gmail.com

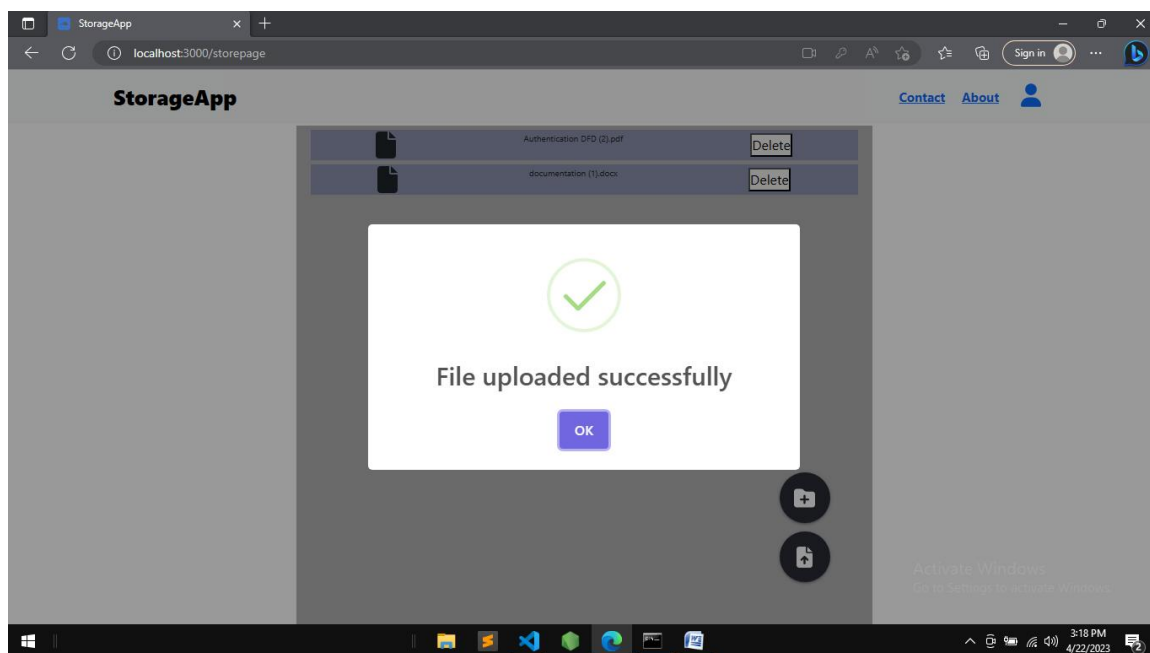
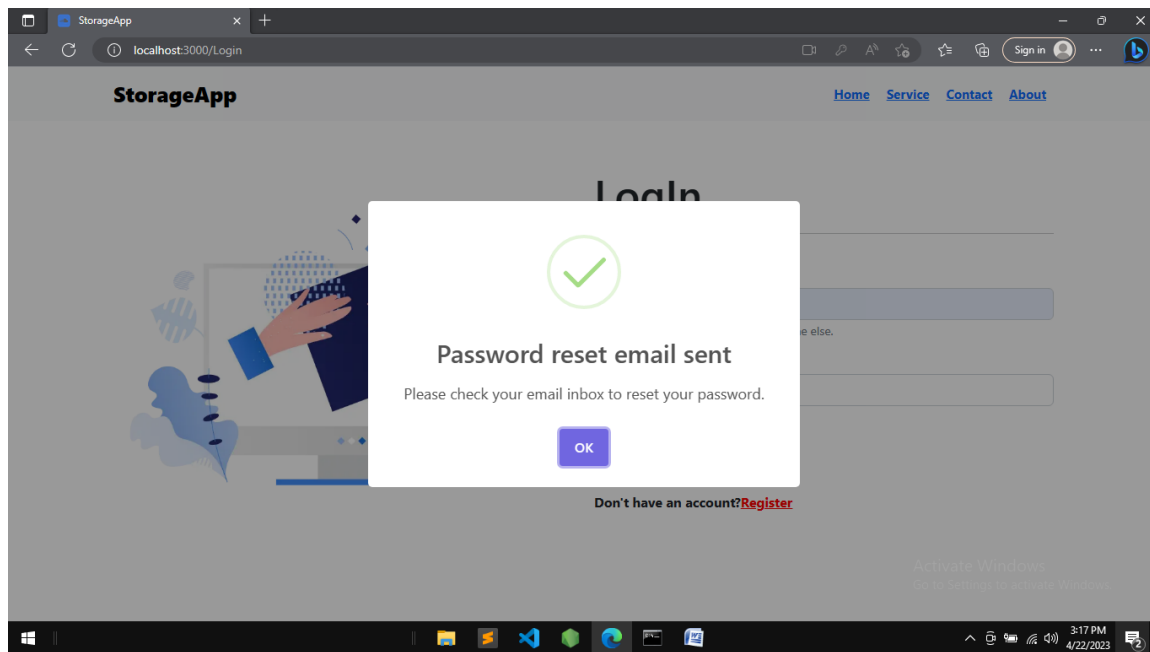
New password

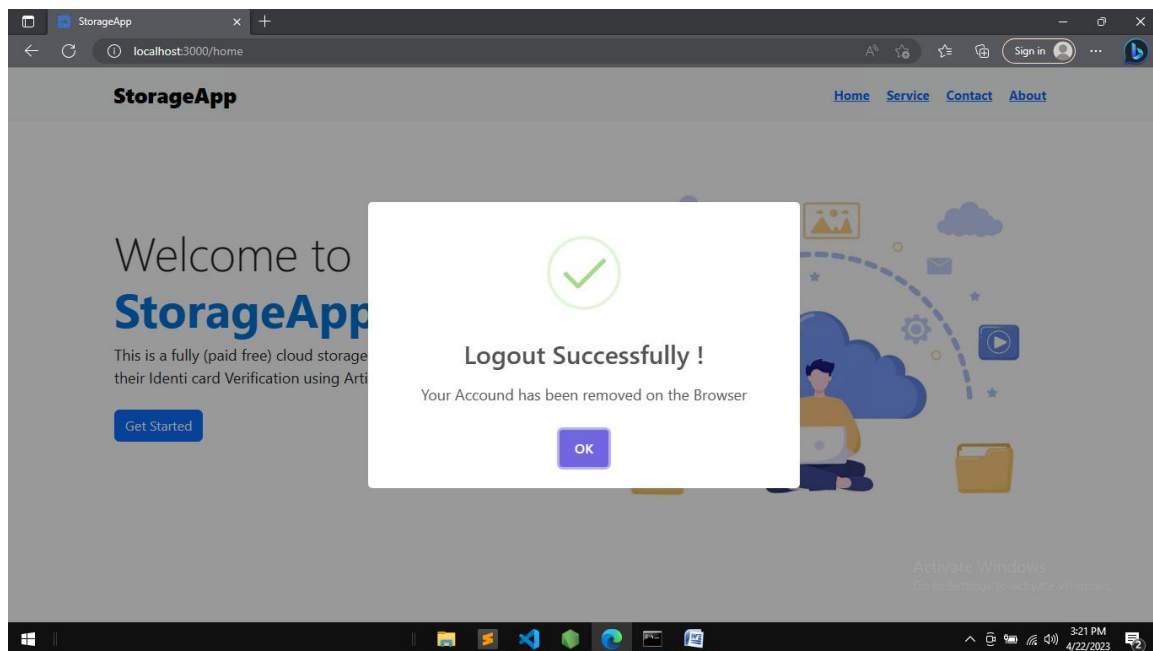
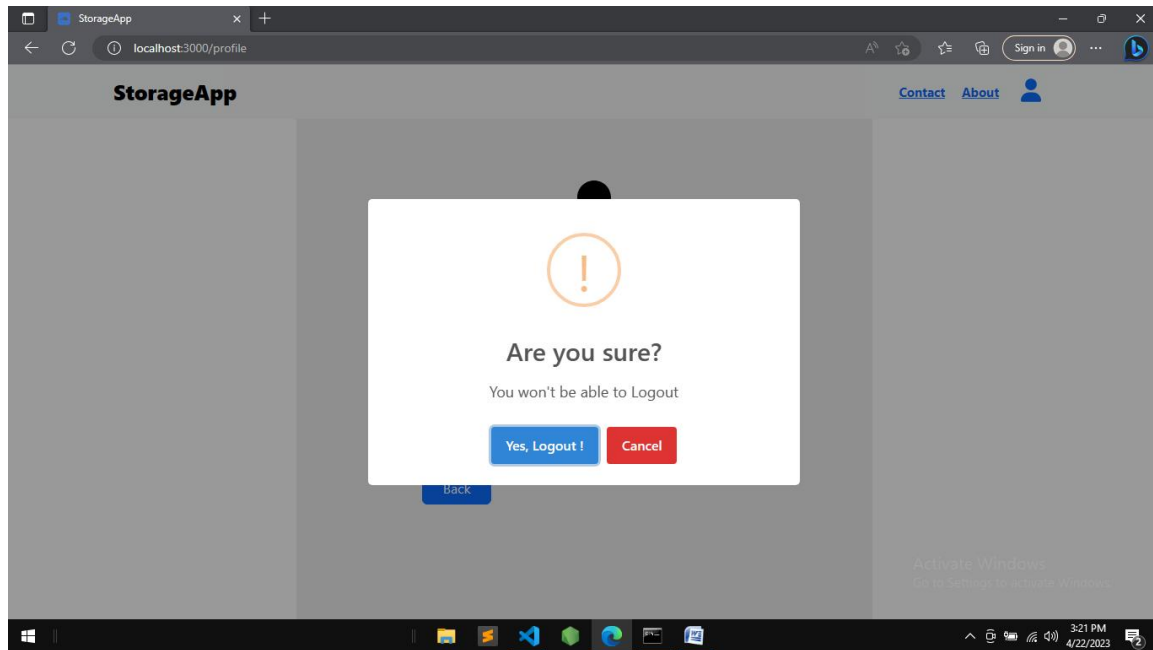
SAVE

Activate Windows  
Go to Settings to activate Windows.

## ALERTS

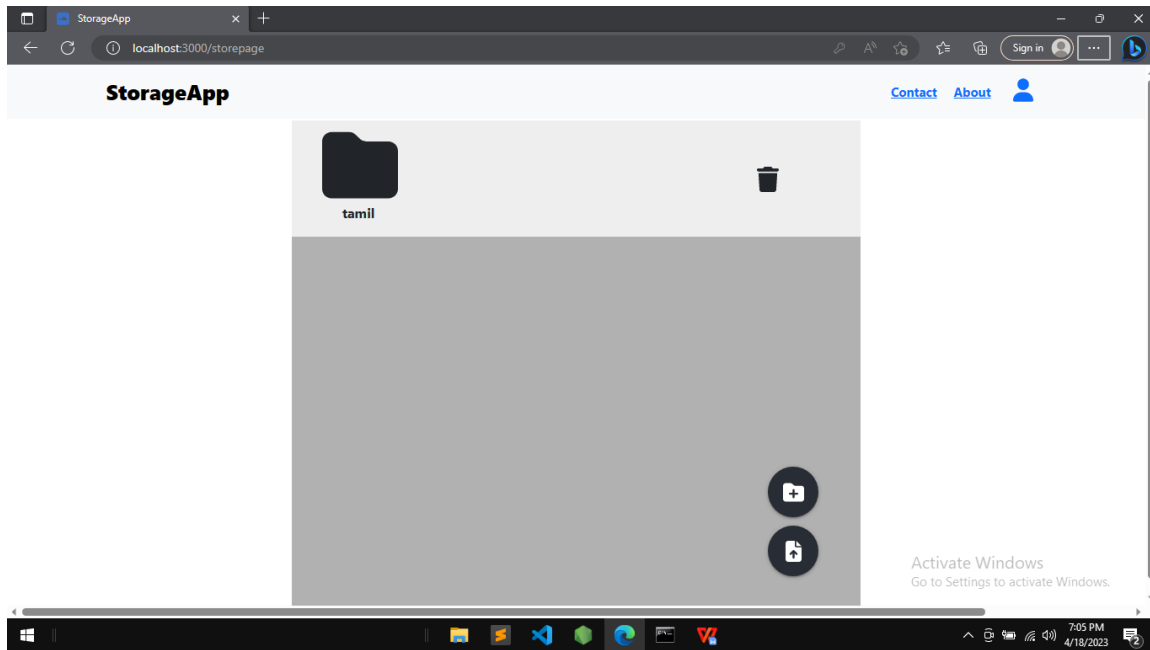




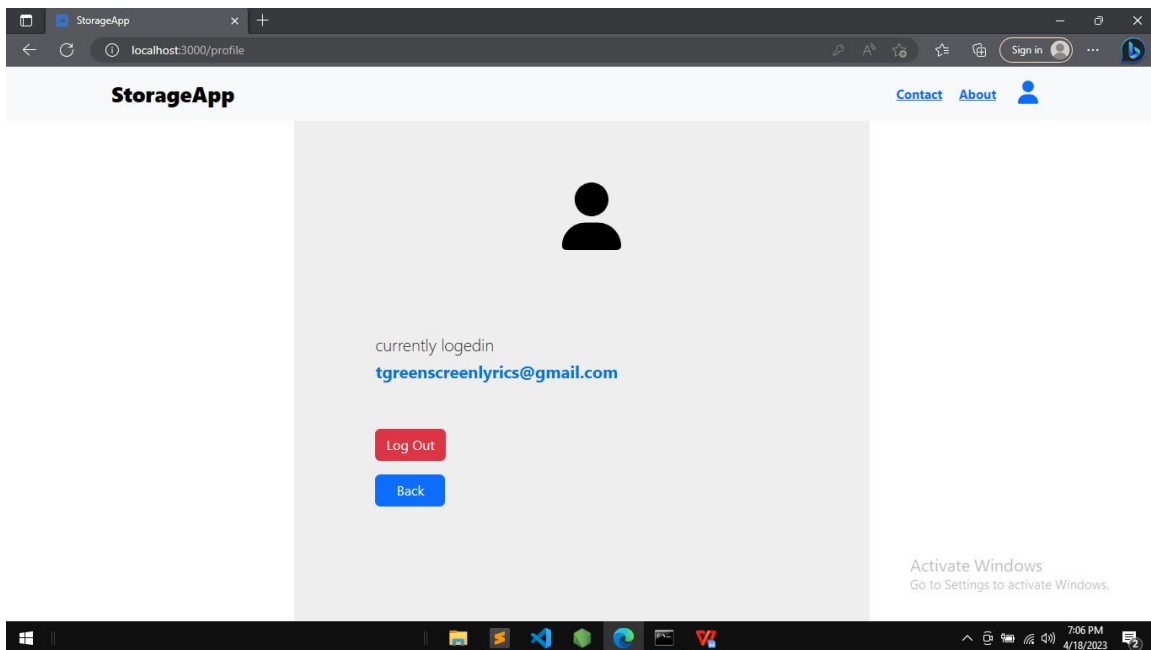




## STORAGE PAGE



## PROFILE PAGE



## **FUTURE ENHANCEMENT**

## **FUTURE ENHANCEMENT**

In the future, one potential enhancement for the "Students Only Accessible Cloud Storage with AI Authentication" project could be the integration of Google Ads service with advanced filtering capabilities to ensure that the ads displayed on the platform are non-abuse able. The filtering process would use advanced machine learning algorithms and user feedback to identify and remove any ads that are potentially abusive or offensive.

By incorporating this feature, the platform could not only generate additional revenue streams but also maintain a safe and secure environment for its users. The advanced filtering capabilities would ensure that the platform only displays high-quality, relevant ads that are appropriate for the target audience. This would help to establish the platform as a trustworthy and reliable source of information for students.

To implement this enhancement, the platform could use Google's Ad Sense program, which offers a wide range of filtering options to ensure that the ads displayed on the platform meet certain criteria. The platform could also use its AI authentication system to monitor user behavior and feedback, allowing it to identify any potentially abusive or inappropriate ads and remove them in real-time.

Overall, the integration of Google Ads service with advanced filtering capabilities would provide a win-win situation for both the platform and its users. Students would benefit from a safer and more secure platform, while the platform could generate additional revenue and maintain its reputation as a trusted source of information for students.

## **CONCLUSION**

## CONCLUSION

In conclusion, the development of a student-only accessible cloud storage system using AI authentication on identity card scanning, with React JS as the front end and Firebase as the backend, is an innovative and efficient solution to the challenges faced by educational institutions and students alike.

By implementing AI authentication on identity card scanning, the system ensures that only authorized users can access the cloud storage, thus increasing the overall security of the system. Furthermore, the use of Firebase as the backend ensures that the system is reliable, scalable, and easily integrated with other Firebase services.

The use of React JS as the front end of the system allows for an intuitive user interface that is both user-friendly and visually appealing. React JS also provides the ability to create reusable components, making it easier to maintain and develop the system in the future.

The student-only accessible cloud storage system offers numerous benefits, including improved data management, increased data security, and easy accessibility to academic materials. The system also provides a centralized platform for collaboration and file sharing between students and teachers, improving overall productivity and collaboration.

Overall, the student-only accessible cloud storage system using AI authentication on identity card scanning, with React JS as the front end and Firebase as the backend, offers a unique and efficient solution to the challenges faced by educational institutions and students. It is a significant contribution to the field of education technology and has the potential to transform the way student's access and share academic materials.

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# **BIBLIOGRAPHY**

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2. <https://www.codecademy.com/learn/react-101>
3. <https://reacttraining.com/online/>
4. <https://firebase.google.com/docs/>
5. [https://www.youtube.com/channel/UCP4bf6IHJJQehibu6ai\\_\\_cg](https://www.youtube.com/channel/UCP4bf6IHJJQehibu6ai__cg)
6. <https://www.udemy.com/course/firebase-course/>