

Karshak - Farmers Market Place : Revolutionizing Agriculture Trade For Farmer Prosperity and Good Food for Good Life

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Interaction, Online Marketplace, E-commerce, FairTrade, Agricultural Innovation.

Abstract—*Karshak-Farmers Market Place embodies a transformative vision, blending technological innovation with a steadfast commitment to farmer prosperity and the promotion of good food for a good life. Leveraging the power of Django, HTML, CSS, Bootstrap, JavaScript, and AJAX, this platform seeks to reshape the traditional agricultural marketplace, particularly in the context of India. By establishing a direct avenue for farmers to connect with consumers, Karshak-Market eliminates the reliance on intermediaries like brokers and dealers, ensuring fair prices and maximizing profits for farmers. Through an intuitive user interface and dynamic features driven by JavaScript and AJAX, the platform facilitates seamless access to high-quality, certified organic produce, promoting a healthier lifestyle and sustainable farming practices.*

Karshak-Market's mission, encapsulated in "Good Food for Good Life," underscores its dedication to enhancing well-being and environmental stewardship. Stringent certification processes uphold the authenticity of organic products, instilling confidence in consumers and driving demand for sustainable agriculture. Furthermore, Karshak-Market serves as a catalyst for empowerment within Indian agricultural communities. By providing farmers with access to valuable resources such as market insights, agricultural best practices, and financial assistance, the platform equips them to make informed decisions and thrive in their endeavors.

In summary, Karshak-Market epitomizes the transformative potential of technology in revolutionizing agricultural trade, ensuring prosperity for farmers and enriching lives through access to nutritious, organic food. As India's backbone, agriculture stands as a pivotal sector, and Karshak-Market's innovative approach holds promise in shaping a more sustainable and equitable food system for generations to come. Additionally, recognizing the importance of government support, this paper also introduces the concept of an Android-based mobile application aimed at providing timely and relevant information on various government schemes for farmers across India. By addressing the shortcomings of existing applications, such as outdated information and security risks, this initiative aims to further empower farmers and enhance their access to crucial support mechanisms.

Keywords— *Model Creation, Django, Python-based Web Framework, Django Library, Web Server, HTML, CSS, AJAX, JavaScript, Bootstrap, Organic Products, Direct Sales, Sustainable Agriculture, Farmer-Customer*

Dr.R.D.Sathiya

I. INTRODUCTION

In an era characterized by growing awareness of environmental sustainability and conscious consumerism, the direct exchange of organic products between farmers and consumers emerges as a pivotal solution. This application serves as a catalyst in this evolving landscape, leveraging technological advancements and the comprehensive capabilities of Django to redefine the accessibility and distribution of organic goods. At its heart, this application serves as a vital bridge connecting farmers dedicated to cultivating organic produce with consumers who prioritize health and environmental responsibility. By harnessing Django's robust framework alongside HTML, CSS, AJAX, JavaScript, and Bootstrap, this platform orchestrates seamless transactions within an intuitive online marketplace.

The crux of this application lies in its transformative potential to empower farmers, offering them a direct platform to exhibit and sell their products, thereby circumventing conventional intermediaries. Beyond ensuring equitable remuneration for their labor, this approach nurtures a sustainable agricultural ecosystem by championing organic farming methodologies. For consumers, the platform offers a portal to a diverse array of organic offerings, each embodying the values of ethical production and environmental stewardship. Through an immersive user interface complemented by dynamic functionalities powered by AJAX and JavaScript, customers can navigate, procure, and advocate for sustainable agriculture effortlessly.

In essence, this application transcends mere technological innovation; it embodies a vision of fostering a more equitable and environmentally conscious food system. As we embark on this journey, we embrace the profound potential of technology to forge genuine connections between farmers and consumers, heralding a future where every purchase contributes to a brighter and healthier world for all.

II. SYSTEM ARCHITECTURE

The application is based on Client Server Architecture. The user interacts with app through the UI of the application shown in the figure. It is 3 - tier architecture. The 3 tiers are:

- Presentation Layer
- Business Layer
- Data Layer

The First tier is the UI and communication layer of the application, where the customer interacts with the application. Its main target is to show information to and gather details from the user. The second tier, also known middle layer, is the center of the application. In this tier, details gathered in the presentation layer is processed - sometimes against other details in the 3rd tier using a specific set of business protocols. The third tier or back-end, is where the details is processed by the application is stored and managed. The database used in this application is firebase.

ARCHITECTURE

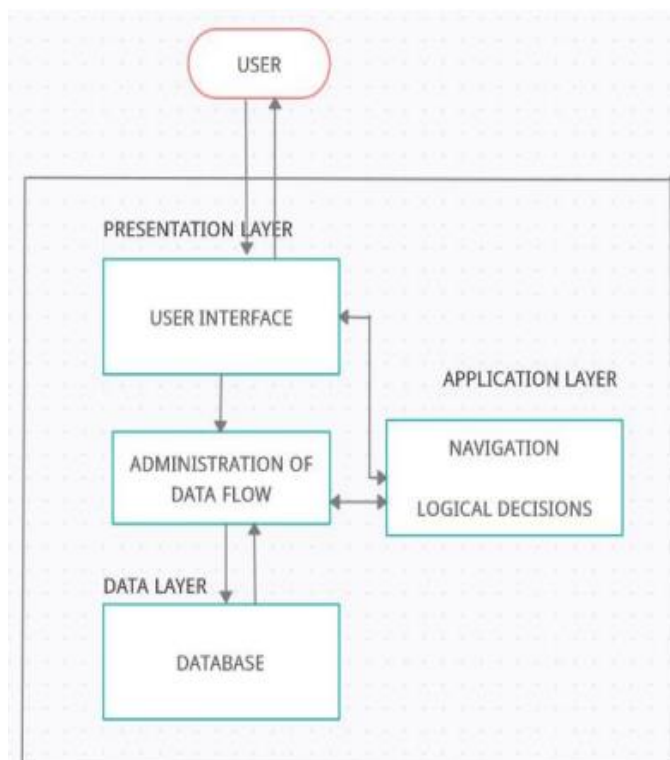
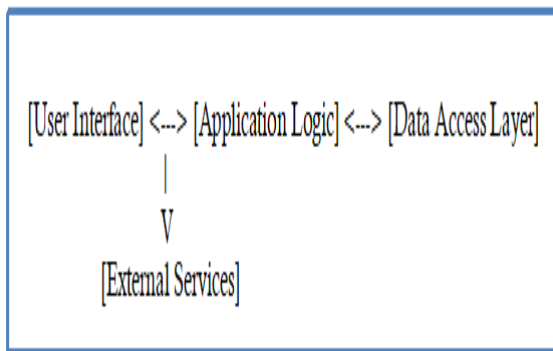


Fig.1 Karshak System Architecture

User Authentication:

Prompt the user to log in with their credentials (username and password). Verify the user's credentials against the database.

Main Menu Navigation:

Once logged in, display the main menu options to the user. Allow the user to choose from various features like viewing government schemes, accessing market information, etc.

Access Market Information:

Allow users to access market information such as crop prices, weather forecasts, etc. Integrate with external APIs or services to fetch real-time market data.

Product Information:

Include a section where users can access information about different agricultural products available in the market. Display details such as product name, description, cultivation methods, nutritional value, etc.

Health Benefits:

Provide information about the health benefits of various agricultural products. Highlight nutritional content, medicinal properties, and dietary advantages to encourage users to consume these products.

Update Profile:

Enable users to update their profile information such as contact details, farm location, etc. Validate and save the updated information to the database.

Feedback Mechanism:

Implement a feedback mechanism where users can provide feedback or suggestions. Store feedback in the database for further analysis and improvement of the application.

Logout:

Provide an option for users to log out securely from their accounts.

Block Diagram:

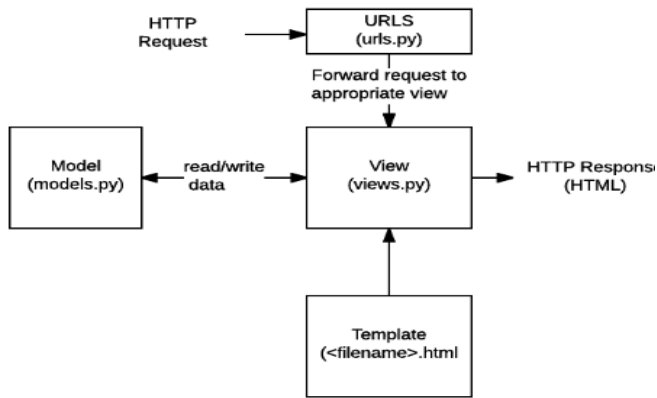


Fig.2 Block Diagram of Karshak

UML DIAGRAMS:

The UML (Unified Modeling Language) diagram for the "Karshak" application provides a visual representation of its architectural components and their interactions. Here's some context for the UML diagram:

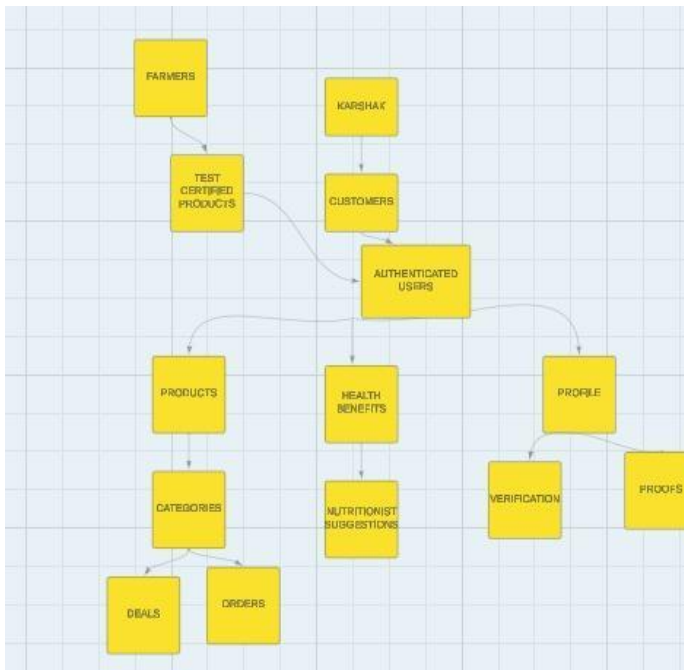


Fig.3 UML Diagram

USE CASE DIAGRAM:

- A use case diagram in the Unified Modeling Language (UML) is a type of behavioral diagram defined by and created from a Use-case analysis.
- Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as

use cases), and any dependencies between those use cases.

- The main purpose of a use case diagram is to show what system functions are performed for which actor. Roles of the actors in the system can be depicted.

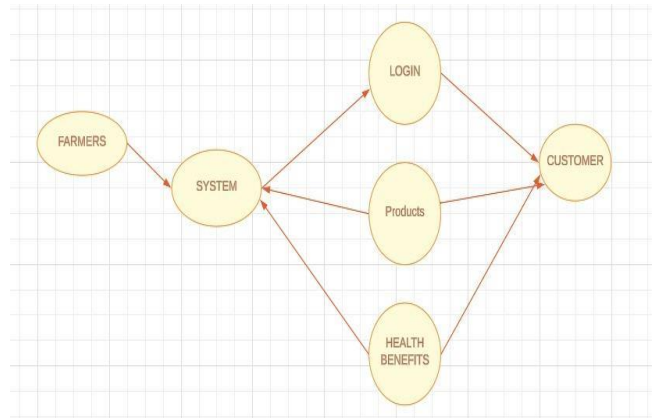


Fig.4 Use Case Diagram

DEPLOYMENT DIAGRAM:

A deployment diagram for the "Karshak" application illustrates the distribution of software components across different nodes or hardware devices in a networked environment.

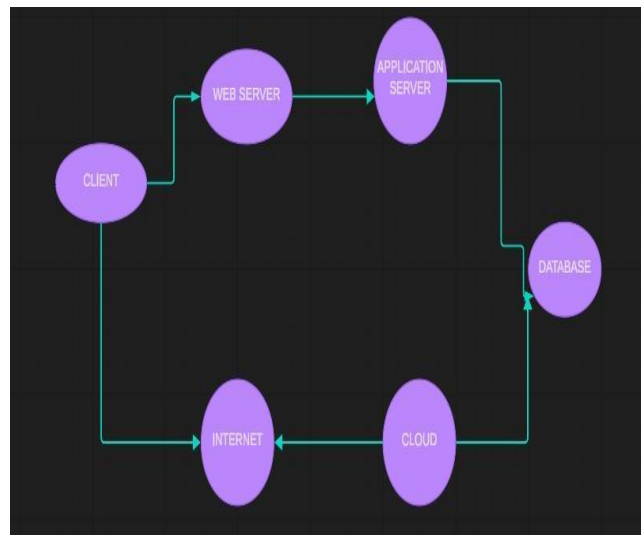


Fig.5 Deployment Diagram

This deployment diagram illustrates how the "Karshak" application is distributed across different nodes and components within a networked environment, enabling farmers and stakeholders to access essential agricultural information and resources seamlessly.

ACTIVITY DIAGRAM:

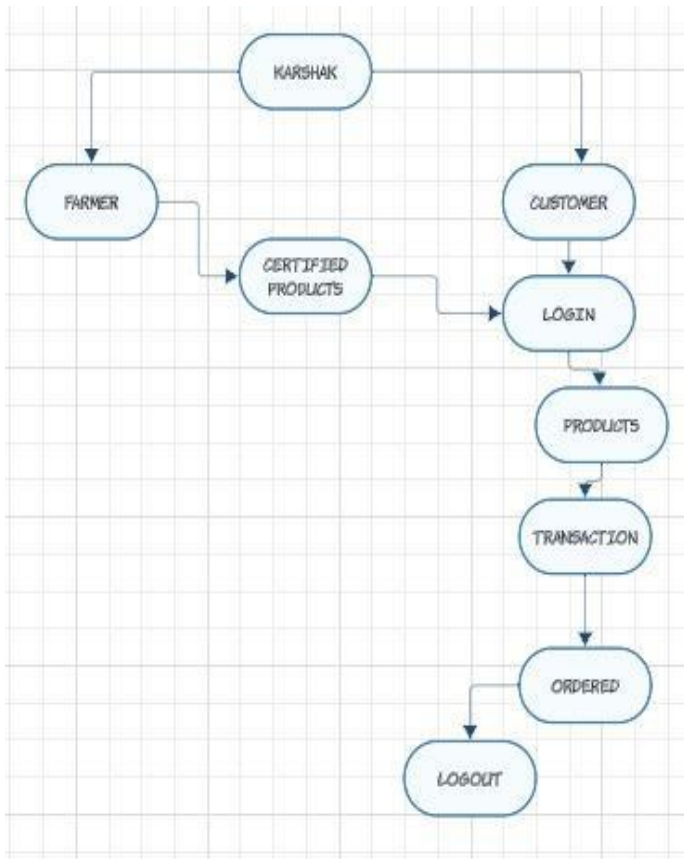


Fig.6 Activity Diagram

ER DIAGRAM:

An Entity–relationship model (ER model) describes the structure of a database with the help of a diagram, which is known as Entity Relationship Diagram (ER Diagram). An ER model is a design or blueprint of a database that can later be implemented as a database. The main components of the E-R model are: entity set and relationship set.

An ER diagram shows the relationship among entity sets. An entity set is a group of similar entities and these entities can have attributes. In terms of DBMS, an entity is a table or attribute of a table in a database, so by showing relationships among tables and their attributes, ER diagrams show the complete logical structure of a database. Let's have a look at a simple ER diagram to understand this concept.

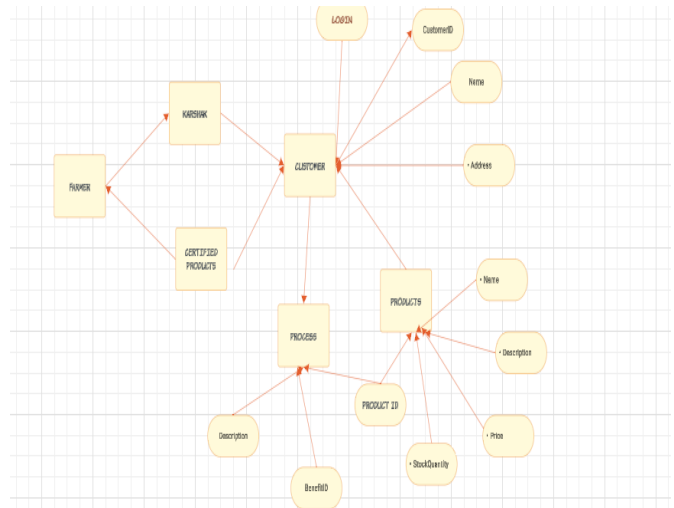


Fig.7 ER Diagram

Entities:

Farmers, Customer, Product, Health Benefits.

Relationships:

A. Customer - Product (Many-to-Many):

- Each customer can purchase multiple products.
- Each product can be purchased by multiple customers.

B. Product - Health Benefits (One-to-Many):

- Each product can have multiple health benefits.
- Each health benefit is associated with one product.

Attributes:

A. Customer:

- CustomerID (Primary Key)
- Name
- Email
- Address

B. Product:

- ProductID (Primary Key)
- Name
- Description
- Price
- StockQuantity

C. Health Benefits:

- BenefitID (Primary Key)
- Description
- ProductID (Foreign Key)

This simplified ER diagram illustrates the relationships between customers, products, and health benefits in the "Karshak" application, focusing specifically on customer interactions.

III. LITERATURE SURVEY

To gain a deeper understanding of the project, I perused several articles and web Pages. Here are some of the publications I reviewed, along with their findings.

A. Related Work

In their paper titled "Kisan Soch – A Mobile App for Farmers," Joshi et al. (2021) highlight the importance of agriculture in India and the need for a mobile application to provide farmers with information about government schemes. They address the limitations of existing applications, such as outdated information and language barriers, by developing a multilingual mobile application using React Native and Neural Machine Translation (NMT) techniques. The authors discuss the system architecture, which is based on a Client-Server Architecture with three tiers: Presentation Layer, Business Layer, and Data Layer. They emphasize the use of React Native for cross-platform compatibility and Google Firebase for data storage. The application utilizes NMT with an attention mechanism to translate government scheme information from English to the user's selected language.

In the literature survey, the authors explore various research papers on NMT and transformer models to improve translation quality. They discuss the challenges associated with NMT and highlight the effectiveness of transformer models with attention mechanisms in achieving accurate translations.[1]

B. Survey of the Existing Applications and websites

- **VaradhiFarms** [2]
- **VamsiFarms** [3]
- **Kisan Soch** [4]
- **FarmersMarket** [5]

Search engines:

Search engines such as Google Chrome, MicroSoft Edge, Opera and Yahoo. Not all accommodation alternatives may be advertised or easily found using search engines. Some Reasonal Products, Organic Products postings may not appear prominently in search engine results, thereby limiting products options.

C. Software Requirement

Specifications Hardware:

- Processor: Intel Core i5
- Memory: 8GB RAM
- Hard disk: 1TB

Software:

- Technology: Python
- OS: Windows10
- IDE: VS CODE

Libraries Used:

- Django.contrib.admin
- Django.urls
- Django.contrib.settings
- Django.http.JsonResponse
- Django.shortcuts
- Django.views.generic.base.View
- Django.forms
- Django.contrib.auth.decorators.login_required

- Django.utils.decorators.method_decorator
- Django.contrib.auth.views
- Django.contrib.auth.forms
- Django.db.models
- Django.contrib.messages
- Django.urls.reverse
- Django.utils.html.format_html

IV. METHODOLOGY

A. Development Environment Setup:

Utilize Visual Studio Code (VSCODE) as the integrated development environment (IDE) for coding. Set up the development environment with Python 3.6 or higher as the primary programming language.

Install necessary libraries and frameworks, including Django for backend development, and utilize OS library for system-level operations.

karshak	16-04-2024 11:46	File folder	
karshakapp	01-04-2024 11:19	File folder	
media	30-03-2024 20:35	File folder	
static	02-04-2024 21:47	File folder	
venv	27-03-2024 09:00	File folder	
db.sqlite3	16-04-2024 11:54	SQlite3 File	216 KB
manage	29-03-2024 09:29	Python File	1 KB

Fig.8 Development Environment Setup

B. Frontend Development

Utilize HTML, CSS, JavaScript, and Bootstrap for frontend development to create a responsive and visually appealing user interface.

Implement dynamic frontend features using JavaScript to enhance user interaction and experience. Leverage Bootstrap framework for efficient styling and layout of frontend components.



Fig.9 Frontend Development

C. Backend Development:

Develop the backend logic using Django, as high-level Python web framework, to handle server-side operations

and data process.

Utilize Django's built-in features for user authentication, data modeling, and routing to streamline backend development.

Implement AJAX (Asynchronous JavaScript and XML) for asynchronous communication between the frontend and backend, enabling seamless data exchange without page reloads.













	_pycache_	13-04-2024 18:12	File folder	
	migrations	06-04-2024 01:05	File folder	
	static	29-03-2024 11:03	File folder	
	templates	29-03-2024 09:43	File folder	
	_init_	29-03-2024 09:33	Python File	0 KB
	admin	06-04-2024 14:03	Python File	3 KB
	apps	29-03-2024 09:33	Python File	1 KB
	forms	02-04-2024 13:51	Python File	3 KB
	models	06-04-2024 01:04	Python File	5 KB
	tests	29-03-2024 09:33	Python File	1 KB
	urls	07-04-2024 08:45	Python File	4 KB
	views	13-04-2024 10:47	Python File	16 KB

Fig.10 Backend Development

D. Data Collection and Preprocessing:

Gather relevant datasets containing agricultural information, government schemes, and other pertinent data for the application.

Preprocess the collected data using Python scripts to clean, filter, and organize it for efficient storage and retrieval.

Action: <div><div></div>0 of 17 selected</div>					
<input type="checkbox"/>	ID	TITLE	DISCOUNTED PRICE	CATEGORY	PRODUCT IMAGE
<input type="checkbox"/>	17	oil	1.0	Oil	product/Vegetable-Oil.jpg
<input type="checkbox"/>	16	Fenugreek Seeds	29.0	IN	product/fenugreekseed.webp
<input type="checkbox"/>	15	Kadainath Eggs	150.0	NG	product/eggs.jpg
<input type="checkbox"/>	14	Dry Fishes	129.0	NG	product/dry_fishes.jpg
<input type="checkbox"/>	13	Devi Cow Ghee	320.0	Ghee	product/dehl_ghee.jpg
<input type="checkbox"/>	12	Cow Ghee	130.0	Ghee	product/cow_ghee.jpg
<input type="checkbox"/>	11	Cotton	300.0	CR	product/cotton.jpg
<input type="checkbox"/>	10	Peanut (Groundnut) Oil	25.0	Oil	product/cooking_oil.jpg
<input type="checkbox"/>	9	Coconut Oil	40.0	Oil	product/coconut-oil.jpg
<input type="checkbox"/>	8	Chana Dal	25.0	PU	product/chana-dal-indian.jpg
<input type="checkbox"/>	7	Small Chana	80.0	GR	product/chana.jpg
<input type="checkbox"/>	6	Castor Oil*	60.0	Oil	product/castor_oil.jpg
<input type="checkbox"/>	5	Wheat Flour	6.0	FL	product/wheat_flour.jpg
<input type="checkbox"/>	4	Cashew Nuts	120.0	NU	product/cashew_nuts.webp
<input type="checkbox"/>	3	Black Grams	30.0	PU	product/black-grams.jpg
<input type="checkbox"/>	2	Badam	250.0	NU	product/badam.jpg
<input type="checkbox"/>	1	Almond Oil	75.0	Oil	product/almond_oil_Yv9W8Tf.jpg

Fig.11 Data Collection and Preprocessing

E. Integration and Deployment:

Integrate the frontend and backend components to create a cohesive and functional application.

Deploy the application on a hosting platform compatible with Python, such as Python Anywhere, for accessibility and scalability.

Ensure smooth deployment by testing the application thoroughly in the production environment.



Fig.12 Integration and Deployment

F. Testing and Quality Assurance:

Conduct rigorous testing of the application to identify and address any bugs, errors, or usability issues.

Perform user acceptance testing (UAT) to ensure that the application meets the requirements and expectations of its target users.

Implement continuous integration and continuous deployment (CI/CD) practices to automate testing and deployment processes for efficiency and reliability.

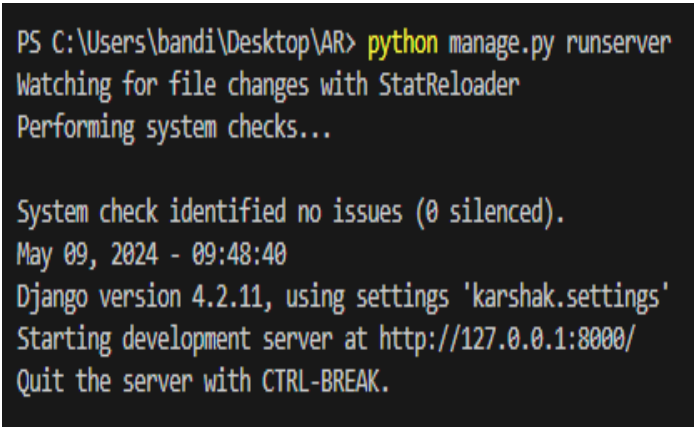


Fig.13 Testing and Quality Assurance

V. RESULTS

Home Page: Users can view the Home

Fig.14 Home Page(New User)

User Registration page: User can register with required details.

Customer Registration

Fig.15 Registration Page

Customer Registration

Fig.16 Successfully Registered user

Login

Fig.17 Login Page(Registered User)

Home Page: Authenticated Users can view the Home page.

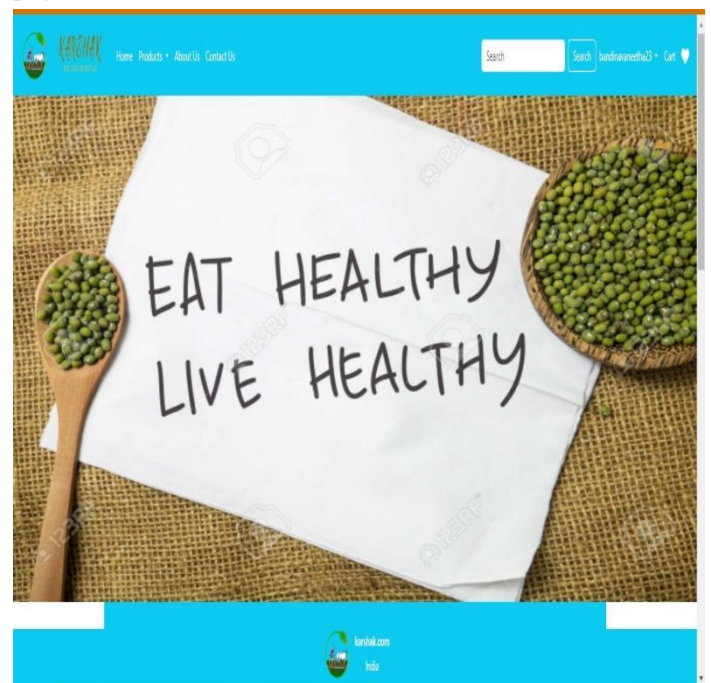




Fig.18 Fig.19 Home Page

About Us: This is the small information about project.

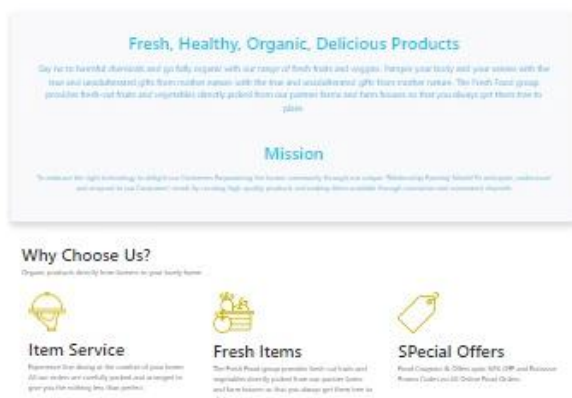


Fig.20 About Us

Contact Us: This is the small information about project.



Fig.21 Contact Us

Products:

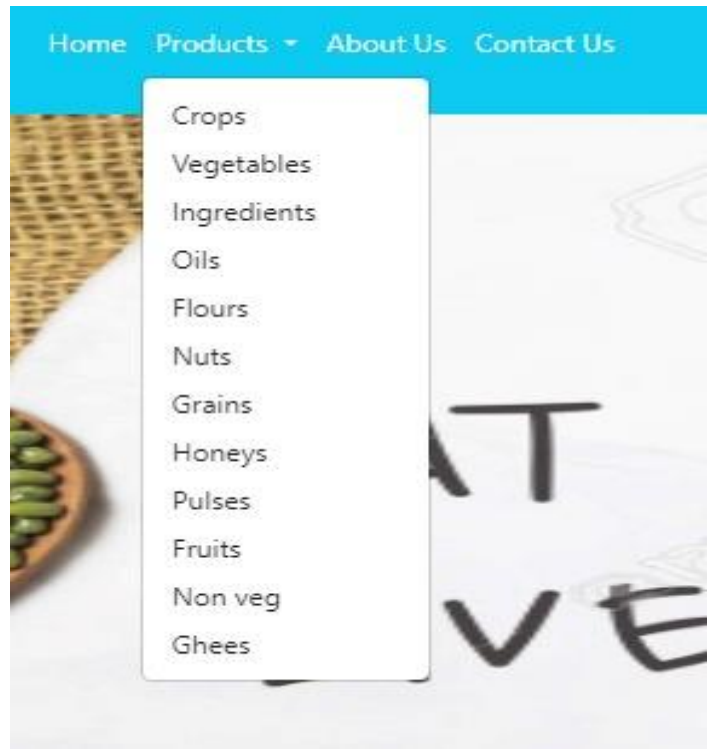


Fig.22 Fig.23 Products Page

Profile:

Welcome Bandi

Profile

Address

Name:

Mobile:

Locality:

City:

Zipcode:

State:



Fig.24 Fig.25 Profile Page

Address Update:

Welcome Bandi

Profile
Address

Address 1

Name: Bandi Navaneetha34

Locality: Srinivasa puram

Mobile: 9701861121

City: sdsfs

State: Mizoram

Pincode: 512387

Update Address

Address 2

Name: Bandi Navaneetha34

Locality: Srinivasa puram

Mobile: 9704069897

City: proddatur

State: Maharashtra

Pincode: 516360

Update Address

Address 3

Name: Bandi Navaneetha

Locality: Srinivasa puram

Mobile: 67789054326

City: proddatur

State: Karnataka

Pincode: 516360

Update Address

Fig.26 Address Update Page

Add to cart:



Fenugreek Seeds

Pure Organic Organic Fenugreek Seeds - Organic Methi Dana - 350 Gm

Rs.29.0/-

Product Features

- Brand Pure Organic Item Weight 350 Grams Speciality Organic Item Form Seeds Diet Type Vegetarian Package Weight 0.37 Kilograms Variety Fenugreek Number of Items 1
- About this item Methi dana for cooking - A Must In Your Kitchen: Whether you're looking for a way of incorporating more nutrients into your meal plan or you simply want to add a unique flavor to your traditional recipes, the organic methi dana is exactly what you need! Organic Fenugreek seeds: These fenugreek seeds organic are sustainably sourced from farmers, being natural, vegan friendly and with no gluten, preservatives or artificial fillers. Organic Fenugreek seeds for weight loss: The high fiber content in fenugreek seed can create a feeling of fullness and reduce appetite, potentially aiding in weight management and controlling overeating. Fenugreek seeds for health: It is an important source of vitamins and minerals, being rich in choline, mastic, vitamin A, B, D, Vitamin, iron and fiber. An excellent device for maintaining optimal digestion and cholesterol levels, keeping your hair and skin healthy, as well as for anti-inflammatory support! Methi Dana Recipe: These organic, Distal Methi Dana Sabut can be easily incorporated in your daily diet, being ideal for Methi Biryani, Indian curries, salads, dry rubs, marinades and other delicious dishes!

Add to Cart Buy Now

Fig.27 Add to cart Page

Payment Page:

Order Summary

Product: Fenugreek Seeds

Quantity: 1

Price: 29.0

Total Cost + Rs. 40 = 69.0

Term and Condition: Lorem ipsum dolor sit amet consectetur adipiscing elit. Mollitia, ullam saepe lute optio repeliat deat velit, minus rem. Facilis cumque neque numquam laboriosam, accusantium adipisci nisi nihil in et quis?

Select Shipping Address

Total Amount

69.0

Payment

Fig.28 Payment Page

Transaction:

Karshak

Pay With UPI ID/ Mobile Number

UPI ID/ Mobile Number

Enter UPI ID/ Mobile Number

success@razorpay

Pay With UPI QR

Scan the QR using any UPI app on your phone.

QR Code is valid for 11:38 minutes

₹ 69

View Details

Pay Now

karshak.com

India

Fig.29 Transaction Page

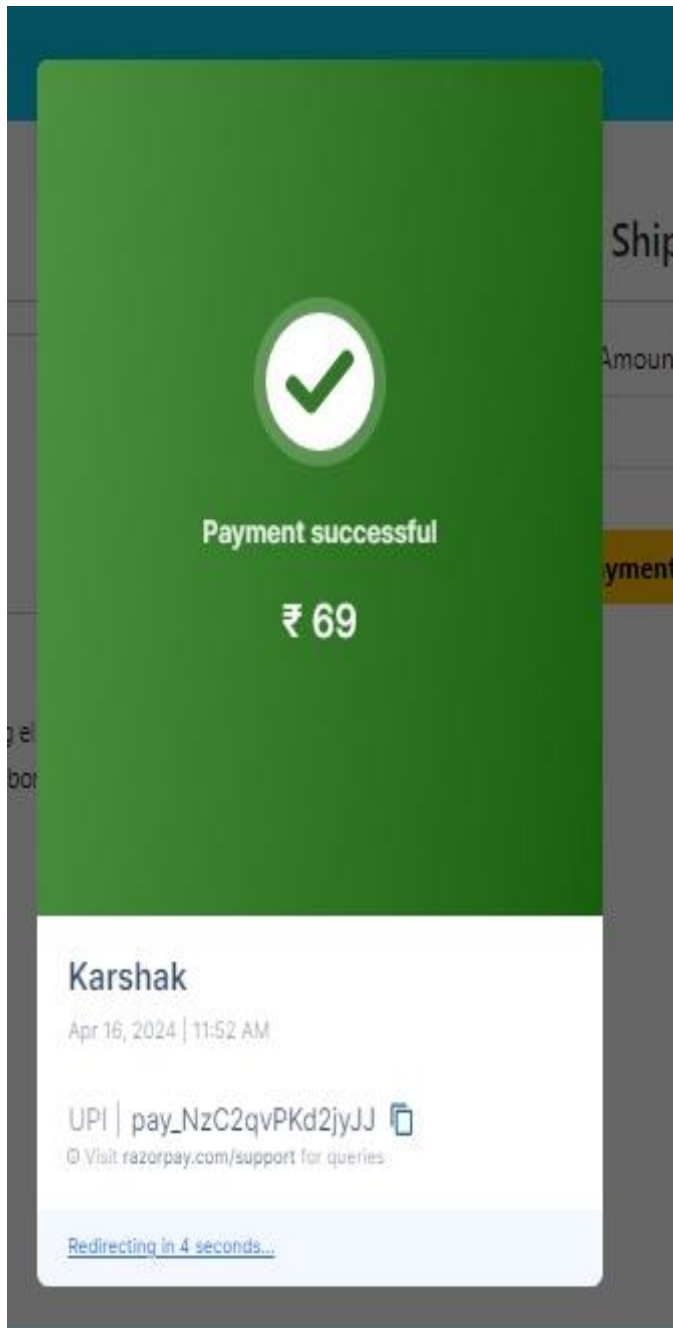


Fig.30 Transaction Successful

Order:



Fig.31 Orders Status Page

VI. CONCLUSION

In conclusion, our project "Karshak" has achieved its objectives of creating a comprehensive mobile application aimed at empowering farmers and enhancing agricultural practices. Through the utilization of advanced technologies such as React Native, Node JS, and Firebase, we have developed a user-friendly platform that provides valuable resources and support to farmers across India.

By focusing on features such as government scheme updates, market access tools, and multilingual support, we have addressed key challenges faced by farmers, including access to information and communication barriers. Our application facilitates seamless interaction between farmers, experts, and stakeholders, enabling knowledge exchange, collaboration, and support within the agricultural community.

Through extensive data collection, preprocessing, and machine learning techniques such as the Transformer model, we have ensured the accuracy and reliability of information provided through our application. By leveraging cloud deployment and multilingual capabilities, we have enhanced accessibility and usability for farmers of diverse backgrounds and regions.

Overall, the "Karshak" project represents a significant advancement in agricultural technology, with the potential to drive positive change and impact the livelihoods of millions of farmers in India. By promoting sustainable practices, improving market access, and fostering education and awareness, our application contributes to the overall development and prosperity of rural communities. Moving forward, we aim to continue refining and expanding the capabilities of "Karshak" to further empower farmers and support the growth of the agricultural sector.

FUTURE WORKS

- ◆ Native Language
- ◆ Farmers Interface
- ◆ Providing different regional language options for the application.
- ◆ UI enhancement
- ◆ Government Schemes(Native Language)
- ◆ Adding GPS to automatically predict weather
- ◆ Adding schemes from different states

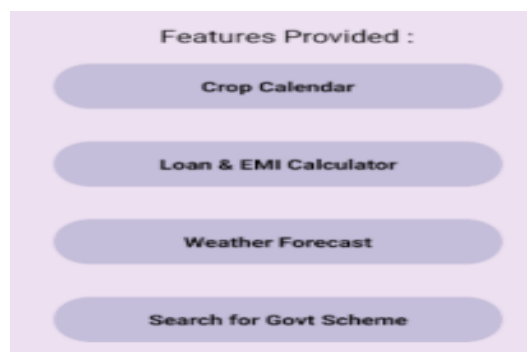


Fig.32 Government Schemes

Surya Raitha Scheme

Surya Raitha Scheme

Karnataka Surya Raitha scheme has been launched to help all of the people who are finding it very difficult to supply power in their farms. This scheme will be very beneficial for all of the farmers who are finding it very difficult to get power generation in their new farms and crops because of the extremely high bill of electricity.

New solar-based power generation will be provided for all of the farmers of the Karnataka state so that they can get higher salaries and get good crops. Farmers are the most affected department in this economy because of the coronavirus pandemic. Many farmers were also seen protesting against the farm bill.

The applicant must submit the following documents while applying for the recruitment:- Aadhar Card, Residential

Fig.33 In English

Surya Raitha Scheme

सूर्य रायता योजना

कर्नाटक सूर्य रायथा योजना उन सभी लोगों की मदद के लिए शुरू की गई है, जिन्हें अपने खेतों में बिजली की आपूर्ति करना बहुत मुश्किल हो रहा है। यह योजना उन सभी किसानों के लिए बहुत फायदेमंद होगी, जिन्हें बिजली के अत्यधिक बिल के कारण अपने नए खेतों और फसलों में बिजली उत्पादन प्राप्त करना बहुत मुश्किल हो रहा है।

कर्नाटक राज्य के सभी किसानों के लिए नई सौर-आधारित बिजली उत्पादन प्रदान किया जाएगा ताकि उन्हें अधिक वेतन मिल सके और अच्छी फसल मिल सके। कोरोनावायरस महामारी के कारण इस अर्थव्यवस्था में किसान सबसे अधिक प्रभावित विभाग हैं। कई किसान कृषि बिल का विरोध भी करते दिखे।

भर्ती के लिए आवेदन करते समय आवेदक को निम्नलिखित दस्तावेज जमा करने होंगे: - आधार कार्ड, आवासीय प्रमाण, भूमि विवरण, बैंक खाता विवरण, पहचान प्रमाण, पासपोर्ट साइज फोटो और

Fig.34 In Hindi

Surya Raitha Scheme

ಸೂರ್ಯ ರೈತಾ ಯೋಜನೆ

ತಮ್ಮ ಜಮೀನಿನಲ್ಲಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಮಾಡಲು ತುಂಬಾ ಕಷ್ಟಪಡುತ್ತಿರುವ ಎಲ್ಲ ಜನರಿಗೆ ಸಹಾಯ ಮಾಡಲು ಕರ್ನಾಟಕ ಸೂರ್ಯ ರೈತಾ ಯೋಜನೆಯನ್ನು ಪ್ರಾರಂಭಿಸಲಾಗಿದೆ. ಅತಿ ಹೆಚ್ಚು ವಿದ್ಯುತ್ ಬಿಲ್ ಇರುವುದರಿಂದ ತಮ್ಮ ಹೊಸ ಹೊಸ ಮತ್ತು ಬೆಳೆಗಳಲ್ಲಿ ವಿದ್ಯುತ್ ಉತ್ಪಾದನೆ ಪಡೆಯಲು ತುಂಬಾ ಕಷ್ಟಪಡುತ್ತಿರುವ ಎಲ್ಲ ರೈತರಿಗೆ ಈ ಯೋಜನೆ ತುಂಬಾ ಪ್ರಯೋಜನಕಾರಿಯಾಗಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯದ ಎಲ್ಲ ರೈತರಿಗೆ ಹೆಚ್ಚಿನ ಸಂಬಳ ಪಡೆಯಲು ಮತ್ತು ಉತ್ತಮ ಬೆಳೆಗಳನ್ನು ಪಡೆಯಲು ಹೊಸ ಸೌರ ಆಧಾರಿತ ವಿದ್ಯುತ್ ಉತ್ಪಾದನೆ ನೀಡಲಾಗುವುದು. ಕರೋನಾವೈರಸ್ ಸಾಂಕ್ರಾಮಿಕ ರೋಗದಿಂದಾಗಿ ಈ ಆರ್ಥಿಕತೆಯಲ್ಲಿ ರೈತರು ಹೆಚ್ಚು ಪರಿಣಾಮ ಬೀರುವ ಇಲಾಖೆ. ಕೃಷಿ ಮಸೂದೆಯನ್ನು ವಿರೋಧಿಸಿ ಅನೇಕ ರೈತರು ಪ್ರತಿಭಟನೆ ನಡೆಸುತ್ತಿರುವುದು ಕಂಡುಬಂತು.

ನೇಮಕಾತಿಗೆ ಅರ್ಜಿ ಸಲ್ಲಿಸುವಾಗ ಅರ್ಜಿದಾರರು ಈ

Fig.35 In Kannada

UML DIAGRAM FOR FUTURE WORKS:

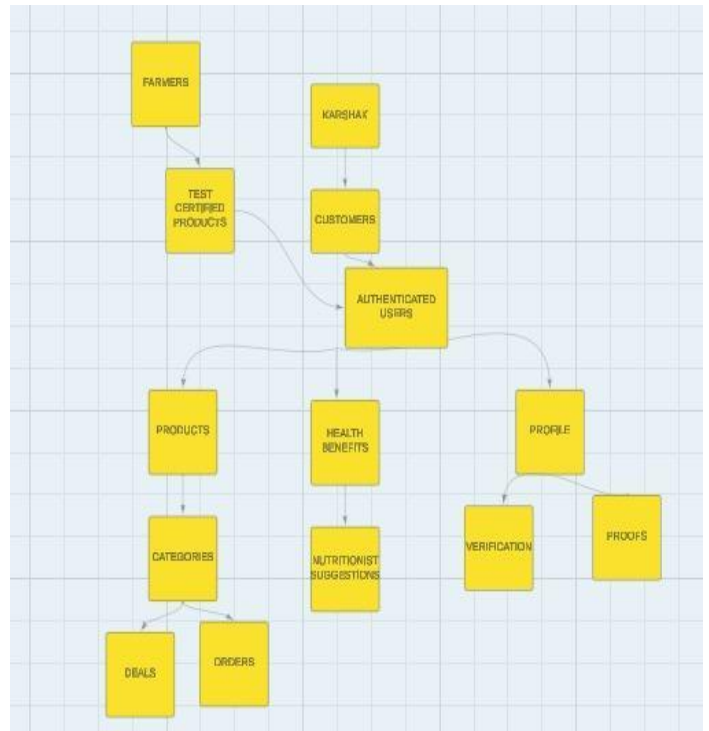


Fig.35 Future UML Diagram

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