



**RAVENSHAW UNIVERSITY**

**A PROJECT REPORT ON**

## **Project(F4)**

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## **DECLARATION**

We hereby declare that the project entitled with “**PROJECT-F4**” submitted to the Department of Information Technology Management (ITM) of Ravenshaw University, Cuttack in partial fulfilment for the award of Bachelor in Science in ITM during the academic year 2020-2023.

The above said project is to be a part towards the fulfilment of the requirement of course study. This project is an original one and has not been submitted to any organization for the fulfilment of any course.

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## **ACKNOWLEDGMENT**

What we write or mention in this sheet will hardly be adequate in return for the amount of help and co-operation. We have received from all of the people who have contributed to make this project a reality. But we shall still try my level best to thank them.

First of all, we would like to convey our heartfelt regards to Mr. Sailaja Sankar Kanungo, HOD of Dept. ITM, Ravenshaw University, Cuttack for his encouragement to carry out this project. And deepest regards to Santosh Kumar Paul and Shilpa Patra, my project guide in this undertaking, who has always there for us to offer help in all possible ways, ready to solve any problem with a smiling face owe him a lot due to boost that he provided me which further the successful completion of the project within the stipulated time.

**Last but not the least our best regards to our lovable teachers of our department.** We wish to express our heartiest thanks to the parents and friends who played a very important part in making my project complete and successful.

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# Ravenshaw University, Cuttack

## Department of Information Technology Management

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### CERTIFICATE

This is to certify that the project entitled with “**PROJECT F4**” is a Bonafede project been submitted by Chandan Kumar Sahu (20DIT035), Ankit Kumar Samal(20DIT002), Shruti Ray(20DIT022), Puspita Priyadarsini Barik(20DIT055) are the students of Department of Information Technology Management (ITM) of Ravenshaw University, Cuttack, Odisha. They were done the project work “**Project-F4**” under my supervision in partial fulfilment of the requirement as a project for the B.Sc. (Information Technology Management). This is an original piece of work & it has not been submitted anywhere else.

They are found to be very regular, sincere, hardworking students & have undertaken a lot of trouble for the completion for the project. I wish them all the best in the future.

Project Guide Signature

Internal Guide Signature

External Signature

## ABSTRACT

This project documentation presents a comprehensive overview of “**PROJECT F4**”, it’s a set of resources and information designed to assist farmers in various aspects of their agricultural practices. It is user friendly, simple. Its deals with the farmers information, The Farmer project documentation is a comprehensive resource that provides farmers with knowledge and practical guidance to optimize their agricultural practices and promote sustainable farming techniques. It covers various topics, including crop management and overall farm management. The documentation empowers farmers to make informed decisions on soil preparation, pest management, irrigation, and nutrient optimization. It also offers insights into specific crops and livestock, as well as farm equipment maintenance and safety protocols. By adopting the recommended practices, farmers can enhance productivity, minimize environmental impact, and contribute to the long-term viability of their farms.

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# CHAPTER 1

## INTRODUCTION

## **1. INTRODUCTION:**

The project F4 includes registration of farmer, storing their details into the system. The software has the facility to give a unique id for every farmer and stores the details in it.

The project F4 can be entered using a username and password. It is accessible either by an administrator. Only they can add data into the database. The data can be retrieved easily. The interface is very user-friendly. The data are well protected for personal use and makes the data processing very fast.

F4 project is helpful, flexible, and easy to use and is designed and developed to deliver the ways of cultivation about different crops to farmer.

F4 is designed basically for farmer which help them to make their farming practices more sustainable. It aims to improve their agricultural methods and make their farming systems more environmentally friendly, economically viable, and socially responsible. It's provided an expertise to solve their queries regarding farming problems and notify the government rules and schemes to them.

The F4 project helps farmers by using new ideas and technology to make farming better. It focuses on making farming more productive and sustainable. The project works with farmers to understand their challenges, such as climate change and limited resources. It then provides them with solutions and support to improve their farming practices. The goal is to help farmers grow more crops, earn a better income, and be better prepared for the future.

### **1.1 OBJECTIVES:**

- Increase Farmers crop productivity using advanced farming techniques and technologies.
- Improve the quality of Farmers crops for better market value.
- Promote sustainable farming practices to protect the environment and ensure long-term success.
- F4 helps farmer to connect with the expertise to know about their farming issues.

## **1.2 MODULES:**

F4 is web application for farmer which helps to provide cultivations tips to farmer and solve their queries regarding farming. In this project, we use PHP and MySQL database.

The entire project mainly consists of 3 modules, which are

1. Admin module
2. User module (farmer)
3. Expert module

### **1.2.1 Admin module:**

1. **Dashboard:** In this section, admin can view the Farmer profile, Expert profile, Different crops with the harvesting steps and can view the responded queries.
2. **Admin:** In this section, admin can add farmer's details and also manage crops details (Add/Update).
3. **Farmer:** In this section, admin can view/update farmer detail (who registered to our website) and also have right to authenticate.
4. **Expert:** In this section, admin can view expert's details.
5. **Contact us Queries:** In this section, admin can view queries which are sent by farmer.
6. **Expert Session Logs:** In this section, admin can see login and logout time of expert.
7. **Farmer Session Logs:** In this section, admin can see login and logout time of farmer.
8. **Pages:** In this section, admin can update the about us and contact us page details.

Admin can also change his/her own password and view his/her own details.

### **1.2.2 User module (farmer):**

1. **Dashboard:** In this section, farmers can view the his/her profile, Access different type of crop details
2. **Expert Advice:** In this section, Farmer can take advice from expert about his/her queries.
3. **Farmer History:** In this section, Farmer can see his/her own quires history.  
User can update his/her profile, change the password and recover the password.

### **1.2.3 Expert module:**

1. **Dashboard:** In this section, expert can view and update his/her own profile and reply to farmers queries.
2. **Query History:** In this section, Expert can see farmer's queries history which he/she answered to farmer.  
Expert can also update his profile, change and recover the password with includes his/her personal details.

# CHAPTER 2

## METHODOLOGY

## **2. METHODOLOGY:**

### **Requirement Analysis:**

Identify the specific needs and objectives of the "Farming Help" website. Conduct interviews and surveys with farmers to gather their requirements and expectations. Determine the features and functionalities required, such as step-by-step harvesting guides, information on pesticides, fertilizers, and machinery, and updates on government rules and acts related to agriculture.

### **Market Research:**

Conduct a thorough market analysis to understand the existing platforms and competitors in the agriculture and farming domain. Identify the gaps and opportunities that can be addressed by the "Farming Help" website. Analyse user preferences and trends to ensure the website meets their needs effectively.

### **Technology Selection:**

Evaluate different technologies and frameworks suitable for developing a dynamic and user-friendly website. Consider factors such as scalability, security, performance, and compatibility with various devices and browsers. Choose a technology stack that supports the desired features and can be maintained and updated easily.

### **Design and Prototyping:**

Create wireframes and prototypes of the website's user interface (UI) and user experience (UX). Collaborate with UI/UX designers to ensure the website is visually appealing, intuitive, and easy to navigate. Incorporate feedback from farmers and stakeholders to refine the design and prototype.

### **Development:**

Break down the project into smaller modules or components for efficient development. Follow an iterative development approach, building and testing each module before integrating them into a cohesive website. Implement responsive design techniques to ensure the website is accessible and functional on various devices. Use secure coding practices and implement necessary measures to protect user data.

### **Content Creation:**

Gather relevant and accurate information on harvesting techniques, pesticides, fertilizers, machinery, government rules, and acts related to agriculture. Collaborate with subject matter experts to ensure the content is comprehensive, reliable, and up-to-date. Organize the content into easily understandable and navigable sections for users.

### **Integration and Testing:**

Integrate the developed modules and components into a functional website. Conduct thorough testing to identify and resolve any bugs, usability issues, or performance bottlenecks. Perform compatibility testing across different browsers, devices, and screen resolutions. Validate the accuracy and reliability of the information provided on the website.

### **Deployment and Maintenance:**

Deploy the "Farming Help" website on a reliable hosting platform. Monitor the website's performance and user feedback after deployment. Regularly update the content, keeping it current and in line with the latest agriculture practices and government regulations. Address any issues, bugs, or user suggestions promptly through regular maintenance and updates.

### **User Training and Support:**

Develop user manuals, tutorials, or videos to guide farmers on effectively using the website. Offer responsive customer support channels, such as email, chat, or helpline, to address user queries and issues. Continuously gather user feedback to improve the website's usability and functionality.

### **Evaluation and Documentation:**

Conduct a comprehensive evaluation of the "Farming Help" website's performance, usability, and impact on farmers. Collect feedback from users, stakeholders, and subject matter experts to assess the effectiveness of the website. Document the entire development process, including methodologies, challenges faced, lessons learned, and recommendations for future enhancements.

By following these methodologies, you can ensure a systematic and efficient approach to developing the "Farming Help" website and documenting the final year project.

## CHAPTER 3

# **REQUIREMENT SPECIFICATION**

### **3.1 User Requirements:**

➤ **Step-by-Step Harvesting Guides:**

Users should be able to access detailed and easy-to-follow instructions on various crop harvesting techniques. The guides should include information on the optimal time for harvesting, tools required, and proper handling and storage methods.

➤ **Pesticide and Fertilizer Recommendations:**

Farmers need guidance on selecting the right pesticides and fertilizers for specific crops and conditions. The website should provide comprehensive information on recommended products, dosage, application methods, and safety precautions.

➤ **Machinery Information:**

Users should have access to a database of different farming machinery, including tractors, harvesters, and irrigation systems. The website should provide details on machinery specifications, usage guidelines, maintenance tips, and potential suppliers.

➤ **Government Rules and Acts:**

The website should offer the latest updates on government regulations, policies, and schemes related to agriculture. Users should be able to easily access information on subsidies, loan programs, and compliance requirements.

➤ **News and Updates:**

Users should receive timely updates on farming news, market trends, weather forecasts, and disease outbreaks. The website should provide relevant articles, blogs, or notifications to keep farmers informed and up to date.

### **3.2 Functional Requirements:**

➤ **User Registration and Profiles:**

Allow farmers to create user accounts and maintain personalized profiles. Users should be able to save their preferences, bookmark articles, and receive customized recommendations.

➤ **Search and Navigation:**

Provide a search function to quickly find specific information, such as crop names, machinery models, or government policies. Include intuitive navigation menus and categories for easy access to different sections of the website.

➤ **Content Management System (CMS):**

Implement a user-friendly CMS to manage and update the website's content efficiently. Enable authorized administrators to add, edit, and publish articles, guides, and news items.

➤ **Interactive Guides and Tutorials:**

Develop interactive and visually appealing step-by-step guides for harvesting techniques. Include images, videos, or animations to enhance user understanding and engagement.

➤ **Product Recommendations:**

Incorporate a recommendation engine to suggest suitable pesticides, fertilizers, and machinery based on user input and crop requirements. Provide detailed product descriptions, reviews, and links to trusted suppliers.

➤ **Notification and Alerts:**

Implement a system to send notifications or alerts to users regarding important updates, new articles, or upcoming deadlines. Users should have the option to customize their notification preferences.

### **3.3 Non-functional Requirements:**

➤ **Performance and Scalability:**

The website should load quickly and handle a large number of concurrent users without significant performance degradation. Ensure scalability to accommodate future growth in users and content.

➤ **Usability and Accessibility:**

Design the website with a user-friendly interface and intuitive navigation. Ensure accessibility for users with disabilities by following WCAG (Web Content Accessibility Guidelines) standards.

➤ **Security and Privacy:**

Implement robust security measures to protect user data and prevent unauthorized access. Comply with data privacy regulations and provide clear information on data collection and usage.

➤ **Compatibility:**

The website should be compatible with popular web browsers (e.g., Chrome, Firefox, Safari) and responsive across different devices (desktop, mobile, tablets).

➤ **Reliability and Availability:**

Ensure high uptime and availability of the website to allow users to access information at any time. Implement

## **CHAPTER 4**

### **FEASIBILITY STUDY**

## **4. FEASIBILITY STUDY**

This feasibility study explores the practicality and benefits of creating a farming help documentation system. It aims to determine if such a system is feasible and valuable for providing assistance and support to farmers. The study assesses the advantages, costs, and challenges associated with implementing the documentation system, helping decision-makers evaluate its potential impact and viability. By understanding the needs of farmers and evaluating the potential benefits, decision-makers can determine the viability and potential impact of establishing a comprehensive documentation system to assist farmers in their daily operations and address common challenges they face.

### **4.1 Technical Feasibility:**

Assess the technical aspects of developing and maintaining the "Farming Help" website. Evaluate the availability of suitable technologies, frameworks, and tools for website development. Consider the compatibility of the chosen technology stack with the desired features and scalability requirements. Ensure the availability of skilled developers and resources to handle the technical implementation.

### **4.2 Operational Feasibility:**

Determine the practicality and effectiveness of implementing and operating the "Farming Help" website. Identify the operational processes, resources, and expertise required to maintain the website's content and features. Assess the willingness and capacity of stakeholders to actively participate and contribute to the website's success. Evaluate the potential impact of the website on the existing farming support ecosystem and the ease of integrating with relevant stakeholders.

### **4.3 Economic Feasibility:**

Evaluate the financial viability of the "Farming Help" website project. Estimate the initial development costs, including infrastructure, software licenses, and hiring or outsourcing expenses. Consider the potential revenue streams, such as advertisements, subscriptions, or partnerships, to ensure long-term sustainability. Conduct a cost-benefit analysis to determine if the project's benefits outweigh the associated costs.

#### **4.4 Legal and Regulatory Feasibility:**

Assess the legal and regulatory implications associated with the "Farming Help" website. Ensure compliance with data privacy regulations and obtain necessary permissions for using copyrighted content or third-party data. Understand the legal obligations and responsibilities related to providing information on pesticides, fertilizers, and government rules. Evaluate any potential legal risks and seek legal advice to mitigate them effectively.

#### **4.5 Schedule Feasibility:**

Determine the timeline and feasibility of completing the "Farming Help" website project within the allocated timeframe. Identify any potential constraints, such as dependencies on external factors or limited availability of resources. Develop a realistic project plan with clear milestones and deliverables to ensure timely completion.

#### **4.6 Social and Environmental Feasibility:**

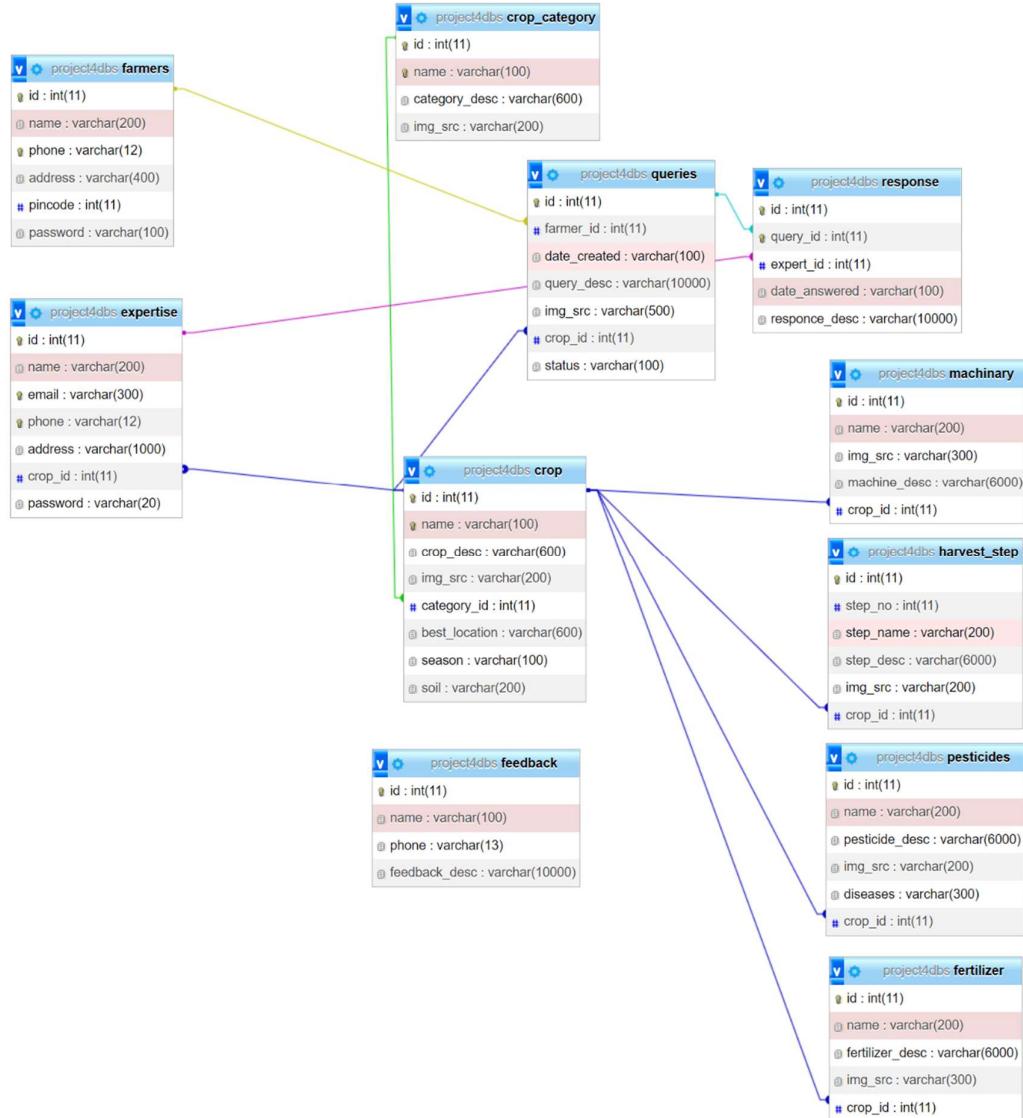
Evaluate the social and environmental impact of the "Farming Help" website. Assess how the website can contribute to sustainable farming practices, environmental conservation, or social welfare initiatives. Consider any potential negative effects or unintended consequences and develop strategies to mitigate them.

Allow users Overall, the project aims to improve Farmers farming operations, make them more profitable and sustainable, and enhance their livelihoods.

# CHAPTER 5

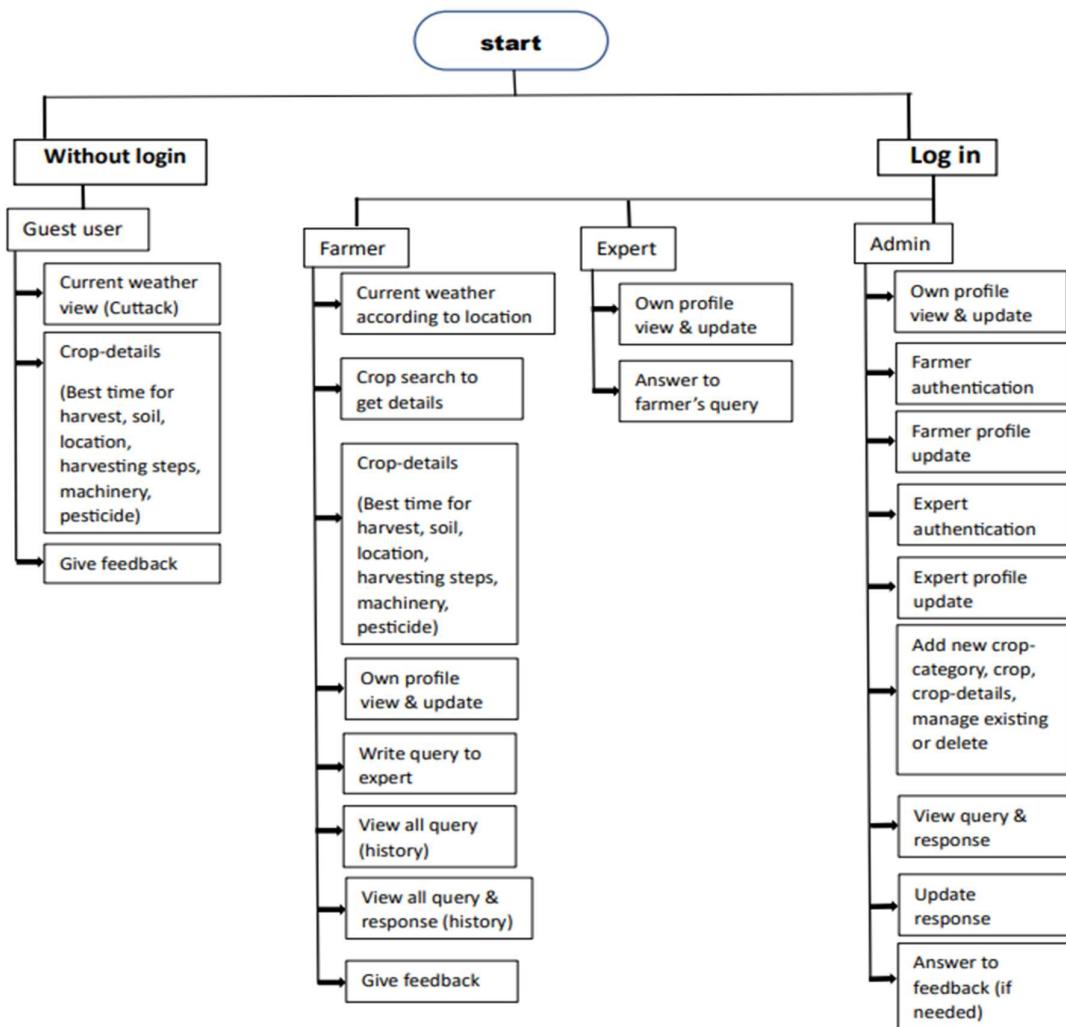
## DESIGN

## 5.1 ER Diagram:



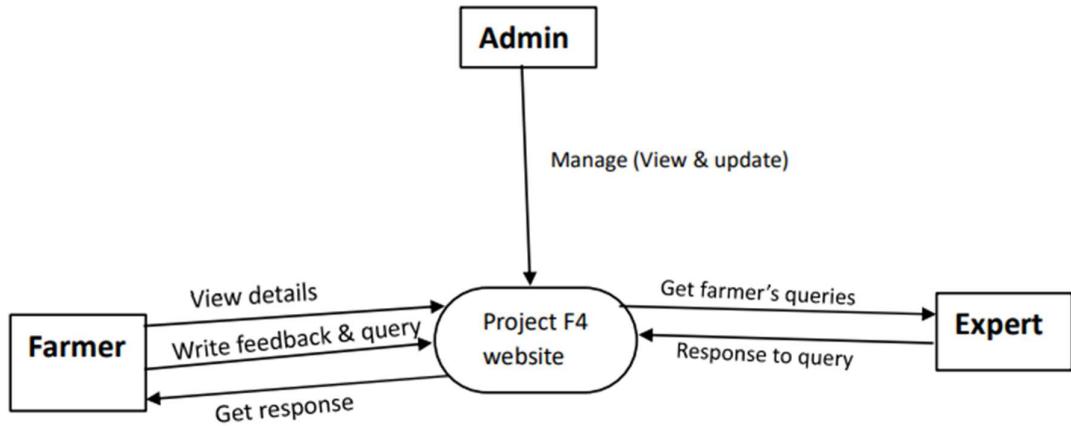
[ Project F4 ER diagram]

## 5.2 Sequence Diagram:

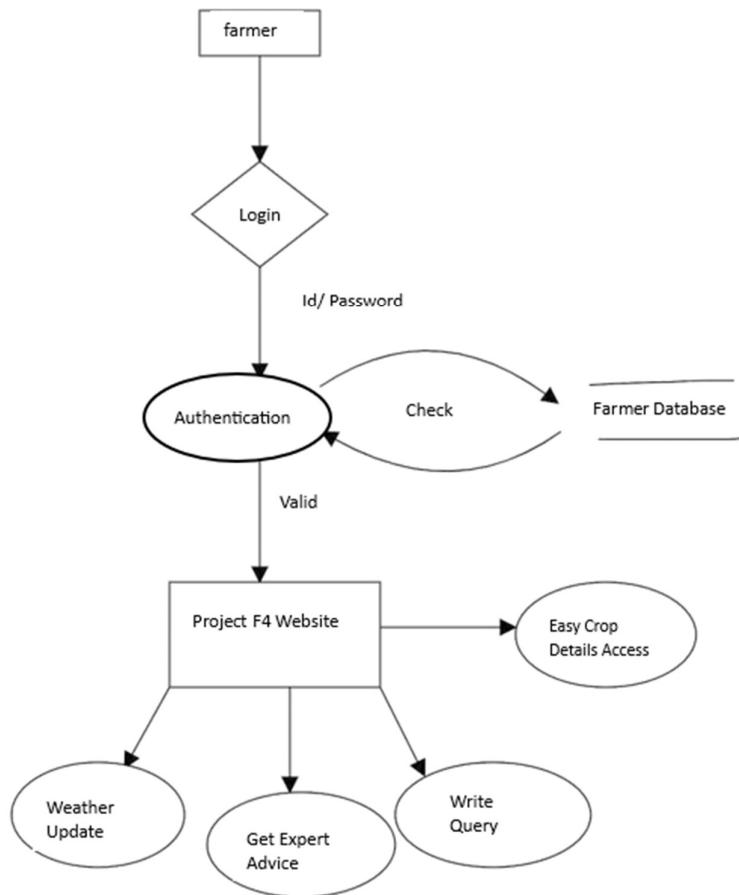


[ Project F4 Sequence diagram]

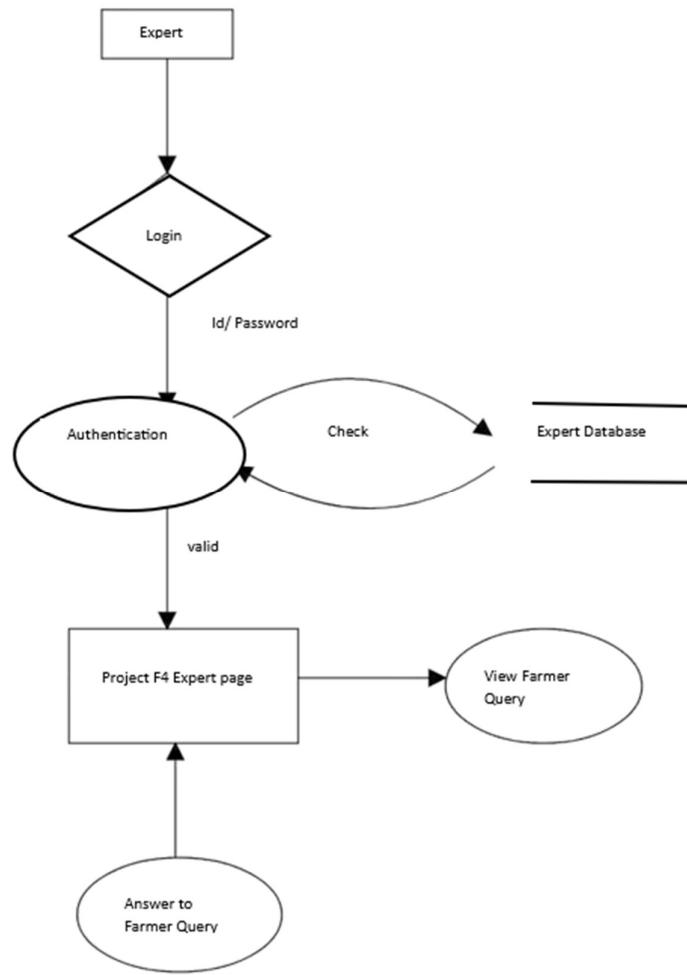
### 5.3 Data Flow Diagram:



[Project F4 DFD Level 0 diagram]



[Project F4 DFD Level 1: farmer diagram]



[Project F4 DFD Level 1: expert diagram]

## 5.4 CLASS DIAGRAM:

### Table of contents

- 1 crop
- 2 crop\_category
- 3 expertise
- 4 farmers
- 5 feedback
- 6 fertilizer
- 7 harvest\_step
- 8 machinairy
- 9 pesticides
- 10 queries
- 11 response
- 12 Relational schema

### 1 crop

Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
name	varchar(100)		No			
crop_desc	varchar(600)		No			
img_src	varchar(200)		No			
category_id	int(11)		No		-> crop_category.id ON UPDATE CASCADE ON DELETE RESTRICT	
best_location	varchar(600)		No			
season	varchar(100)		No			
soil	varchar(200)		No			

### 2 crop\_category

Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
name	varchar(100)		No			
category_des	varchar(600)		No			
img_src	varchar(200)		No			

### 3 expertise

Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
name	varchar(200)		No			
email	varchar(300)		No			
phone	varchar(12)		No			
address	varchar(1000)		No			
crop_id	int(11)		No		-> crop.id ON UPDATE CASCADE ON DELETE RESTRICT	
password	varchar(20)		No			

### 4 farmers

Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
name	varchar(200)		No			
phone	varchar(12)		No			
address	varchar(400)		No			
pincode	int(11)		No			
password	varchar(100)		No			

### 5 feedback

Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
name	varchar(100)		No			
phone	varchar(13)		No			
feedback_des	varchar(1000)		No			

## 6 fertilizer

Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
name	varchar(200)		No			
fertilizer_desc	varchar(600)		No			
img_src	varchar(300)		No			
crop_id	int(11)		No			-> crop.id ON UPDATE CASCADE ON DELETE RESTRICT

## 7 harvest\_step

Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
step_no	int(11)		No			
step_name	varchar(200)		No			
step_desc	varchar(600)		No			
img_src	varchar(200)		No			
crop_id	int(11)		No			-> crop.id ON UPDATE CASCADE ON DELETE RESTRICT

## 8 machinery

Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
name	varchar(200)		No			
img_src	varchar(300)		No			
+-----+-----+-----+-----+-----+-----+-----+						
Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
name	varchar(200)		No			
pesticide_desc	varchar(600)		No			
img_src	varchar(200)		No			

## 9 pesticides

)						
crop_id	int(11)		No			-> crop.id ON UPDATE CASCADE ON DELETE RESTRICT

## 10 queries

Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
farmer_id	int(11)		No			-> farmers.id ON UPDATE CASCADE ON DELETE RESTRICT
date_create_d	varchar(100 )		No			
query_desc	varchar(100 00)		No			
img_src	varchar(500 )		Yes	NULL		
crop_id	int(11)		No			-> crop.id ON UPDATE CASCADE ON DELETE RESTRICT
status	varchar(100 )		No	open		

## 11 response

Column	Type	Attributes	Null	Default	Extra	Links to
id	int(11)		No		auto_increment	
query_id	int(11)		No			-> queries.id ON UPDATE CASCADE ON DELETE RESTRICT
expert_id	int(11)		No			-> expertise.id ON UPDATE CASCADE ON DELETE RESTRICT
date_answered	varchar(100 )		No			
responce_desc	varchar(100 00)		No			

# **CHAPTER 6**

## **CODING**

## CHAPTER 7

# TESTING

## **7. TESTING**

Testing can be divided into two categories: black box testing and white box testing. Here's an overview of how you can approach testing your "Farming Help" website using both black box and white box testing techniques:

### **7.1 Black Box Testing:**

Black box testing focuses on testing the functionality of the system without considering its internal structure or implementation details. It aims to validate the inputs and outputs of the system. Here are some black box testing techniques you can use:

- User Interface Testing:**

Verify that the user interface is intuitive, easy to navigate, and visually appealing. Test the user interface elements, such as buttons, forms, and menus, to ensure they function correctly and provide the expected user experience.

- Functional Testing:**

Test each functional requirement of the website independently. This includes verifying that the step-by-step harvesting guides, pesticide and fertilizer recommendations, machinery information, and government updates are accurate and accessible to users.

- Usability Testing:**

Engage representative users to evaluate the website's usability. Have them perform tasks related to harvesting, pesticide selection, and machinery usage while observing their interactions and collecting feedback on the user-friendliness and effectiveness of the website.

- Compatibility Testing:**

Test the website on different browsers, devices, and operating systems to ensure it works correctly across various platforms. Verify that the content is displayed consistently and that all functionalities are fully supported.

### **7.2 White Box Testing:**

White box testing involves examining the internal structure and implementation of the system. It focuses on testing the system's internal logic, code coverage, and performance. Here are some white box testing techniques you can use:

- Code Review:**

Perform a detailed review of the website's source code to identify any potential issues such as logic errors, inefficient code, or security vulnerabilities. Ensure that coding standards and best practices are followed.

- **Unit Testing:**

Write and execute unit tests to verify the correctness of individual components or modules of the website. Test each function, method, or class in isolation to ensure they produce the expected output and handle various inputs correctly.

- **Performance Testing:**

Measure and evaluate the website's performance under different scenarios, such as high traffic or heavy load. Identify and resolve any bottlenecks, latency issues, or resource constraints that may affect the website's responsiveness and scalability.

- **Security Testing:**

Conduct security testing to identify and address vulnerabilities. Test for common security risks such as cross-site scripting (XSS), SQL injection, and authentication flaws. Implement measures to protect user data and ensure secure communication.

By combining black box and white box testing techniques, you can thoroughly evaluate the functionality, usability, and internal quality of your "Farming Help" website, ensuring that it meets user requirements, performs as expected, and adheres to best practices.

## CHAPTER 8

# USER INTERFACE DESIGN

➤ **Design Principles:**

Outline the guiding design principles that influenced the UI design decisions.

Explain the rationale behind the chosen colour scheme, typography, layout, and visual elements.

Highlight any specific user experience (UX) considerations that influenced the design.

Detail any additional navigation features, such as breadcrumbs or search functionality.

➤ **Navigation:**

The navigation should be clear and easily accessible, allowing users to quickly find the information they need. Consider using a hierarchical structure, such as a menu or sidebar, to organize different sections and topics.

➤ **Layout and Organization:**

Describe how the content is organized within the UI, emphasizing the use of headings, sections, and subheadings.

Explain the hierarchy of information, including the visual distinction between headings, subheadings, and body text.

Discuss any grid systems, columns, or responsive design principles used to ensure a consistent layout across devices.

➤ **Visual Elements:**

Document the use of visual elements such as icons, buttons, and forms.

Explain the purpose and functionality of each visual element, detailing any interactive features.

Provide examples or screenshots to illustrate how these visual elements appear in the UI.

➤ **Typography:**

Specify the chosen fonts, font sizes, and font weights used in the UI design.

Explain any typographic hierarchy implemented to differentiate between headings, subheadings, and body text.

Discuss considerations made for readability, legibility, and accessibility.

➤ **Interaction and Feedback:**

Describe how users interact with the UI, including actions they can perform and the corresponding feedback they receive.

Explain any animations, transitions, or micro interactions used to enhance the user experience.

Document any error messages, alerts, or notifications that users may encounter during their

interactions.

➤ **Accessibility Considerations:**

Highlight any accessibility features incorporated into the UI design, such as support for screen readers, colour contrast, and keyboard navigation.

Explain how the UI design ensures inclusivity and compliance with accessibility standards.

➤ **Future Improvements:**

Discuss any potential enhancements or future iterations planned for the UI design.

Encourage users to provide feedback or suggestions for improving the UI design.

➤ **Search Functionality:**

Implement a search feature that enables users to search for specific terms or keywords within the documentation. Display the search results in a clear and structured manner, highlighting the most relevant information.

➤ **Interactive Elements:**

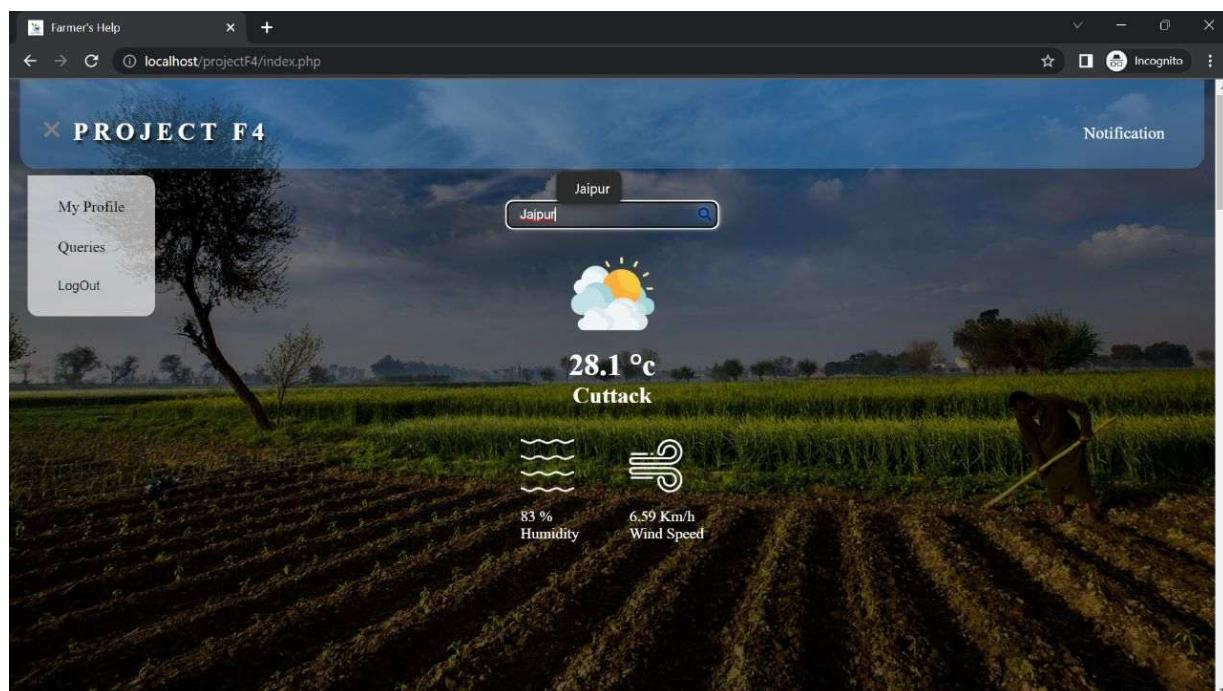
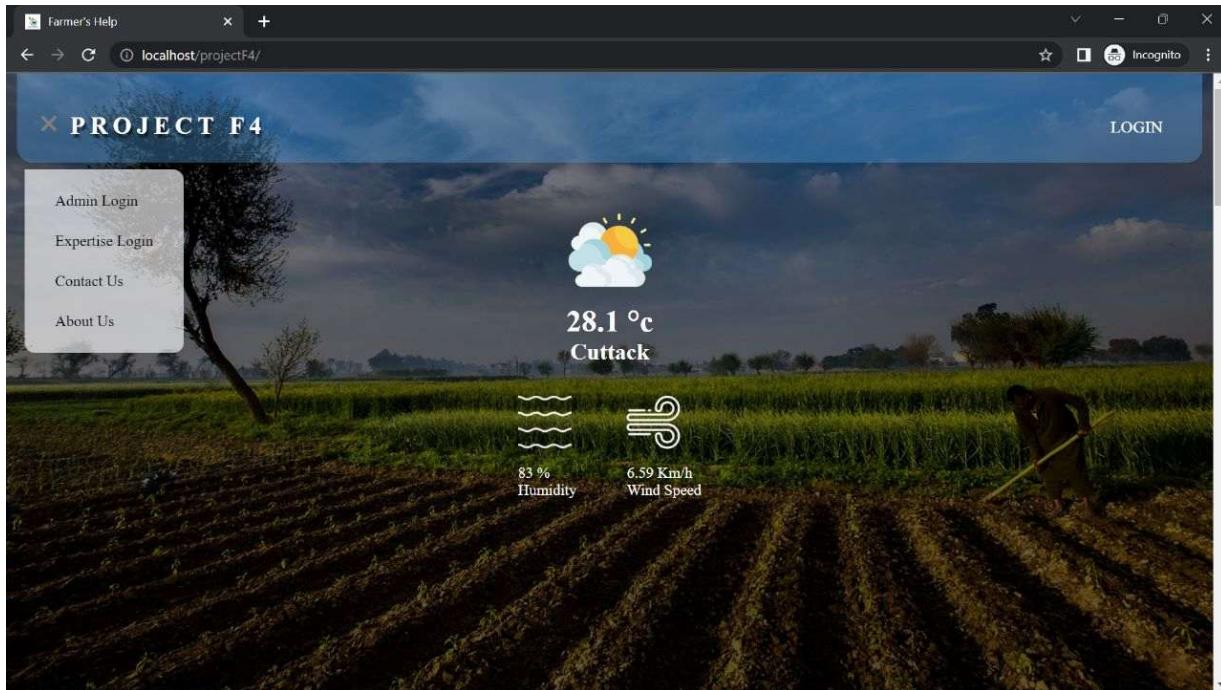
Incorporate interactive elements where appropriate to enhance user engagement. This could include buttons, collapsible sections, tabs, or tooltips that provide additional information or explanations.

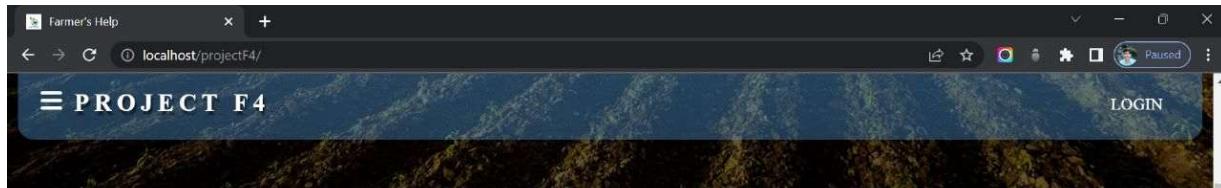
➤ **Accessibility:**

Design the interface with accessibility in mind to accommodate users with disabilities. This includes providing alternative text for images, using appropriate colour contrasts, and ensuring keyboard navigation is possible.

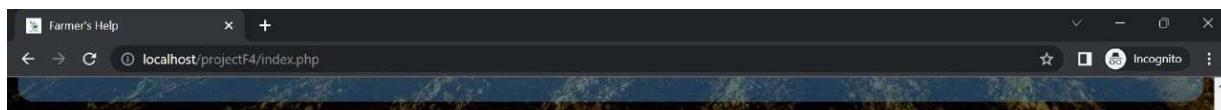
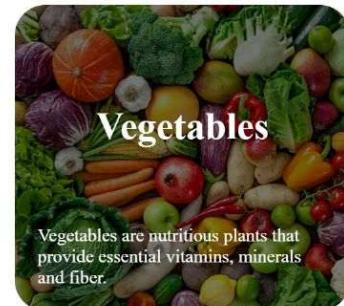
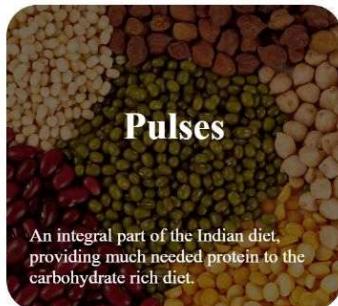
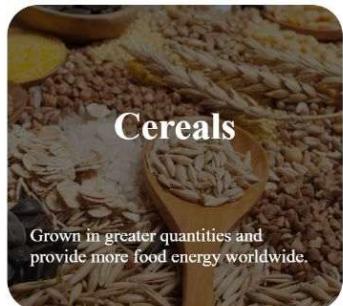
## **CHAPTER 9**

### **SAMPLE SCREENSHOTS**

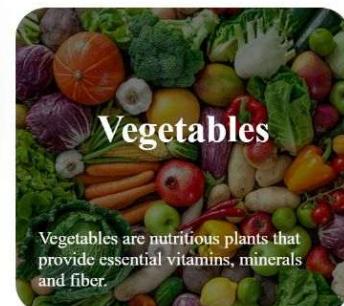
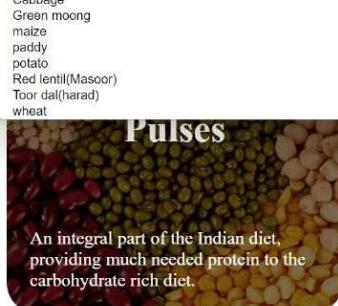
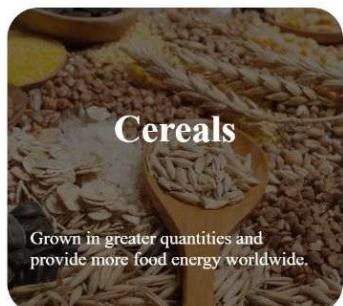




## CROP PRACTICES



## CROP PRACTICES



## Get expert advice for your farm

- ✓ Get personalized insights from our team of experts
- ✓ Learn new techniques to improve your yield and quality
- ✓ Get easy step and your problem will be vanished.
- ✓ Know more efficient way of farming.
- ✓ Stay updated with the latest farming news and trends

Need help? Write your problem. We will help YOU 🌻.



Farmer Login / Sign up page

localhost/projectF4/farmer-loginPage.php

Incognito



## Login Form

Phone number

password

**LOGIN**

Not registered? Click On [Register](#) / [Cancel](#).

Farmer Login / Sign up page

localhost/projectF4/farmer-loginPage.php

Incognito



## Resister Form

name

Phone

Address

Pincode

password

**REGISTER**

Already registered? Click On [Login](#) / [Cancel](#).



**PADDY**

BASIC	FERTILIZER & PESTICIDE	MACHINERY
Crop Name	Paddy	
Crop Description	Paddy Also Called Rice Paddy, Small Level, Flooded Field Used To Cultivate Rice In Southern & Eastern Asia.	
Best Locations For Harvesting	Cuttack, Khurda, Sambalpur, Bargarh, Kendrapara, Balasore, Jagatsinghpur, Ganjam, Puri, Nayagarh	
Best Season For Harvesting	Rainy And Summer Season	
Best Soil For Harvesting	Loamy Soil	



Land preparation involves several activities that create the optimal growing conditions for paddy crops. The first step in land preparation is clearing the land of any weeds, debris, and rocks. This is typically done manually or using mechanical tools like tractors, depending on the size of the field. After clearing the land, the soil is plowed to a depth of about 15-20 cm to break up hard soil and turn it over to expose the nutrients below. Plowing also helps to loosen the soil, making it easier for the paddy roots to penetrate the soil and take up nutrients. The soil is then leveled to create an even surface, which is crucial for irrigation and preventing waterlogging in low-lying areas. In addition to plowing and leveling, adding organic matter is another crucial step in land preparation. Organic matter such as compost, green manure, or animal manure can be added to the soil to improve soil fertility, water retention, and aeration. Organic matter also enhances the soil's ability to hold nutrients and resist erosion.

## Step-2 : Transplanting The Paddy Seedlings



Transplanting of paddy seedlings involves preparing a seedbed, sowing paddy seeds, germinating the seedlings, uprooting them, and transplanting them to the main field. The seedlings are planted in rows with sufficient spacing, watered immediately, and maintained throughout the growing season. This process is labor-intensive but can result in higher yields and better plant health compared to direct seeding in certain areas.

## Step-3 : Maintenance Of The Field



Maintenance of the paddy field is a critical step in rice cultivation that can significantly impact the overall success of the crop. Proper management of water supply, nutrient levels, pests, diseases, and weeds can all contribute to higher crop yields and better quality rice. For example, inadequate water management can result in waterlogging or drought stress, which can stunt plant growth and reduce yields. Similarly, failure to control weeds or pests can lead to competition for resources and further reduce yields. Proper maintenance of the paddy field not only ensures a successful harvest but also contributes to food security and supports rural livelihoods in many parts of the world. In short, the careful management of the paddy field can have a significant impact on both agricultural productivity and human well-being.

## Step-4 : Harvesting



Paddy cultivation is a complex process that involves several stages, including planting, nurturing, and harvesting the rice crop. Harvesting is the process of collecting mature rice plants from the field and preparing them for further processing. This involves cutting the mature plants, bundling and drying them, threshing to separate the grains from the rest of the plant material, winnowing to separate the grains from the chaff, and cleaning and storing the grains. The timing of the harvesting process is critical to ensure maximum yield, and careful execution and storage are necessary to prevent spoilage and insect infestation. Overall, harvesting is an important step in paddy cultivation that requires attention to detail and careful planning to ensure a successful crop.

Go Back

**PADDY**

FERTILIZER & PESTICIDE

MACHINERY

**Fertilizers**

**Ammonium Sulfates**



**Nitrogen (N)**



**Phosphorous (P) Fertilizer**



**Potassium (K) Fertilizer**



**Pesticides**

**Chlorpyrifos**



**Disease : Aphids, leafhoppers, and rice stem borers.**

This is a broad-spectrum insecticide that is used to control a wide range of pests such as aphids, leafhoppers, and rice stem borers.

**Glyphosate**



**Disease : weeds**

This is a broad-spectrum herbicide that is used to control weeds in paddy fields.

**Carbofuran**



**Disease : Rice root aphids, planthoppers, and stem borers.**

This is also an insecticide that is used to control pests such as rice root aphids, planthoppers, and stem borers.

**Propiconazole**



**Disease : Fungal diseases such as rice blast and sheath blight.**

This is a fungicide that is used to control fungal diseases such as rice blast and sheath blight.



## Machinery

### Tractor



A tractor is used for plowing, leveling, and land preparation. It is also used for transporting various equipment and materials needed in paddy cultivation.

### Power Tiller:



A power tiller is a smaller version of a tractor, used for plowing, tilling, and leveling small plots of land. It is usually operated manually.

### Rice Transplanter



A rice transplanter is used for transplanting rice seedlings into the field. It can plant up to 6 rows of seedlings at a time and can cover a larger area in a shorter period compared to manual transplanting.

### Combine Harvester



A combine harvester is a machine that is used for harvesting rice. It can cut, thresh, and clean the rice grains in one process. It saves time and labor and is a more efficient method of harvesting compared to manual harvesting.

### Threshing Machine



A threshing machine is used to separate the rice grains from the husk. It is usually powered by an engine or a tractor and can thresh large quantities of rice in a short period.

Admin Control Page - Project F4   Expertise page - project F4   localhost / 127.0.0.1 / project4db

localhost/projectF4/expertise.php

Paused

## Hello Expert

- QUERIES
- PROFILE
- LOGOUT

query desc	query Image	Answer Here
What is the range of height over rice field in which the pests are most dense to move?		<a href="#">Answered</a>
Is there a standard procedure for obtaining composite soil samples from rice fields?		<a href="#">Answer Here</a>
If we had enough water(rain or other source)Can we grow rice by directly seeding in dry soil (without growing seedlings in mud) like wheat?		<a href="#">Answer Here</a>

### Work and Responsibilities of a Farming Expert

- Provide agricultural advice:**  
A farming expert on your website should offer expert advice on various aspects of farming, such as crop selection, planting techniques, irrigation methods, pest and disease control, soil management, and fertilization practices.
- Answer farmer queries:**  
The farming expert should be responsible for addressing farmer queries and concerns promptly. This can be done through a dedicated Q&A section on your website, email correspondence, or live chat support.
- Offer guidance on best practices:**  
The expert should educate farmers on modern and sustainable farming practices, including the use of organic methods, efficient water management, crop rotation, integrated pest management, and other environmentally friendly techniques.
- Conduct farm assessments:**  
The farming expert can provide farm assessments and evaluations, either remotely or through farm visits, to identify specific challenges, offer tailored solutions, and suggest improvements for increased productivity and profitability.
- Share market insights:**

Expertise page - project F4   +

localhost/projectF4/expertise.php

Paused

## Hello Expert

- QUERIES
- PROFILE
- LOGOUT

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- Share market insights:**  
The expert should keep farmers updated with the latest market trends, pricing information, and consumer demands for various agricultural products. This helps farmers make informed decisions about crop selection and market opportunities.
- Recommend suitable machinery and equipment:**  
Based on the specific needs of farmers, the expert can recommend appropriate machinery, tools, and equipment for different farming operations. This includes guidance on selecting tractors, harvesters, irrigation systems, and other essential tools.
- Assist with agricultural technology adoption:**  
As technology plays a vital role in modern farming, the expert can provide guidance on adopting and utilizing agricultural technologies, such as precision farming, data analytics, remote sensing, and farm management software.

Admin Control Page - Project F4

localhost/projectF4/adminPage.php

### Hello Admin

Add More

id	name	crop_desc	img_src	category_id	best_location	season	soil	Actions
1	paddy	Paddy also called rice paddy, small level, flooded field used to cultivate rice in southern & eastern Asia.	/imgs/paddy-bg.webp	1	cuttack, khurda, sambalpur, bargarh, kendrapara, balasore, jagatsinghpur, ganjam, puri, nayagarh	rainy and summer season	loamy soil	<a href="#">Delete</a>   <a href="#">Update</a>
2	wheat	wheat is a grass widely cultivated for its seed, a cereal grain that is a worldwide staple food.	/imgs/wheat-bg.webp	1	cuttack, puri, khurda, sundargarh, keonjhar	winter	loamy soil, clay loam soil, sandy loam soil, alluvial soil	<a href="#">Delete</a>   <a href="#">Update</a>
3	maize	Maize also known as Corn & Queen of cereals because it has highest genetic yield potential among the	/imgs/maize-bg.webp	1	Mayurbhanj, koraput, balasore, sundargarh, ganjam, Kalahandi, rayagada, sambalpur	monsoon	red soil, laterite soil, sandy loam soil, alluvial soil	<a href="#">Delete</a>   <a href="#">Update</a>

Inserting New Record - project F4

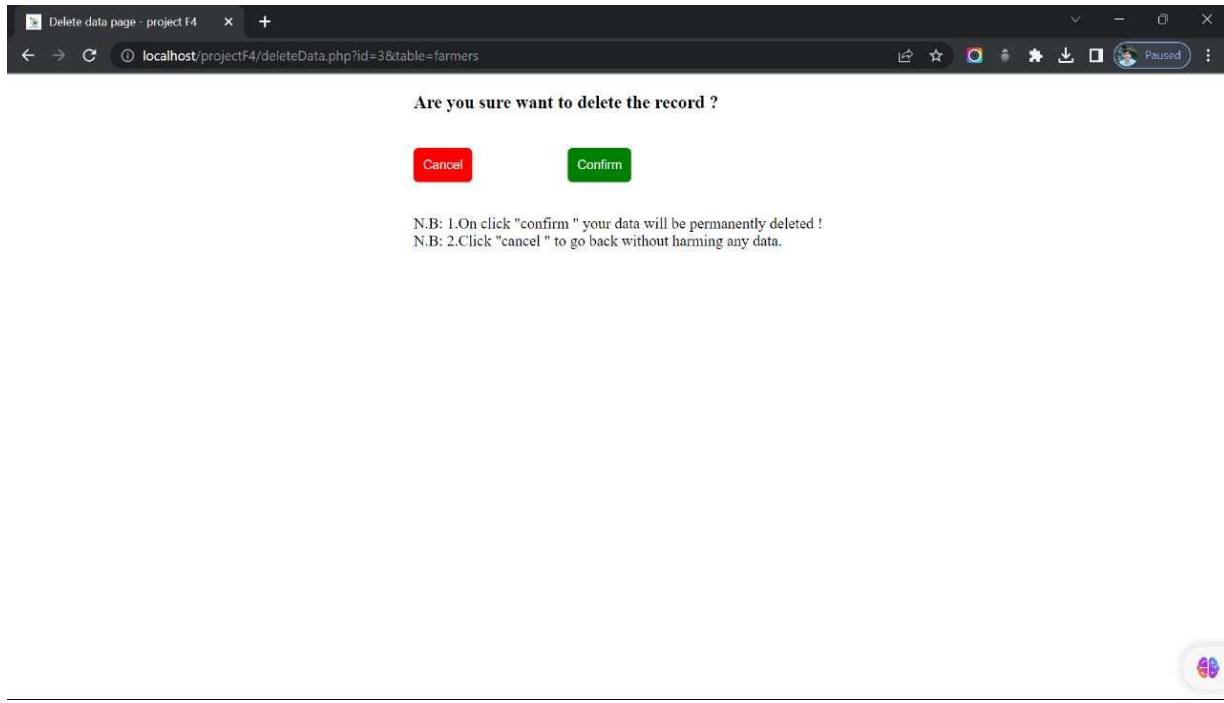
localhost/projectF4/insertData.php?table=crop

### crop

<b>name</b>	
<b>crop_desc</b>	
<b>img_src</b>	<input type="file"/> Choose File No file chosen
<b>category_id</b>	Select Crop-category
<b>best_location</b>	
<b>season</b>	
<b>soil</b>	

CROP-INSERT

Go Back



A screenshot of a web browser window titled "Admin Cotrol Page - Project F4". The URL is "localhost/projectF4/adminPage.php". The page features a sidebar on the left with a "Hello Admin" greeting and a list of tables: FARMERS, EXPERTISE, CROP CATEGORY, CROP, HARVESTING STEPS, PESTICIDES, FERTILIZER, MACHINARY, QUERIES, RESPONSE, FEEDBACK, and LOGOUT. The main content area has a section titled "Job Description: Website Administrator" and a sub-section titled "Responsibilities:" with a numbered list from I to VII. It also includes a section titled "How to perform these tasks:" with a bulleted list of instructions. A small circular progress bar icon is visible in the bottom right corner of the main content area.

**Job Description: Website Administrator**

**Responsibilities:**

- I. Managing user accounts and permissions
- II. Maintaining website security and protecting against threats
- III. Creating and managing website content
- IV. Managing payment processing and transactions
- V. Managing website community interactions and promoting positive engagement
- VI. Ensuring legal compliance with relevant regulations
- VII. Providing training and support to team members or volunteers

**How to perform these tasks:**

- To manage user accounts and permissions, go to the "User Accounts" page and use the provided tools to add, edit, or remove accounts as needed.
- To maintain website security, regularly update security protocols and guidelines, and use tools such as firewalls or malware scanners to protect against threats.
- To create and manage website content, use the content management system (CMS) provided on the site. Add new pages, posts, or products as needed, and edit or delete existing content as necessary.
- To manage payment processing, use the payment gateway provided on the site and ensure that transactions are securely processed and secured.

Date Posted : 21-05-2023

Query : What Is The Range Of Height Over Rice Field In Which The Pests Are Most Dense To Move?

Answer:

Most insects live in the paddy field to collect or eat their food. Some insects such as caterpillars eat leaves. The lady bug and grasshopper used to buzz when there is flower and initial state of rice on the paddy plants. Generally, the paddy plants' heights are on average 1 m to 2 m depending on the classes of paddy. Thus, most insects will move around 0.7 m to 2 m.

[Submit Answer](#) [Cancel](#)

Display Query and Answer - farm

localhost/projectF4/farmerQueryView.php

Gmail YouTube Maps Translate New chat Find icons with the...

Hello chandan ,

### Your Queries

Query	Answer	Action
What is the range of height over rice field in which the pests are most dense to move?	Most insects live in the paddy field to collect or eat their foods. Some insects such as, caterpillar eats leaves. The lady bug and grasshopper used to buzz when their is flower and initial state of rice on the paddy plants. Generally, the paddy plants heights are on average 1 m to 2 m depending on the classes of paddy. Thus, most insects will move around 0.7 m to 2 m.	Already Answered
Is there a standard procedure for obtaining composite soil samples from rice fields?	Not answered	Withdraw
If we had enough water (rain or other source) Can we grow rice by directly seeding in dry soil (without growing seedlings in mud) like wheat?	Not answered	Withdraw

[Go Back](#)

Admin Cotrol Page - Project F4   Farmer's Help

localhost/projectF4/adminPage.php

Hello Admin

Add More

+

TABLES ↴

FARMERS

EXPERTISE

CROP CATEGORY

CROP

HARVESTING STEPS

PESTICIDES

FERTILIZER

MACHINARY

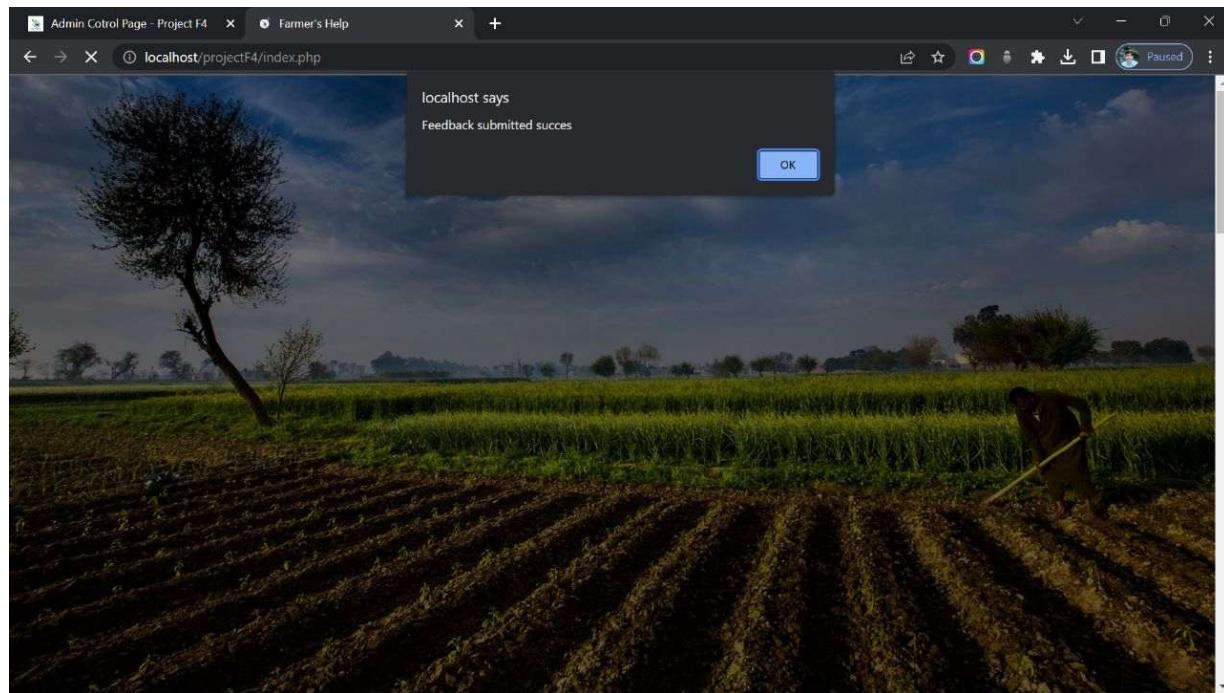
QUERIES

RESPONSE

**FEEDBACK**

LOGOUT

ID	name	phone	feedback_desc	Actions
5	John Doe	123-456-7890	The website is very helpful for farmers.	<a href="#">Delete</a>   <a href="#">Update</a>
6	Jane Smith	Jane Smith	I would like more information on organic farming.	<a href="#">Delete</a>   <a href="#">Update</a>
7	Sarah Brown	999-888-7777	The step-by-step harvesting guide was great.	<a href="#">Delete</a>   <a href="#">Update</a>
8	Sarah Lee	999-888-7777	The website layout is user-friendly and easy to navigate.	<a href="#">Delete</a>   <a href="#">Update</a>
9	Lisa Davis	444-555-6666	I have a suggestion to include a forum for farmers to share their experiences.	<a href="#">Delete</a>   <a href="#">Update</a>



Notification For Farmer - Project X +

localhost/projectF4/Notification.php

Hello Farmers ! Get All the update form Odisha Government about Farming from our website free and usefull.

SR. NO.	TITLE	NOTIFICATION NO.	DETAILS/DOWNLOAD
1	Appointment of 34 no. of AHO (Group-B) in the year 2022	24322	<a href="#">Download(1.32 MB)</a>
2	Contractual engagement of retired employees as Legal Consultant in the Department of Agriculture & FE.	23225	<a href="#">Download(583.45 KB)</a>
3	Amendment the Odisha Horticulture Service(Method of Recruitment and Conditions of Service)Rules, 2014(No.24713 dt.10.12.2021)	24713	<a href="#">Download(1.02 MB)</a>
4	Notification- Promotion to the rank of Assistant Director, Soil Conservation (GroupA, Junior Grade)	5652	<a href="#">Download(476.59 KB)</a>
5	Corrigendum notice on EoI towards empanelment of agencies for Documentation and Preparation of Video CDs at State level		<a href="#">Download(1.73 MB)</a>
6	Corrigendum of EOI for engagement of agency for comprehensive action plan under Crop Diversification		<a href="#">Download(414.9 KB)</a>

## **10.CONCLUSION:**

In conclusion, the farmer project aims to improve agricultural practices and increase productivity for farmers. Through the implementation of modern technologies, such as precision farming techniques, IoT devices, and data analytics, the project seeks to optimize resource utilization, reduce costs, and enhance crop yields. By providing farmers with real-time information on weather condition, best steps for cultivation and pest infestations, the project empowers them to make informed decisions and take timely action. Overall, the project's objective is to support farmers in achieving economic prosperity and environmental sustainability in their agricultural operations.

### **10.1 Summary of the project:**

The farmer help project provides simple and practical information to assist farmers in their work. It covers various topics like crop cultivation, climate condition, pest control, irrigation techniques, machinery, and notify the government rules and regulation.

For crops, it provides guidance on planting, fertilization, weed control, and harvesting. It shows the different climate condition according to their cities. Pest control information helps farmers identify and manage pests and diseases affecting crops and animals.

It provides irrigation techniques to optimize water usage and minimize waste. The machinery offers instructions and safety guidelines for using and maintaining farm equipment.

Overall, the project aims to support farmers by providing practical advice and knowledge to improve their farming practices and enhance their profitability and sustainability.

### **10.2 Future Work:**

In the "Future Work" section of your project documentation, you can outline potential enhancements or additions that can be implemented in the future to further improve the functionality and user experience of the "Farming Help" website. Here are some ideas for future work content:

#### **Dealer User Role:**

Introduce a new user role called "Dealer" to the website. Dealers can register and provide farmers with access to high-quality seeds, fertilizers, machinery, and other farming supplies. Describe how the dealer user role will be implemented, including registration, verification, and management functionalities.

#### **Market Information:**

Expand the website's features to include market information and prices for agricultural products. This will help farmers make informed decisions about selling their produce and enable them to connect with potential buyers or markets.

**News and Updates:**

Incorporate a dedicated section for news and updates related to agriculture, farming techniques, government schemes, and policies. Users, including farmers and dealers, can subscribe to receive regular updates and notifications on relevant topics.

**Mobile Application:**

Consider developing a mobile application for the "Farming Help" platform, making it accessible to users on their smartphones or tablets. The mobile app can provide a more convenient and user-friendly experience, allowing farmers to access information, receive notifications, and perform actions on the go.

**Localization and Multi-language Support:**

Consider adding support for multiple languages to cater to farmers from different regions. Additionally, provide localized content and information specific to different agricultural practices and crops prevalent in various areas.

**E-commerce Integration:**

Enable farmers and dealers to buy and sell agricultural products directly through the website. Implement an e-commerce platform or integrate with existing online marketplaces to facilitate seamless transactions within the farming community.

**User Feedback and Ratings:**

Implement a feedback mechanism where users can rate and provide reviews for various farming techniques, products, and services. This will help users make informed choices and foster a sense of trust and credibility within the community.

## **11. References:**

- ❖ AgriApp: Smart Farming App for Indian Agriculture,  
<https://play.google.com/store/apps/details?id=com.criyagen>
- ❖ <https://play.google.com/store/apps/details?id=com.criyagen>
- ❖ <https://play.google.com/store/apps/details?id=com.peat.GartenBak>
- ❖ <https://play.google.com/store/apps/details?id=com.globalagricentral1>
- ❖ Fundamentals Of Agronomy (book reference for crop details)  
Author by Ram Narayan Meena and Sunil Kumar.
- ❖ Crop science growth and development of crops(author by-Harold Salazar)
- ❖ <https://agri.odisha.gov.in/schemes-agriculture/agriculture>  
(Reference for latest news on agriculture )

## **12.APPENDIX:**

- This appendix provides a glossary of key terms used throughout the SRS document to ensure a common understanding of the terminology.
- Crop Rotation: The practice of systematically planting different crops in the same field over different seasons to improve soil health and reduce pests and diseases.
- Pest Management: The implementation of strategies to control and mitigate the impact of pests, including insects, weeds, and diseases, on crops.
- Irrigation: The process of applying controlled amounts of water to crops to support their growth and development.
- Soil pH: A measure of the acidity or alkalinity of the soil, which affects nutrient availability and plant growth.
- Harvesting: The process of gathering mature crops from the fields.
- The glossary provides definitions and explanations for terms such as crop rotation, pest management, irrigation, soil pH, and harvesting. Including a glossary in the appendix ensures that all stakeholders have a common understanding of the specific terminology used in the SRS document, which can help avoid confusion or misinterpretation of requirements.