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|  | **SRI KRISHNA COLLEGE OF TECHNOLOGY**  **An Autonomous Institution | Accredited by NAAC with 'A' Grade**  **Affiliated to Anna University | Approved by AICTE**  **KOVAIPUDUR, COIMBATORE 641042** |  |

#### AGRITECH

**ADVANCED APPLICATION**

**A PROJECT REPORT**

***Submitted by***

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***in partial fulfilment for the award of the degree***

Of

#### BACHELOR OF TECHNOLOGY

**IN**

**INFORMATION TECHNOLOGY**

**MARCH- 2024**

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**BONAFIED CERTIFICATE**

Certified that this project report “**AGRITECH**” is the Bonafide work of “**KARTHICK V, KABILAN V, JEYAMUTHU G”** who carried out the project work under my supervision.

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| --- | --- | --- |
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Certified that the candidates were examined by us in the Project Work viva- voice examination held on ............................... at Sri Krishna College of Technology, Kovaipudur, Coimbatore -641 042.

**INTERNAL EXAMINER EXTERNAL EXAMINER**

**ACKNOWLEDGEMENT**

Dedicating this project to the **ALMIGHTY GOD** whose abundant grace and mercies enabled its successful completion.

We extend our deep gratitude to our beloved Principal, **Dr.M.G.Sumithra,** for her kindness and unwavering support throughout the project work.

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We are thankful to all those who have directly and indirectly extended their help to us in completing this project work successfully.

.

**ABSTRACT**

The AgriLoan Platform is a cutting-edge digital solution designed to revolutionize agricultural finance, addressing the unique challenges faced by farmers and lenders alike. With a user-friendly interface and robust functionality, this platform streamlines the lending process, promotes financial inclusion, and fosters sustainable agricultural practices.At its core, the AgriLoan Platform offers a comprehensive loan management system, enabling farmers to easily apply for loans, submit documentation, and track the status of their applications in real-time. Leveraging advanced analytics and data-driven insights, lenders can assess creditworthiness, manage risk, and tailor loan products to meet the diverse needs of agricultural borrowers. Furthermore, the AgriLoan Platform integrates features to support sustainable agriculture, including tools for monitoring crop performance, assessing environmental impact, and promoting responsible land management practices. By incentivizing investments in eco-friendly technologies and practices, the platform contributes to long-term agricultural resilience and environmental sustainability. To ensure security and compliance, the AgriLoan Platform incorporates robust encryption protocols and adherence to regulatory standards. This ensures the protection of sensitive financial information and cultivates trust among users and stakeholders.

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**LIST OF ABBREVIATIONS**

|  |  |
| --- | --- |
| **ABBREVIATIVE** | **ABBERVIATION** |
| JS | JavaScript |
| HTML | Hypertext Markup Language |
| CSS | Cascading Style Sheet |
| Info | Information |
| DOB | Date of Birth |
| API | Application Programming Interface |
| JSON | JavaScript Object Notation |

**CHAPTER 1**

**INTRODUCTION**

"AgriTech Finance Pro" is a pioneering digital solution tailored to cater to the evolving landscape of agricultural finance, aligning seamlessly with the innovative practices and technologies driving the agritech revolution. From aspiring agripreneurs to established agricultural enterprises, AgriTech Finance Pro offers a suite of features and tools designed to streamline and enhance the agricultural financing journey in an era of technological advancement.

At its core, AgriTech Finance Pro harnesses the power of agritech to revolutionize agricultural financing, offering a dynamic platform that integrates cutting-edge technologies with financial expertise. Leveraging advanced analytics, machine learning algorithms, and big data, AgriTech Finance Pro provides users with actionable insights and predictive analytics to optimize financial decision-making and enhance operational efficiency.

Central to AgriTech Finance Pro is its comprehensive financial management module, empowering users to access a wide range of financial services tailored to their agricultural needs. Whether it's securing loans, managing investments, or navigating insurance options, AgriTech Finance Pro offers personalized financial solutions designed to support agricultural growth and resilience.

In addition to traditional financial services, AgriTech Finance Pro incorporates innovative features to promote sustainable agricultural practices and technological adoption. From incentivizing investments in precision agriculture technologies to facilitating access to climate-smart financing solutions, AgriTech Finance Pro encourages users to embrace cutting-edge agritech innovations for enhanced productivity, sustainability, and resilience.

Furthermore, AgriTech Finance Pro serves as a knowledge hub for agricultural best practices and technological advancements. Through its interactive learning modules, users can access expert guidance on agritech adoption, digital literacy, and sustainable farming techniques, empowering them to stay informed and ahead of the curve in an ever-changing agricultural landscape.

Recognizing the importance of timely and informed decision-making in agriculture, AgriTech Finance Pro offers proactive alerts and notifications for key financial milestones, market trends, and agritech opportunities. Whether it's optimizing planting schedules, managing cash flows, or seizing investment opportunities, AgriTech Finance Pro ensures that users are equipped with the information they need to thrive in today's dynamic agricultural ecosystem.

* 1. **PROBLEM STATEMENT**

The objective is to develop a frontend web application for AgriLoan that facilitates agricultural loan management, allowing administrators to add new loan products, users to view and apply for loans, and administrators to approve loan applications.

* 1. **OVERVIEW**

AgriLoan is a cutting-edge platform revolutionizing agricultural financing processes, serving as a vital bridge between farmers and financial institutions. With its intuitive interface and robust functionality, AgriLoan simplifies loan management for administrators while providing borrowers with seamless access to financial solutions tailored to their agricultural needs. Through AgriLoan, administrators can effortlessly create and customize loan products, defining parameters such as loan amounts, interest rates, and eligibility criteria. Meanwhile, borrowers benefit from a user-friendly interface that guides them through the loan application process, allowing them to submit applications and track their status with ease.

AgriLoan's structured loan approval workflow ensures efficient processing, with administrators receiving timely notifications and facilitating transparent communication between all parties involved. With a strong focus on security, compliance, and scalability, AgriLoan sets a new standard for agricultural financing, empowering farmers and agricultural enterprises to thrive in today's dynamic financial landscape.

* 1. **OBJECTIVE**

AgriLoan stands at the forefront of agricultural finance, revolutionizing the way farmers access vital financial resources and navigate the lending process. With a focus on modernization and efficiency, AgriLoan provides a streamlined platform that connects farmers with financial institutions, facilitating seamless loan management and fostering economic growth within the agricultural sector.

At the core of AgriLoan's mission is the commitment to providing farmers with quicker access to essential financial resources. Through its intuitive platform, farmers can easily submit loan applications and track their progress in real-time. This streamlined process reduces administrative burden and turnaround time, empowering farmers with the resources they need to sustain and grow their operations.

Transparency and user-friendliness are fundamental principles guiding AgriLoan's approach. The platform ensures clear communication between borrowers and lenders, offering visibility into the status of loan applications and facilitating seamless interactions throughout the lending process. This transparency builds trust and confidence among users, fostering a collaborative and supportive lending environment.

AgriLoan recognizes that agricultural financing is not one-size-fits-all. Therefore, the platform offers tailored financial solutions designed to meet the unique needs and circumstances of individual borrowers. Whether farmers require short-term operating loans, long-term investment capital, or specialized financing for equipment or infrastructure, AgriLoan provides flexible options to suit diverse agricultural endeavors.

**CHAPTER 2**

**SYSTEM ARCHITECTURE**

The Agritech system follows a modern and scalable three-tier architecture. It consists of the frontend layer, backend layer, and the database layer. Each layer plays a crucial role in the system's overall functionality and ensures smooth communication and data management.

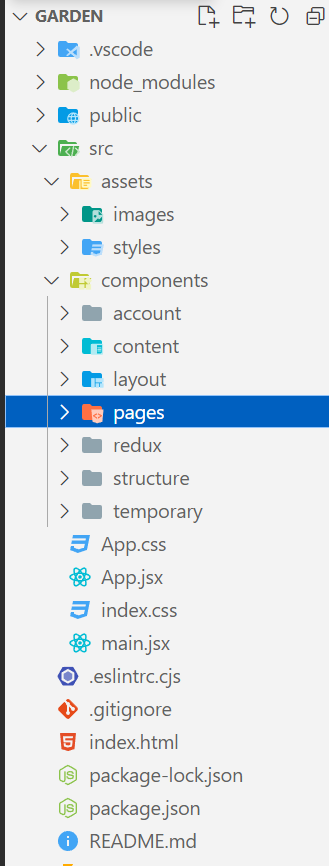
**2.1 FRONTEND**

The frontend layer is developed using React, a popular JavaScript library for building user interfaces. React enables the creation of interactive and responsive components, making it easier for users to navigate through the Plant Garden system. The frontend communicates with the backend through API calls to perform various operations such as fetching plant data, updating plant details, and handling user authentication.

**2.2 REACT**

React is a popular JavaScript library for building user interfaces. It follows a component-based architecture, where the UI is divided into reusable and independent components. React allows developers to create dynamic and interactive UI elements efficiently.

1. **Components:** The frontend of the PerfectGarden system consists of various components that are responsible for different functionalities and visual elements. Examples of components include:
2. **Plant List Component:** Displays a list of plants with their details, such as title, author, and category.
3. **Plant Detail Component:** Shows detailed information about a specific plant, including its cover image, description, and rating.
4. **Search Component:** Provides a search bar where users can search for plants based on specific criteria.
5. **Form Components:** Allow users to add, update, or delete plants from the library by filling out forms.

****

**Fig 2.1 VS Code**

Figure 2.1 explains Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Simple React Snippets is a simple, yet extremely useful VS Code extension for React developers.

**HTML/CSS:**

HTML is used to structure the content of the web pages, while CSS is employed for styling and formatting the visual elements. HTML tags define the structure of the page, such as headings, paragraphs, and lists, while CSS rules specify the appearance, layout, and color schemes.

**JavaScript:**

JavaScript adds interactivity and dynamic behavior to the frontend. It is used to handle user actions and update the UI accordingly. JavaScript also facilitates data retrieval from the backend through API requests.

**Axios:**

Axios is a popular JavaScript library used for making HTTP requests from the browser. It is utilized in the frontend of the Open Library system to communicate with the backend API and retrieve data from the server. For example, when a user searches for a book or adds a new book, Axios is used to send the relevant data to the server and receive the corresponding response.

**State Management:**

React incorporates a state management mechanism that allows components to store and manage their internal state. This enables dynamic rendering of UI elements based on changes in data or user interactions. State management libraries like Redux or React Context API may be used to manage application-wide state and facilitate data flow between components.

**Responsive Design:**

The frontend of the Open Library system is designed to be responsive, meaning it adapts and scales seamlessly across different devices and screen sizes. This ensures that users can access and interact with the application from various devices, such as desktops, tablets, or smartphones.

**CHAPTER 3**

**LITERATURE SURVEY**

**3.1 Related Works**

[1] The Role of Agricultural Finance in Rural Development" by A. G. Bello and E. S. Odunuga (2019):

This paper explores the significance of agricultural finance in driving rural development. It discusses the challenges faced by farmers in accessing financial services and emphasizes the importance of innovative solutions such as digital platforms like AgriLoan in improving financial inclusion and promoting sustainable agricultural practices.

[2] "Digital Transformation in Agricultural Finance: A Review" by K. S. Rajashekarappa and A. P. Balakrishna (2020):

This review article examines the digital transformation in agricultural finance, focusing on the emergence of online platforms and mobile applications. It discusses the potential of these digital tools in enhancing efficiency, transparency, and accessibility in agricultural lending, citing examples like AgriLoan as promising innovations in the field.

[3] "Innovations in Agricultural Finance: A Review of Recent Trends and Developments" by M. K. Osei and C. A. Boadi (2021):

This review provides insights into recent trends and innovations in agricultural finance. It discusses the role of technology in revolutionizing lending practices and highlights the importance of platforms like AgriLoan in providing tailored financial solutions to farmers. The paper also examines challenges and opportunities in the adoption of digital agricultural finance solutions.

[4] "The Impact of Digital Platforms on Agricultural Finance: Evidence from Developing Countries" by N. A. Onuoha and O. O. Adekunle (2020):

This study investigates the impact of digital platforms on agricultural finance in developing countries. It assesses the effectiveness of platforms like AgriLoan in improving access to credit, enhancing financial literacy, and promoting agricultural productivity. The paper offers valuable insights into the potential of digital solutions in transforming agricultural finance landscapes.

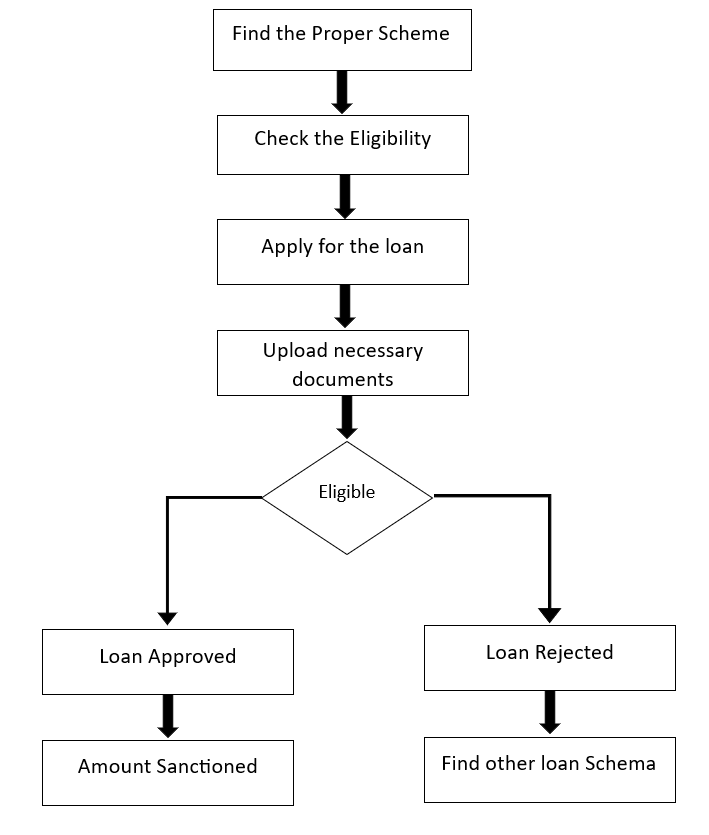
[5]"Promoting Sustainable Agriculture through Innovative Financing Mechanisms" by L. T. Awoyemi and O. M. Olomola (2018):

This paper explores innovative financing mechanisms for promoting sustainable agriculture. It discusses the role of digital platforms in incentivizing investments in sustainable farming practices and improving access to finance for smallholder farmers. The study highlights platforms like AgriLoan as catalysts for driving sustainability in agricultural finance.

**CHAPTER 4**

**FUNCTIONALITY**

PerfectGarden offers a wide range of functionality to make gardening more accessible, enjoyable, and successful for users of all levels



**Fig 4.1 Flow chart**

**4.1 LOGIN**

A login page is a crucial component of any website or application that requires user authentication. Its primary purpose is to verify the user's identity and grant access to restricted content or features. The login page typically includes fields for the user to enter their username/email and password.

**4.2 REGISTER**

A register page, also known as a sign-up page, is an essential component of websites or applications that require user registration. Its primary purpose is to collect user information and create a new account for accessing the platform.

The register page typically includes fields for users to enter their personal details, such as username, email address, password, and any additional required information. Users may also be asked to confirm their password to ensure accuracy.

**4.3 MANAGE LOANS**

AgriLoan simplifies loan management for administrators, offering a user-friendly interface to oversee the lending process efficiently. The platform enables administrators to add and customize loan products, review applications, and facilitate transparent communication with borrowers. With streamlined workflows and real-time notifications, AgriLoan ensures prompt processing and clear visibility into the status of loan applications. Additionally, robust security measures protect sensitive financial data, instilling trust and confidence in the integrity of the system. AgriLoan empowers administrators to tailor financial solutions, driving economic growth and resilience within the agricultural sector with its seamless and transparent loan management capabilities.

**4.4 ADD LOANS**

To add loans in AgriLoan, administrators navigate to the loan management section in the admin dashboard. Here, they input details such as loan amount, interest rates, and repayment terms, customizing parameters to suit specific agricultural financing needs. After ensuring accuracy, administrators save and publish the loan product, making it accessible to borrowers.

AgriLoan's intuitive interface streamlines the process, facilitating efficient loan management and transparent communication between administrators and borrowers. This seamless addition of loans enhances financial accessibility and supports the growth and sustainability of agricultural endeavors within the platform's ecosystem.

**4.5 UPDATE LOANS**

In AgriLoan, updating loan details is a straightforward process designed to ensure administrators can easily modify loan products as needed. To update a loan, administrators access the loan management section in the admin dashboard, where they can locate the specific loan product requiring updates. Within the loan details interface, administrators can make necessary modifications, such as adjusting loan amounts, interest rates, repayment terms, or eligibility criteria.

After ensuring the accuracy of the changes, administrators save the updates, and the modified loan product is automatically reflected in the system. This seamless process empowers administrators to adapt loan offerings efficiently, ensuring they remain aligned with the evolving needs of borrowers and the agricultural sector.

**4.6 REMOVE LOANS**

To remove loans from AgriLoan, administrators access the loan management section in the admin dashboard. They locate the specific loan product to remove and initiate the removal process by selecting the "Remove Loan" or "Delete Loan" option. After confirming the removal, the selected loan product is permanently deleted from the platform, along with any associated data. Administrators then verify the removal to ensure its success.

This streamlined process allows administrators to efficiently manage loan offerings, ensuring that outdated or irrelevant loans are removed from the platform to maintain accuracy and relevance. Removing loans when necessary helps optimize the platform's functionality and ensures that borrowers have access to the most up-to-date and relevant financial products tailored to their agricultural needs.

**4.7 MANAGE USER**

Managing user accounts is pivotal for maintaining security and facilitating a seamless borrowing experience. Administrators possess the authority to create, modify, and remove user accounts as required, ensuring the platform's integrity.

Stringent security measures are implemented to safeguard user data, preserving confidentiality and trust.Furthermore, AgriLoan provides personalized user profiles, empowering borrowers to customize their preferences and access their loan history effortlessly. This level of account management grants users autonomy over their AgriLoan experience, fostering a tailored and user-centric journey in agricultural financing.

**4.8 APPLY LOAN**

To apply for a loan on AgriLoan, borrowers begin by accessing the platform's loan application section. Here, they complete a form with personal details, loan amount requested, purpose of the loan, and any necessary documentation. After reviewing the information for accuracy, borrowers submit the application through the platform.

AgriLoan administrators then review the application, assessing its eligibility based on the provided details. Throughout this process, borrowers may receive notifications regarding the status of their application. If approved, borrowers are notified, and instructions for loan disbursement are provided. This streamlined process ensures borrowers can easily access the financial resources they need for their agricultural endeavors, contributing to the growth and sustainability of their operations.

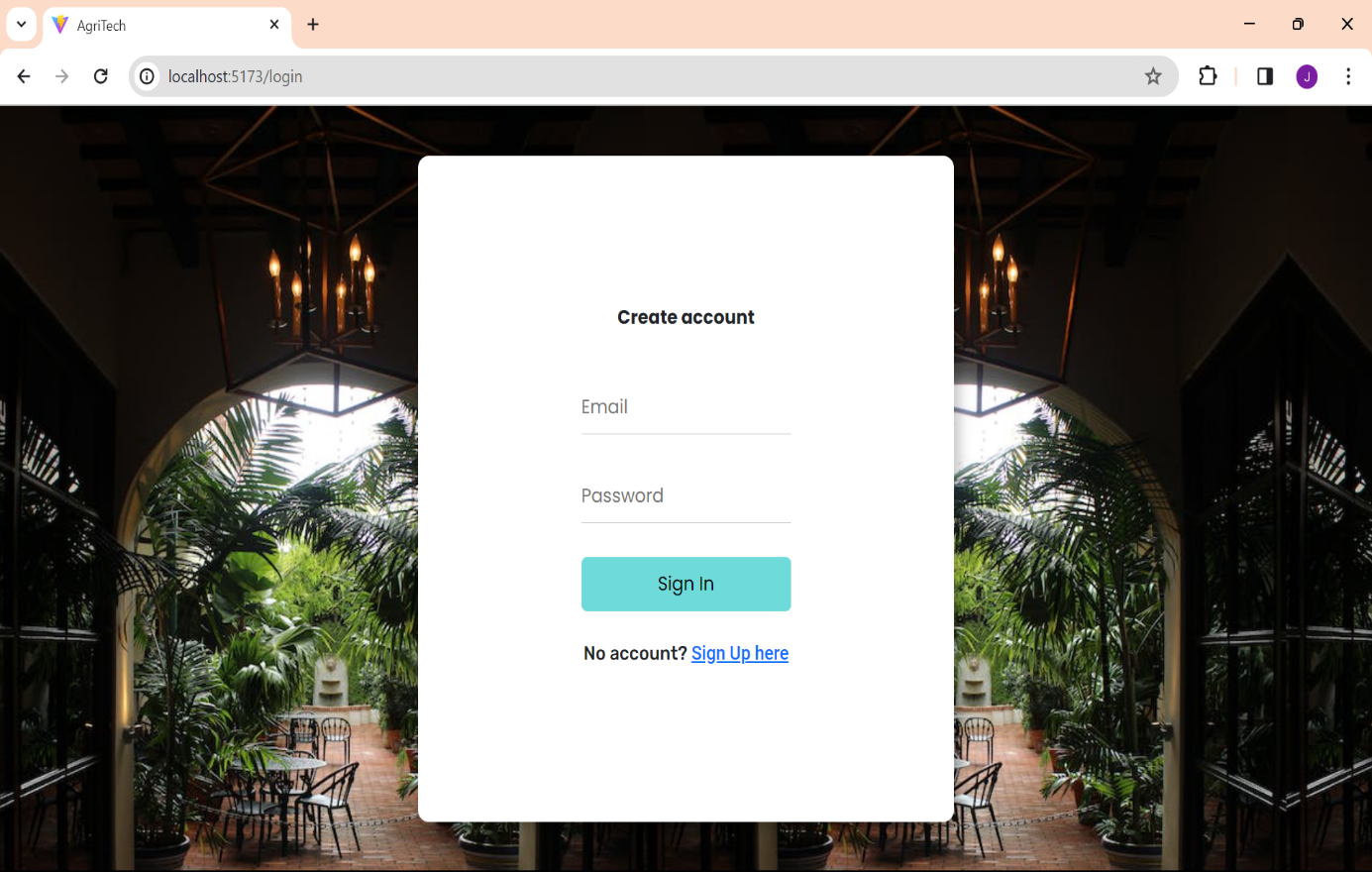
**CHAPTER 5**

**SYSTEM DESIGN AND ANALYSIS**

The frontend design of AgriLoan focuses on delivering a user-friendly and intuitive interface for borrowers and administrators. Developed using modern web technologies like React.js or Angular, the frontend ensures responsiveness and cross-browser compatibility. Borrowers can easily navigate through the loan application process, with clear and concise forms for submitting loan requests. Administrators have access to a comprehensive dashboard where they can manage loan products, review applications, and communicate with borrowers efficiently.

The frontend design prioritizes accessibility, ensuring that users with varying levels of technical proficiency can interact with the platform seamlessly. User experience (UX) principles are incorporated to streamline workflows and enhance usability, allowing borrowers and administrators to accomplish tasks quickly and efficiently. Overall, the frontend design of AgriLoan aims to provide a visually appealing, user-centric interface that enhances the overall borrowing experience for agricultural stakeholders.

**5.1 LOGIN**

****

**Fig 5.1 Login page**

Figure 5.1 explains A login page is a crucial component of any website or application that requires user authentication. Its primary purpose is to verify the user's identity and grant access to restricted content or features.

**Code:**

import React, { useState } from 'react';

import { Link, useNavigate } from 'react-router-dom';

import '../../assets/css/Login.css';

import { useDispatch } from 'react-redux';

import { login } from '../../components/Redux/userSlice';

function Login() {

const [email, setEmail] = useState('');

const [password, setPassword] = useState('');

const [errors, setErrors] = useState({});

const nav = useNavigate();

const dispatch = useDispatch();

const handleSubmit = (e) => {

e.preventDefault();

const validationErrors = {};

if (!email.trim()) {

validationErrors.email = 'Email is required';

} else if (!/\S+@\S+\.\S+/.test(email)) {

validationErrors.email = 'Email is not valid';

}

if (!password.trim()) {

validationErrors.password = 'Password is required';

} else if (password.length < 6 || password.length > 15) {

validationErrors.password = 'Password should be between 6 and 15 characters';

} else if (email === 'jeya@gmail.com' && password === 'jeya@12') {

nav('/admin'); // Redirect to admin route if credentials match

return;

}

setErrors(validationErrors);

if (Object.keys(validationErrors).length === 0) {

dispatch(login(email));

nav('/home');

}

};

return (

<div className="wrapper bg1">

<div className="container" id="main1">

<div className="row" id="login1">

<div className="col-md-6 right1">

<div className="input-box1">

<header className="header1">Create account</header>

<div className="input-field1">

<input

type="email"

className="input1"

value={email}

onChange={(e) => setEmail(e.target.value)}

placeholder="Email"

/>

<h6 className="error1">{errors.email && <span>{errors.email}</span>}</h6>

</div>

<div className="input-field1">

<input

type="password"

className="input1"

value={password}

onChange={(e) => setPassword(e.target.value)}

placeholder="Password"

/>

<h6 className="error1">{errors.password && <span>{errors.password}</span>}</h6>

</div>

<div className="input-field1">

<input type="submit" onClick={handleSubmit} className="submit1" value="Sign In" />

</div>

<div className="signin1">

<h6>

No account? <Link to="/signup">Sign Up here</Link>

</h6>

</div>

</div>

</div>

</div>

</div>

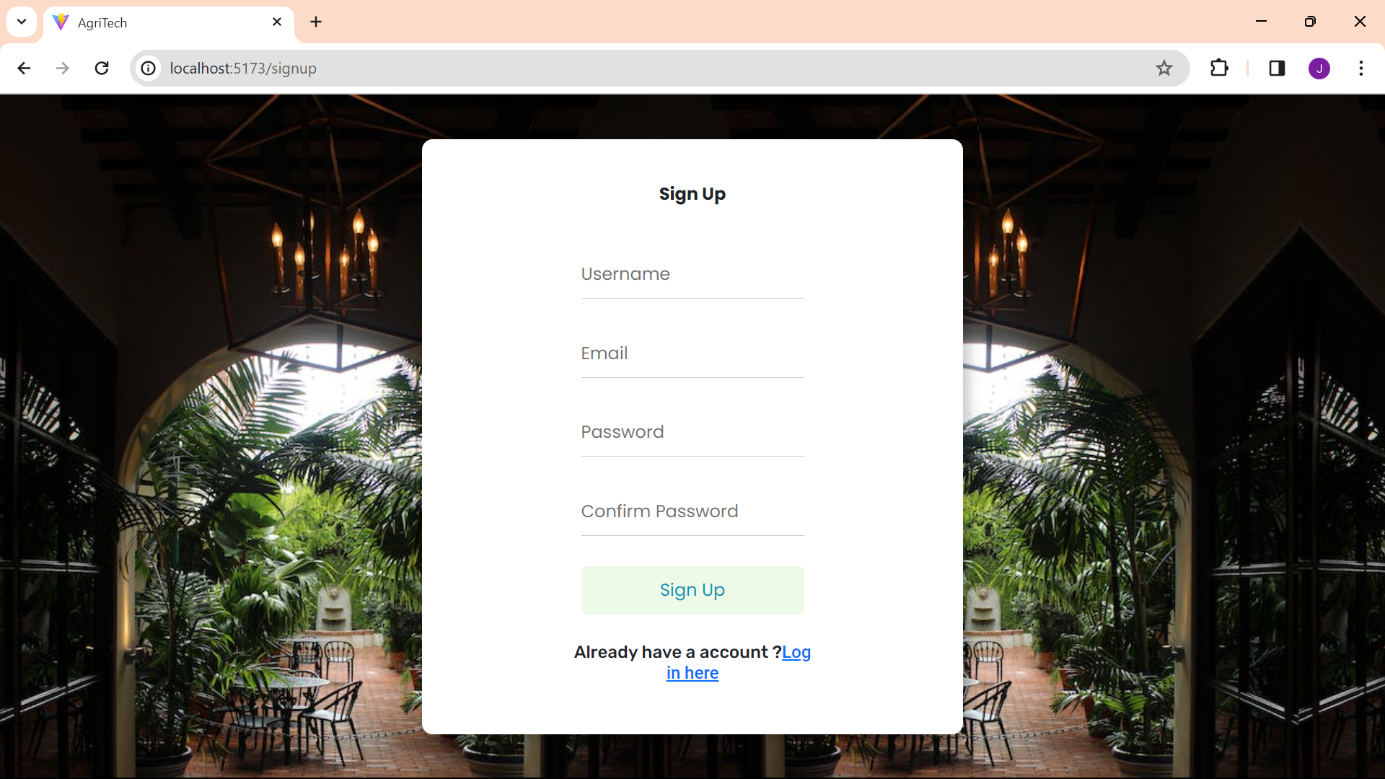
</div>

);

}

export default Login;

**5.2 REGISTER**

****

**Fig 5.2 Register page**

Figure 5.2 explains A register page, also known as a sign-up page, is an essential component of websites or applications that require user registration. Its primary purpose is to collect user information and create a new account for accessing the platform.

**Code:**

import React, { useState } from 'react';

import { useNavigate } from 'react-router-dom';

import { Link } from 'react-router-dom';

import '../../assets/css/Signup.css'

function Signup() {

const [userName, setName] = useState('');

const [email, setEmail] = useState('');

const [password, setPassword] = useState('');

const [confirmPassword, setConfirmPassword] = useState('');

const [errors, setErrors] = useState({});

const nav=useNavigate();

const details={userName,email,password};

const handleSubmit = (e) => {

e.preventDefault();

console.log(details);

const validationErrors = {};

if (!userName.trim()) {

validationErrors.userName = "Username is required";

}

if (!email.trim()) {

validationErrors.email = "Email is required";

}

else if (!/\S+@\S+\.\S+/.test(email)) {

validationErrors.email = "Email is not valid";

}

if (!password.trim()) {

validationErrors.password = "Password is required";

}

else if (password.length < 6) {

validationErrors.password = "Password should be at least 6 characters";

}

if (confirmPassword !== password) {

validationErrors.confirmPassword = "Passwords do not match";

}

setErrors(validationErrors);

if (Object.keys(validationErrors).length === 0) {

nav('/login') ;

}

};

return (

<div className='wrapper bg2'>

<div className='container' id='main2'>

<div className='row' id="signup2">

<div className='col-md-6 right2'>

<div className='input-box2'>

<header className='header2'>Sign Up</header>

<div className='input-field2'>

<input

type="text"

className='input2'

value={userName}

onChange={(e) => setName(e.target.value)}

placeholder="Username"

/>

<h6 className='error2'>{errors.userName && <span>{errors.userName}</span>}</h6>

</div>

<div className='input-field2'>

<input

type="email"

className='input2'

value={email}

onChange={(e) => setEmail(e.target.value)}

placeholder="Email"

/>

<h6 className='error2'>{errors.email && <span>{errors.email}</span>}</h6>

</div>

<div className='input-field2'>

<input

type="password"

className='input2'

value={password}

onChange={(e) => setPassword(e.target.value)}

placeholder="Password"

/>

<h6 className='error2'>{errors.password && <span>{errors.password}</span>}</h6>

</div>

<div className='input-field2'>

<input

type="password"

className='input2'

value={confirmPassword}

onChange={(e) => setConfirmPassword(e.target.value)}

placeholder="Confirm Password"

/>

<h6 className='error2'>{errors.confirmPassword && <span>{errors.confirmPassword}</span>}</h6>

</div>

<div className='input-field2'>

<input type='submit' onClick={handleSubmit} className='submit2' value="Sign Up"/>

</div>

<div className='signin2'>

<h6>Already have a account ?<Link to="/login">Log in here</Link></h6>

</div>

</div>

</div>

</div>

</div>

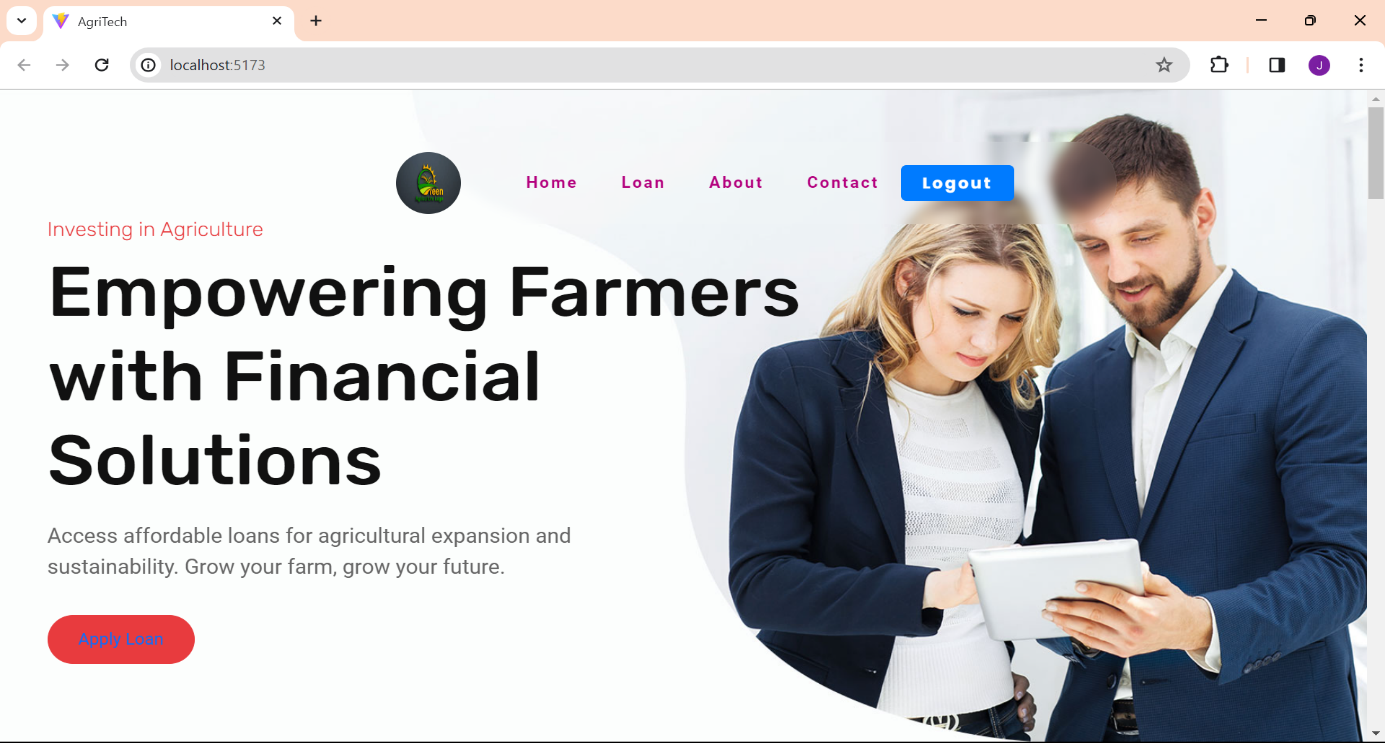
</div>

)

}

export default Signup;

**5.3 HOME PAGE**

****

**Fig 5.3 Home page**

**Code:**

import React from 'react';

import { Header } from './Header';

import "../../assets/css/Home.css"

import { Link } from 'react-router-dom';

class Home extends React.Component {

render() {

return (

<div>

<Header/>

<section className="slider\_\_area">

<div className="container-fluid">

<div className="row">

<div className="col-xl-12 slider\_\_area\_\_content\_\_wrap">

<div className="slider\_\_area\_\_content">

<h6>Investing in Agriculture</h6>

<h1>Empowering Farmers with Financial Solutions</h1>

<p className="lead">Access affordable loans for agricultural expansion and sustainability. Grow your farm, grow your future.</p>

<a className="btn btn-primary my-3"><Link to="/loanpage" style={{textDecoration:"none"}}>Apply Loan</Link></a>

</div>

</div>

</div>

</div>

</section>

<section className="icon\_\_area">

<div className="container">

<div className="row">

<div className="col-xl-12 icon\_\_area--border">

<ul>

<li><img src="https://templates.envytheme.com/finix/default/assets/img/partner/image1.png" alt="" /></li>

<li><img src="https://templates.envytheme.com/finix/default/assets/img/partner/image2.png" alt="" /></li>

<li><img src="https://templates.envytheme.com/finix/default/assets/img/partner/image4.png" alt="" /></li>

<li><img src="https://templates.envytheme.com/finix/default/assets/img/partner/image5.png" alt="" /></li>

</ul>

</div>

</div>

</div>

</section>

<section className="about\_\_area py-5 mb-4 mt-5">

<div className="container">

<div className="row">

<div className="col-xl-6 col-lg-6 col-md-6 mb-sm-5">

<div className="about\_\_area\_\_img">

<div className="about\_\_area\_\_img1">

<img src="https://templates.envytheme.com/finix/default/assets/img/about/image3.png" alt="" />

</div>

<div className="about\_\_area\_\_img2">

<div className="about\_\_area\_\_img2\_\_inner">

<h2>25</h2>

<span>Years Of Experience</span>

</div>

</div>

</div>

</div>

<div className="col-xl-6 col-lg-6 col-md-6">

<div className="finix\_\_text ms-2 ">

<h6>About Our Agricultural Loan Services</h6>

<h2>Partnering with Farmers for Sustainable Growth</h2>

<p>At Agriculture Loan Co., we've been dedicated to supporting farmers with financing for over 25 years. Our loans are tailored to help you expand your farm, invest in new equipment, and adopt sustainable practices.</p>

<strong>In agriculture, we focus on:</strong>

<ul>

<li>Flexible loan options</li>

<li>Expert advice</li>

<li>Commitment to sustainability</li>

</ul>

<a href="#" className="btn btn-primary my-2">Learn More</a>

</div>

</div>

</div>

</div>

</section>

<section className="Choose\_\_area mainbg py-5">

<div className="container-fluid">

<div className="row my-4">

<div className="col-xl-6 col-lg-6 mb-md-5 mb-sm-5 text-md-center">

<div className="finix\_\_text text-md-center text-sm-center me-5">

<h6>Transparent Process</h6>

<h1>Why Choose Our Agriculture Loans?</h1>

<p>Discover why farmers trust us for their financial needs. We provide transparent processes, competitive rates, and dedicated support to help you succeed in agriculture.</p>

<img src="https://templates.envytheme.com/finix/default/assets/img/choose.png" alt="" />

<div className="choose\_\_area\_\_box\_\_btn">

<a href="https://www.youtube.com/watch?v=gN8uPQzi7Xc&pp=ygUlYWdyaWN1bHR1cmUgbG9hbiBhcHBseSB2ZWRpbyBpbiB0YW1pbA%3D%3D"><i className="fas fa-play-circle"></i></a>

</div>

</div>

</div>

<div className="col-xl-6 col-lg-6 mt-md-5 mt-sm-5">

<div className="row ms-2 mb-3">

<div className="col-lg-6 col-md-6 text-center mb-4 mt-3">

<div className="choose\_\_area\_\_box\_\_item">

<span><i className="fab fa-fonticons-fi"></i></span>

<h2>Flexible Options</h2>

<p>Customize your loan to fit your farming needs. Whether it's for land purchase, equipment, or working capital, we have flexible options to support you.</p>

</div>

</div>

<div className="col-lg-6 col-md-6 text-center mb-4">

<div className="choose\_\_area\_\_box\_\_item ">

<span><i className="fas fa-cogs"></i></span>

<h2>Expert Advice</h2>

<p>Benefit from our team's expertise in agriculture finance. We provide personalized advice and guidance to help you make informed financial decisions.</p>

</div>

</div>

</div>

<div className="row ms-2">

<div className="col-lg-6 col-md-6 text-center mb-4">

<div className="choose\_\_area\_\_box\_\_item ">

<span><i className="fab fa-cc-discover"></i></span>

<h2>Commitment to Sustainability</h2>

<p>We're committed to supporting sustainable farming practices. Our loans can help you invest in eco-friendly technologies and practices for a greener future.</p>

</div>

</div>

<div className="col-lg-6 col-md-6 text-center choose\_\_area\_\_box\_\_iteml ">

<div className="choose\_\_area\_\_box\_\_item ">

<span><i className="fas fa-brain"></i></span>

<h2>Trusted Experience</h2>

<p>With over 25 years of experience, we've earned the trust of farmers across the country. Join the thousands who have benefited from our agricultural loan services.</p>

</div>

</div>

</div>

</div>

</div>

</div>

</section>

</div>

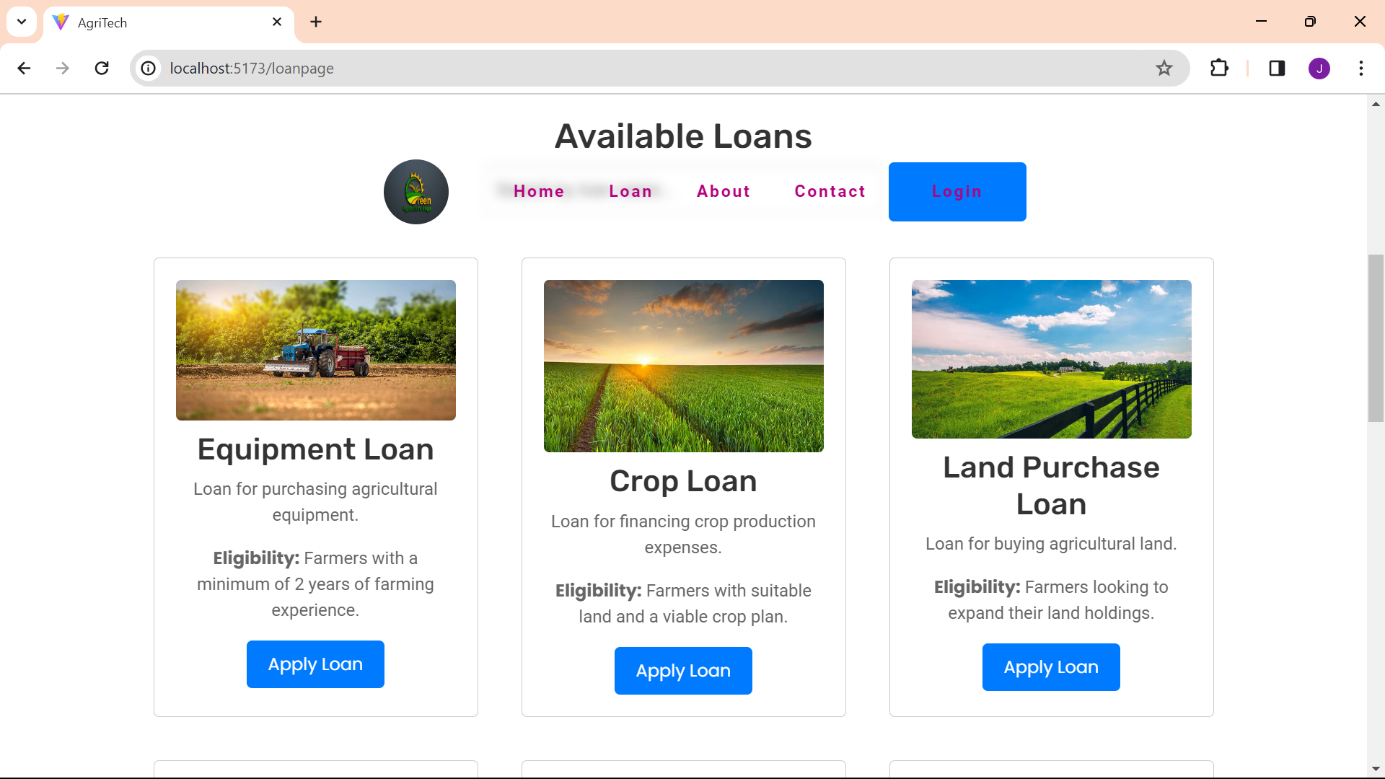
);

}

}

export default Home;

**5.4 LOANS PAGE**

****

**Fig 5.4 Loans Page**

**Code:**

import React, { useState } from 'react';

import '../../assets/css/LoanType.css'; // Import CSS file for styling

import { useSelector, useDispatch } from 'react-redux';

import { selectUser } from '../../components/Redux/userSlice';

import { useNavigate } from 'react-router-dom';

const LoanPage = () => {

const loanTypesData = [

{

id: 1,

name: "Equipment Loan",

description: "Loan for purchasing agricultural equipment.",

image: "https://www.adanicapital.in/-/media/Project/AdaniCapital/Farm-Equipments/Tractor-Loan/tractorloan.webp",

eligibility: "Farmers with a minimum of 2 years of farming experience.",

},

{

id: 2,

name: "Crop Loan",

description: "Loan for financing crop production expenses.",

image: "https://i.ndtvimg.com/i/2016-02/agriculture-farm-generic-istock\_650x400\_61455603415.jpg",

eligibility: "Farmers with suitable land and a viable crop plan.",

},

{

id: 3,

name: "Land Purchase Loan",

description: "Loan for buying agricultural land.",

image: "https://www.horizonfc.com/sites/default/files/styles/news\_featured/public/images/blog/Land%20Mortgage%20vs.%20Home%20Mortgage.jpg?h=4e81ff6a&itok=\_Ho7j7tR",

eligibility: "Farmers looking to expand their land holdings.",

},

{

id: 4,

name: "Livestock Loan",

description: "Loan for purchasing livestock.",

image: "https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTJMS4wLfueCFGb4J49i3guR1FlwzQNmHuhgA&usqp=CAU",

eligibility: "Farmers engaged in livestock farming.",

},

{

id: 5,

name: "Farm Improvement Loan",

description: "Loan for making improvements to the farm infrastructure.",

image: "https://media.istockphoto.com/id/1221831931/photo/farmer-on-combine-harvester-in-cornfield-during-harvest.jpg?s=612x612&w=0&k=20&c=1riZGLmPvBwVvGEndDSoxZWP0-oU-9h\_swvNub7nkhc=",

eligibility: "Farmers seeking to enhance their farm infrastructure.",

},

{

id: 6,

name: "Working Capital Loan",

description: "Loan for covering day-to-day operating expenses of the farm.",

image: "https://www.smefinanceforum.org/sites/default/files/styles/720x486/public/shutterstock\_1635308305-NL.jpg?itok=CZF9dwkLhttps://www.shutterstock.com/image-photo/farmer-holding-money-bag-on-260nw-1934020754.jpg",

eligibility: "Farmers needing funds for day-to-day operations.",

},

{

id: 7,

name: "Irrigation Loan",

description: "Loan for installing or upgrading irrigation systems.",

image: "https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRW0ztoMuiK4ZjP4AkuE0Gy\_Ul7JY14n6SzHw&usqp=CAU",

eligibility: "Farmers looking to improve irrigation facilities.",

},

{

id: 8,

name: "Greenhouse Loan",

description: "Loan for building or expanding greenhouse facilities.",

image: "https://images.pexels.com/photos/2886937/pexels-photo-2886937.jpeg?cs=srgb&dl=pexels-mark-stebnicki-2886937.jpg&fm=jpg",

eligibility: "Farmers interested in greenhouse farming.",

},

{

id: 9,

name: "Organic Farming Loan",

description: "Loan for transitioning to or expanding organic farming practices.",

image: "https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRB-ern29G\_DE7J60qqUZkwsHfWXcWEkqvxDA&usqp=CAU",

eligibility: "Farmers transitioning to or expanding organic farming.",

}

];

const dispatch = useDispatch();

const user = useSelector(selectUser);

const email = user.email;

const navigate = useNavigate();

const handleRoute = () => {

if (email) {

navigate('/loanformpage');

} else {

navigate('/error');

}

};

const [loanTypes, setLoanTypes] = useState(loanTypesData);

const [searchQuery, setSearchQuery] = useState('');

const handleSearchChange = (e) => {

setSearchQuery(e.target.value);

const filteredLoans = loanTypesData.filter(loan => loan.name.toLowerCase().includes(e.target.value.toLowerCase()));

setLoanTypes(filteredLoans);

};

return (

<div className="loan-type-container " >

<h2 style={{ textAlign: 'center' }}>Available Loans</h2>

<input

type="text"

placeholder="Search by loan name... "

value={searchQuery}

onChange={handleSearchChange}

/>

<div className="loan-types">

{loanTypes.map((loan) => (

<div key={loan.id} className="loan-card">

<img src={loan.image} alt={loan.name} />

<h3>{loan.name}</h3>

<p>{loan.description}</p>

<p><strong>Eligibility:</strong> {loan.eligibility}</p>

<button onClick={handleRoute}>Apply Loan</button>

</div>

))}

</div>

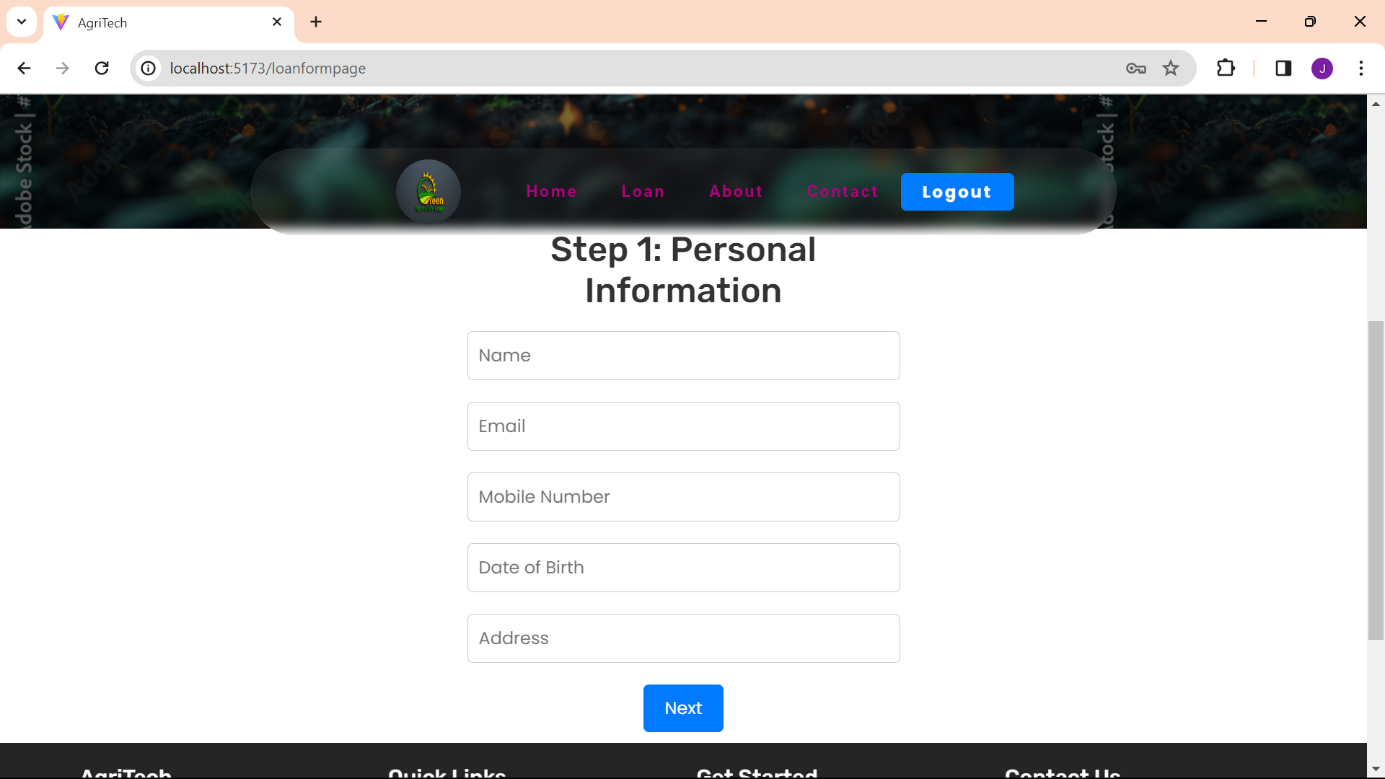
</div>

);

};

export default LoanPage;

**5.5 LOAN APPLY PAGE**

****

**Fig 5.5 Apply Page**

**Code:**

import React, { useState } from 'react';

import '../../assets/css/Loanform.css';

import { Header } from './Header';

const LoanForm = () => {

const [step, setStep] = useState(1);

const [formData, setFormData] = useState({

name: '',

email: '',

mobileNumber: '',

age: '',

address: '',

adharNumber: '',

panNumber: '',

monthlyIncome: '',

loanAmount: '',

loanDuration: '',

loanPurpose: '',

idProof: '',

loanType: '', // Added loanType field

});

const handleChange = (e) => {

const { name, value } = e.target;

setFormData({ ...formData, [name]: value });

};

const nextStep = () => {

setStep(step + 1);

};

const prevStep = () => {

setStep(step - 1);

};

const handleSubmit = (e) => {

e.preventDefault();

// Handle form submission

console.log('Form submitted:', formData);

};

const confirmDetails = () => {

nextStep();

};

const Step1 = (

<div className="step">

<h2>Step 1: Personal Information</h2>

<input type="text" name="name" value={formData.name} onChange={handleChange} placeholder="Name" required />

<input type="email" name="email" value={formData.email} onChange={handleChange} placeholder="Email" required />

<input type="tel" name="mobileNumber" value={formData.mobileNumber} onChange={handleChange} placeholder="Mobile Number" required />

<input type="number" name="dob" value={formData.dob} onChange={handleChange} placeholder="Date of Birth" required />

<input type="text" name="address" value={formData.address} onChange={handleChange} placeholder="Address" required />

<button onClick={nextStep}>Next</button>

</div>

);

const Step2 = (

<div className="step">

<h2>Step 2: Document Information</h2>

<input type="text" name="adharNumber" value={formData.adharNumber} onChange={handleChange} placeholder="Aadhar Number" required />

<input type="text" name="panNumber" value={formData.panNumber} onChange={handleChange} placeholder="PAN Number" required />

<input type="text" name="monthlyIncome" value={formData.monthlyIncome} onChange={handleChange} placeholder="Monthly Income" required />

<button onClick={prevStep}>Previous</button>

<button onClick={nextStep}>Next</button>

</div>

);

const Step3 = (

<div className="step">

<h2>Step 3: Loan Details</h2>

<input type="number" name="loanAmount" value={formData.loanAmount} onChange={handleChange} placeholder="Loan Amount" required />

<input type="number" name="loanDuration" value={formData.loanDuration} onChange={handleChange} placeholder="Loan Duration (months)" required />

<textarea name="loanPurpose" value={formData.loanPurpose} onChange={handleChange} placeholder="Loan Purpose" required></textarea>

<input type="file" name="idProof" onChange={handleChange} required />

<button onClick={prevStep}>Previous</button>

<button onClick={confirmDetails}>Confirm Details</button>

</div>

);

const Step4 = (

<div className="step">

<h2>Step 4: Loan Type</h2>

<select name="loanType" value={formData.loanType} onChange={handleChange} required>

<option value="">Select Loan Type</option>

<option value="Equipment Loan">Equipment Loan</option>

<option value="Crop Loan">Crop Loan</option>

<option value="Land Purchase Loan">Land Purchase Loan</option>

{/\* Add more loan types as needed \*/}

</select>

<button onClick={prevStep}>Previous</button>

<button onClick={nextStep}>Next</button>

</div>

);

const Confirmation = (

<div className="step">

<h2>Confirm Details</h2>

<p>Name: {formData.name}</p>

<p>Email: {formData.email}</p>

<p>Mobile Number: {formData.mobileNumber}</p>

<p>Date of Birth: {formData.dob}</p>

<p>Address: {formData.address}</p>

<p>Aadhar Number: {formData.adharNumber}</p>

<p>PAN Number: {formData.panNumber}</p>

<p>Monthly Income: {formData.monthlyIncome}</p>

<p>Loan Amount: {formData.loanAmount}</p>

<p>Loan Duration: {formData.loanDuration}</p>

<p>Loan Purpose: {formData.loanPurpose}</p>

<p>Loan Type: {formData.loanType}</p>

<button onClick={prevStep}>Previous</button>

<button onClick={handleSubmit}>Submit</button>

</div>

);

let currentStep;

switch (step) {

case 1:

currentStep = Step1;

break;

case 2:

currentStep = Step2;

break;

case 3:

currentStep = Step3;

break;

case 4:

currentStep = Step4;

break;

case 5:

currentStep = Confirmation;

break;

default:

currentStep = Step1;

}

return (

<div className="loan-form-container">

<form onSubmit={handleSubmit}>

{currentStep}

</form>

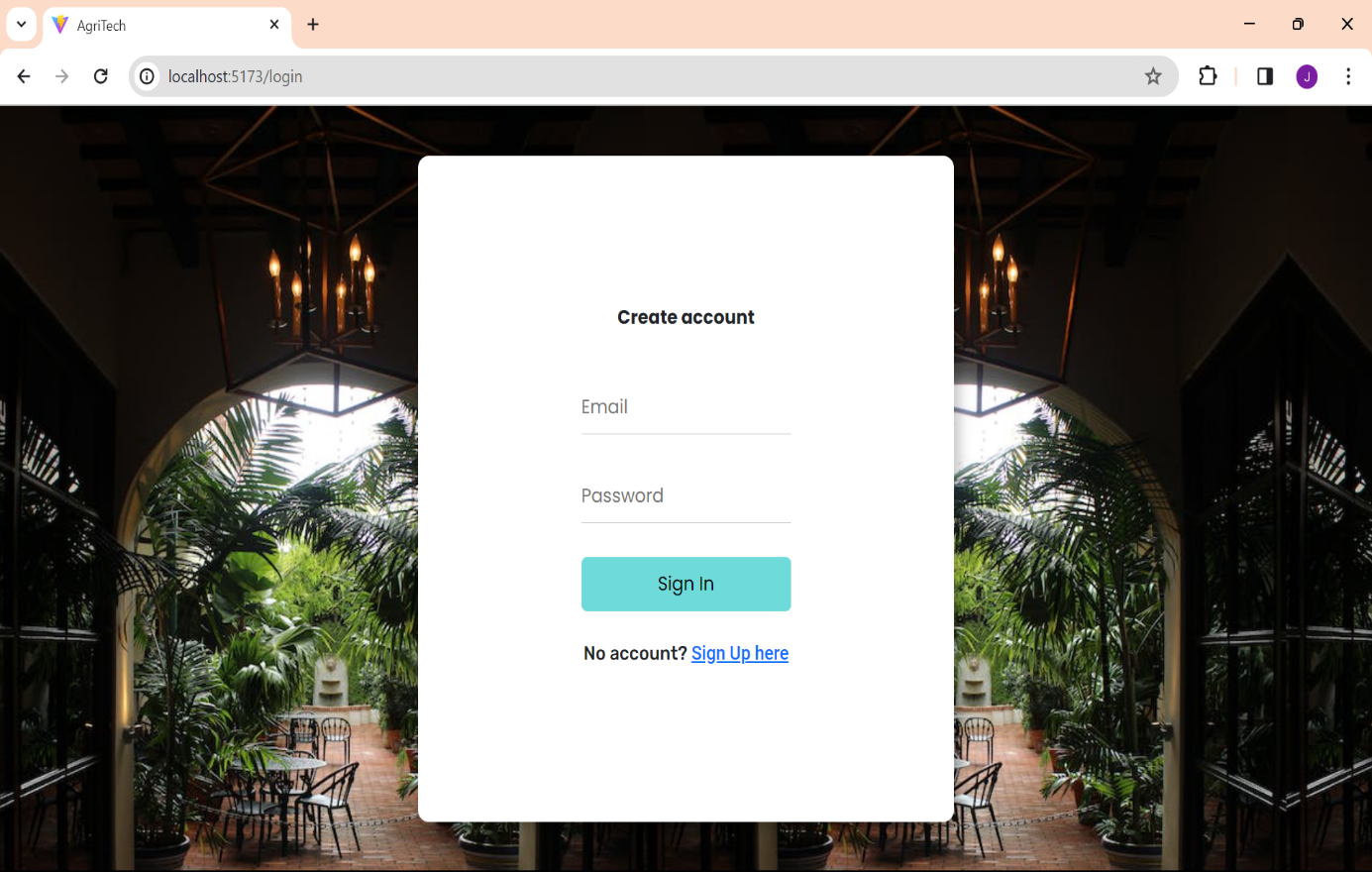
</div>

);

};

export default LoanForm;

**5.6 Admin Login**

****

**Fig 5.6 Admin Login Page**

Figure 5.6 explains A login page is a crucial component of any website or application that requires user authentication. Its primary purpose is to verify the user's identity and grant access to restricted content or features.

**Code:**

import React, { useState } from 'react';

import { Link, useNavigate } from 'react-router-dom';

import '../../assets/css/Login.css';

import { useDispatch } from 'react-redux';

import { login } from '../../components/Redux/userSlice';

function Login() {

const [email, setEmail] = useState('');

const [password, setPassword] = useState('');

const [errors, setErrors] = useState({});

const nav = useNavigate();

const dispatch = useDispatch();

const handleSubmit = (e) => {

e.preventDefault();

const validationErrors = {};

if (!email.trim()) {

validationErrors.email = 'Email is required';

} else if (!/\S+@\S+\.\S+/.test(email)) {

validationErrors.email = 'Email is not valid';

}

if (!password.trim()) {

validationErrors.password = 'Password is required';

} else if (password.length < 6 || password.length > 15) {

validationErrors.password = 'Password should be between 6 and 15 characters';

} else if (email === 'jeya@gmail.com' && password === 'jeya@12') {

nav('/admin'); // Redirect to admin route if credentials match

return;

}

setErrors(validationErrors);

if (Object.keys(validationErrors).length === 0) {

dispatch(login(email));

nav('/home');

}

};

return (

<div className="wrapper bg1">

<div className="container" id="main1">

<div className="row" id="login1">

<div className="col-md-6 right1">

<div className="input-box1">

<header className="header1">Create account</header>

<div className="input-field1">

<input

type="email"

className="input1"

value={email}

onChange={(e) => setEmail(e.target.value)}

placeholder="Email"

/>

<h6 className="error1">{errors.email && <span>{errors.email}</span>}</h6>

</div>

<div className="input-field1">

<input

type="password"

className="input1"

value={password}

onChange={(e) => setPassword(e.target.value)}

placeholder="Password"

/>

<h6 className="error1">{errors.password && <span>{errors.password}</span>}</h6>

</div>

<div className="input-field1">

<input type="submit" onClick={handleSubmit} className="submit1" value="Sign In" />

</div>

<div className="signin1">

<h6>

No account? <Link to="/signup">Sign Up here</Link>

</h6>

</div>

</div>

</div>

</div>

</div>

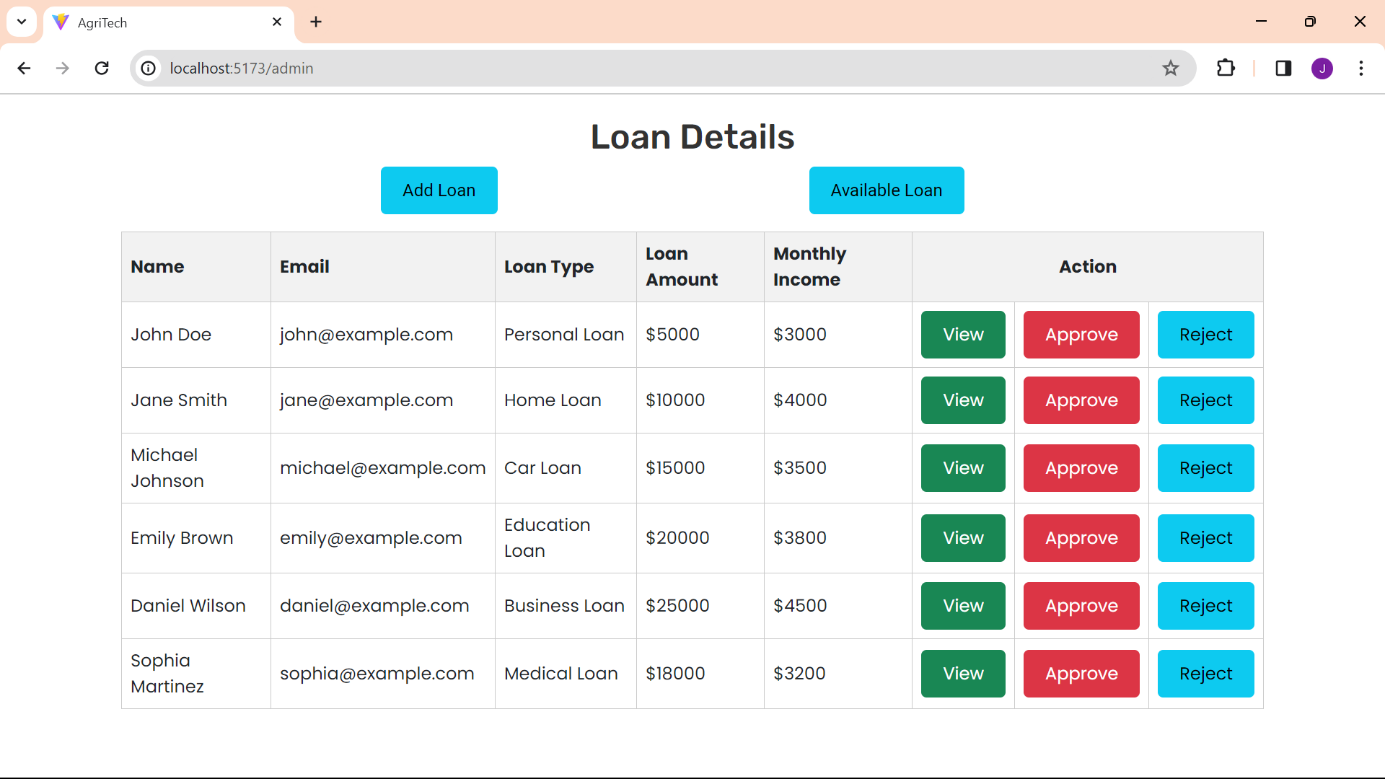
</div>

);

}

export default Login;

**5.7 Admin Page**

****

**Code:**

import React from 'react';

import { Link } from 'react-router-dom';

import '../../assets/css/AdminDashboard.css';

// Sample JSON data

const loanData = [

{

id: 1,

name: 'John Doe',

email: 'john@example.com',

loanType: 'Personal Loan',

loanAmount: '$5000',

monthlyIncome: '$3000'

},

{

id: 2,

name: 'Jane Smith',

email: 'jane@example.com',

loanType: 'Home Loan',

loanAmount: '$10000',

monthlyIncome: '$4000'

},

{

id: 3,

name: 'Michael Johnson',

email: 'michael@example.com',

loanType: 'Car Loan',

loanAmount: '$15000',

monthlyIncome: '$3500'

},

{

id: 4,

name: 'Emily Brown',

email: 'emily@example.com',

loanType: 'Education Loan',

loanAmount: '$20000',

monthlyIncome: '$3800'

},

{

id: 5,

name: 'Daniel Wilson',

email: 'daniel@example.com',

loanType: 'Business Loan',

loanAmount: '$25000',

monthlyIncome: '$4500'

},

{

id: 6,

name: 'Sophia Martinez',

email: 'sophia@example.com',

loanType: 'Medical Loan',

loanAmount: '$18000',

monthlyIncome: '$3200'

}

];

export default function AdminDashboard() {

// Define handleDelete function if needed

return (

<>

<div className="bol">

<div className="plant-details-list-container">

<center>

<h2>Loan Details</h2>

</center>

<Link to="/addloan">

<button className="btn-info" style={{marginLeft:'20%'}}>Add Loan</button>

</Link>

<Link to="/available">

<button className="btn-info" style={{marginLeft:'30%'}}>Available Loan</button>

</Link>

<table className="text-center mt-3">

<thead>

<tr className="text-center">

<th>Name</th>

<th>Email</th>

<th>Loan Type</th>

<th>Loan Amount</th>

<th>Monthly Income</th>

<th colSpan="3" style={{textAlign:'center'}}>Action</th>

</tr>

</thead>

<tbody>

{loanData.map((loan, index) => (

<tr key={index}>

<td>{loan.name}</td>

<td>{loan.email}</td>

<td>{loan.loanType}</td>

<td>{loan.loanAmount}</td>

<td>{loan.monthlyIncome}</td>

<td>

<button className="btn-success">

View

</button>

</td>

<td>

<button className="btn-danger">

Approve

</button>

</td>

<td>

<button className="btn-info">

Reject

</button>

</td>

</tr>

))}

</tbody>

</table>

</div>

</div>

</>

);

}

**CHAPTER 6**

**CONCLUSION AND FUTURE SCOPE**

**6.1 CONCLUSION**

In conclusion, AgriLoan stands as a beacon of innovation and empowerment in the realm of agricultural finance. It transcends the traditional lending landscape, offering a comprehensive and user-centric platform that addresses the unique needs and challenges of farmers and agricultural enterprises.

At its core, AgriLoan embodies a commitment to excellence, efficiency, and accessibility. By leveraging advanced technologies and intuitive interfaces, AgriLoan streamlines the borrowing process, making it easier and more convenient for farmers to access vital financial resources. The platform's robust database, personalized guidance, and tailored financial solutions empower users at every stage of their financial journey, from planning and application to approval and disbursement.

Moreover, AgriLoan fosters a sense of community and belonging within the agricultural sector. Through its user-friendly features and interactive tools, AgriLoan encourages collaboration, knowledge-sharing, and peer support among farmers and agricultural stakeholders. This sense of camaraderie enhances the overall borrowing experience, creating a supportive ecosystem where farmers can thrive and succeed.

AgriLoan's impact extends far beyond the realm of finance. By providing farmers with the resources and support they need to grow and prosper, AgriLoan plays a vital role in driving economic growth, sustainability, and resilience within the agricultural community. It empowers farmers to innovate, adapt to changing market conditions, and overcome financial obstacles, thereby contributing to the long-term viability of agricultural operations.

In essence, AgriLoan is more than just a lending platform; it is a catalyst for positive change and transformation in agriculture. It embodies the spirit of innovation, collaboration, and empowerment, paving the way for a brighter and more prosperous future for farmers around the world.

**6.2 FUTURE SCOPE**

AgriLoan can further digitize and automate various aspects of the lending process, including loan application, approval, and disbursement. Implementing artificial intelligence (AI) and machine learning (ML) algorithms can streamline credit assessment, risk management, and loan decision-making, leading to faster processing times and improved efficiency.

AgriLoan can expand its range of financial products and services to cater to the diverse needs of farmers and agricultural enterprises. This may include offering specialized loans for equipment financing, crop insurance, agri-input financing, and value chain financing. By diversifying its offerings, AgriLoan can better address the evolving financial requirements of the agricultural sector.

AgriLoan can collaborate with agri-tech companies to integrate innovative technologies into its platform. This may involve incorporating data analytics, remote sensing, IoT (Internet of Things), and blockchain solutions to optimize farm management practices, improve productivity, and mitigate risks. By leveraging agri-tech solutions, AgriLoan can provide more tailored financial solutions based on real-time farm data and insights.

AgriLoan can focus on expanding its reach to underserved and marginalized farmers, particularly in remote rural areas. By leveraging mobile technology and agent banking networks, AgriLoan can enhance financial inclusion and accessibility, empowering smallholder farmers and women entrepreneurs to access formal financial services and improve their livelihoods.

AgriLoan can incorporate sustainability criteria into its lending practices, promoting environmentally friendly and socially responsible agricultural practices. This may involve offering preferential loan terms and incentives for adopting sustainable farming techniques, conservation practices, and climate-smart agriculture. By supporting sustainable finance initiatives, AgriLoan can contribute to the long-term resilience and sustainability of the agricultural sector.

**CHAPTER 7**

**REFERENCES**

[1]. Smith, J. (Year). Agricultural Finance Trends: A Comprehensive Review (1st ed.). Publisher.

[2]. Brown, A., & Jones, B. (Year). Innovations in Agricultural Lending Practices (Vol. 3). Journal of Agricultural Economics.

[3]. United Nations. (Year). Report on Financial Inclusion in Rural Areas. Retrieved from [URL or Publisher].

[4]. World Bank Group. (Year). Agricultural Finance Report. Retrieved from [URL or Publisher].