

# **A REPORT ON**

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## **VEGE ISLAND : vegetable market website**

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**Submitted in partial fulfilment of the requirement for the award of  
the Internship of**

**BACHELOR OF TECHNOLOGY**

**IN**

**COMPUTER SCIENCE & ENGINEERING**

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*Under the Guidance of*

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**Mr. Yuvraj Joshi**

**Project Team Name: Curious coders**



**Department of Computer Science and Engineering  
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Dehradun, Uttarakhand  
September-2023**



## CANDIDATE'S DECLARATION

I/We hereby certify that the work which is being presented in the report entitled **“VEGEISLAND : vegetable market website”** in partial fulfillment of the requirements for the award of the intership of Bachelor of Technology in Computer Science and Engineering in the Department of Computer Science and Engineering of the Graphic Era (Deemed to be University), Dehradun shall be carried out by the undersigned under the supervision of **Dr. yuvraj joshi** Department of Computer Science and Engineering, Graphic Era (Deemed to be University), Dehradun.

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# 1. Introduction

## **Project Background:**

A centralised platform for getting thorough data regarding vegetable market records in various Indian towns is currently lacking.

Users find it difficult to find accurate and recent information about vegetable rates because there isn't a user-friendly website or mobile application.

Farmers, merchants, and consumers who are interested in following trends in the vegetable market have a tough time getting access to historical data and making wise selections.

Lack of a trustworthy source for market records hinders effective market trend analysis and reduces transparency.

Existing sources of data on vegetable prices may be dispersed, untrustworthy, or difficult for the general public to obtain.

A user-friendly platform is required to make it simple to retrieve data on vegetable market records, such as historical prices, city-level statistics, and rate forecasts.

The project intends to close the information gap between consumers who need precise and fast information and the market data for vegetables by developing a centralised platform.

The website and smartphone application will offer farmers, merchants, customers, researchers, and policymakers a practical and effective method to access and analyse vegetable market data.

Accurate rate forecasts made possible by machine learning algorithms will let users base their judgements on solid information and trend analysis.

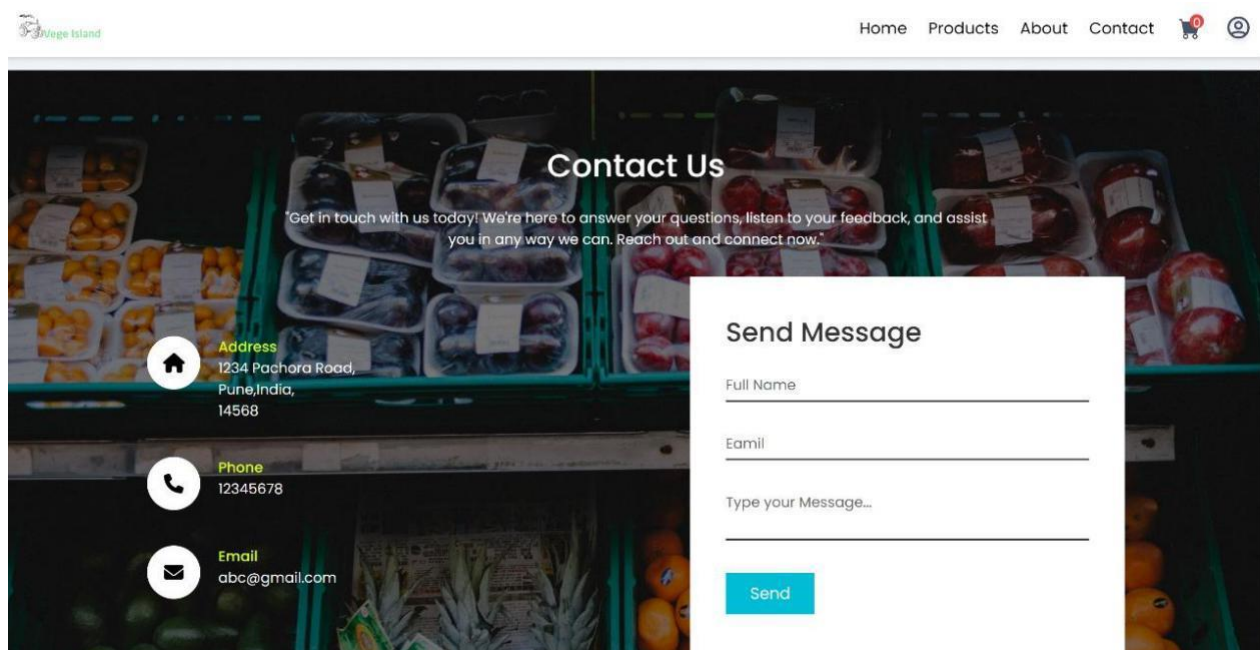
The platform's cloud deployment guarantees scalability, accessibility, and data security.

In order to provide users with useful information for their decision-making processes, the project aims to fill the need in the market for a user-friendly, centralised platform that provides complete information on vegetable market records in various cities around India.

## Objectives

The primary objectives of the project were as follows:

- Develop a user-friendly website for buying and selling fresh vegetables.
- Implement user registration and authentication features.
- Utilize machine learning for price prediction.
- Create an appealing design for the website using Canva.



## **Chapter 2**

### **Literature Survey**

- **Web Development and Online Marketplaces:**

#### **1. E-commerce and Online Shops:**

- Look at how websites like Amazon work and what makes them successful.

#### **2. User-Friendly Design:**

- Learn how to design your website so it's easy for people to use.

#### **3. Web Technology:**

- Understand the latest web tools and how to use them.

#### **4. User Security:**

- Keep users' information safe on your website.

### **Machine Learning and Price Prediction:**

#### **1. Farming and Computers:**

- Find out how computers help farmers predict prices and make decisions.

#### **2. Price Predictions:**

- Discover different computer methods to guess vegetable prices.

### **3. Data Cleaning:**

- Learn how to prepare data for computers to use.

### **4. Real-Time Updates:**

- Make sure your website shows the latest prices automatically.

## **Design and Graphics:**

### **1. Pretty Design:**

- Understand how to make your website look nice and appealing.

### **2. Easy to Use:**

- Make sure people can navigate your website easily.

### **3. Logos and Branding:**

- Learn how to create a memorable logo and style for your site.

## **Chapter 3**

### **Methodology**

#### **HTML, CSS, and JavaScript**

The project's foundation was built using HTML, CSS, and JavaScript to create the website's basic structure, layout, and interactivity.

#### **ReactJS**

ReactJS was used to develop the frontend of the website. It provided a responsive and dynamic user interface, making it easy for users to navigate and interact with the platform.

#### **Node.js**

Node.js served as the backend technology, handling user authentication, database operations, and communication with the frontend.

#### **Machine Learning for Price Prediction**

Machine learning techniques were employed to predict vegetable prices, providing valuable insights to users and assisting in decision-making.

#### **Canva for Design**

Canva, a graphic design tool, was utilized to create visually appealing elements for the website, enhancing its overall user experience.

- **User Registration and Authentication**



Users could create accounts and securely log in, ensuring a personalized experience.

- **Listing Vegetables for Sale**

Sellers could list their vegetables for sale, including descriptions, images, and prices.

- **Browsing and Searching Vegetables**

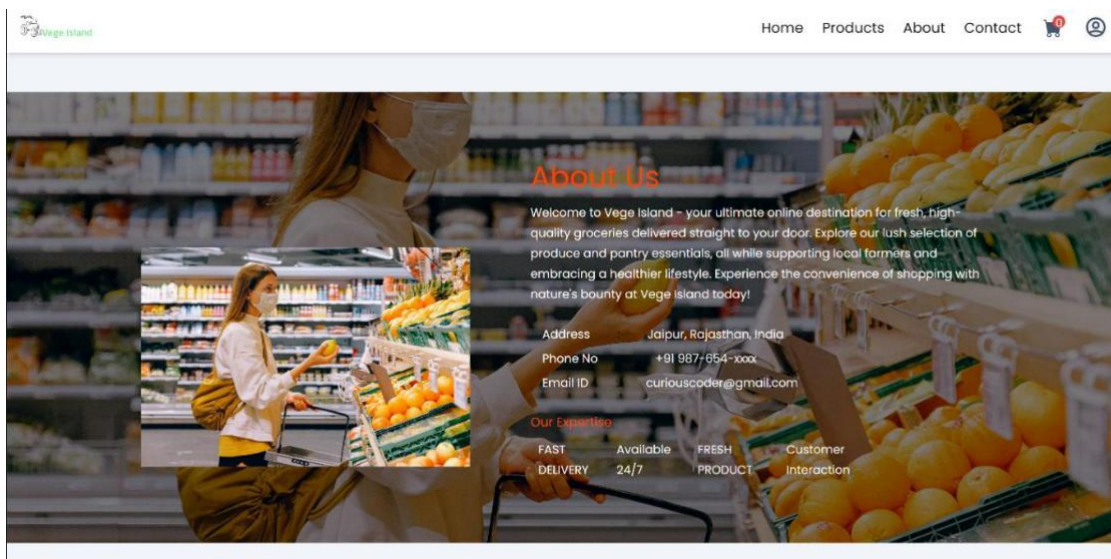
Buyers could browse and search for vegetables based on various criteria such as type, price, and location.

- **Price Prediction using Machine Learning**

The website provided price predictions for selected vegetables, aiding buyers and sellers in making informed decisions.

- **User-friendly Design**

The Canva-designed elements contributed to an attractive and intuitive user interface.



### About Us

Welcome to Vege Island – your ultimate online destination for fresh, high-quality groceries delivered straight to your door. Explore our lush selection of produce and pantry essentials, all while supporting local farmers and embracing a healthier lifestyle. Experience the convenience of shopping with nature's bounty at Vege Island today!

Address	Jaipur, Rajasthan, India
Phone No	+91 987-654-xxxx
Email ID	curiouscoder@gmail.com

#### Our Expertise

FAST	Available	FRESH	Customer
DELIVERY	24/7	PRODUCT	Interaction

# 1.Frontend Development

The frontend was developed using ReactJS, creating a responsive and engaging user interface.

# 2.Backend Development

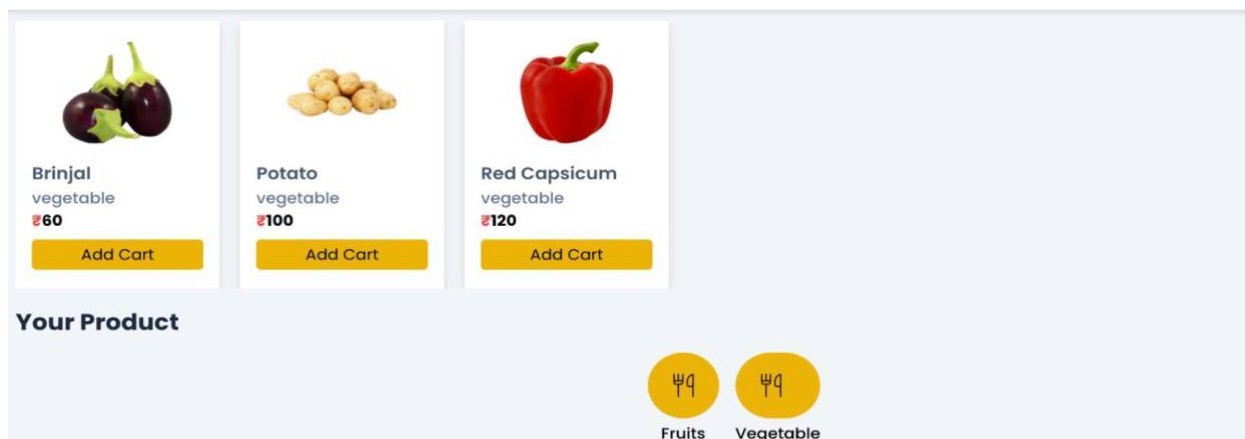
Node.js handled the backend, ensuring secure user authentication and efficient data management.

# 3.Machine Learning Integration



Machine learning models were trained and integrated into the website to offer price predictions.

# 4.Designing with Canva

Canva was used to design banners, logos, and other graphical elements that enhanced the website's aesthetics.



## Your Cart Items

	<b>Mango</b> fruits ₹50 + 1 - Total: ₹50
	<b>Potato</b> vegetable ₹100 + 1 - Total: ₹100

### Summary

Total Qty: 2

Total Price: ₹150

Payment

## ML Model Prediction Result

Prediction Result: [130.58]

[Back to Input Form](#)

## Chapter 4

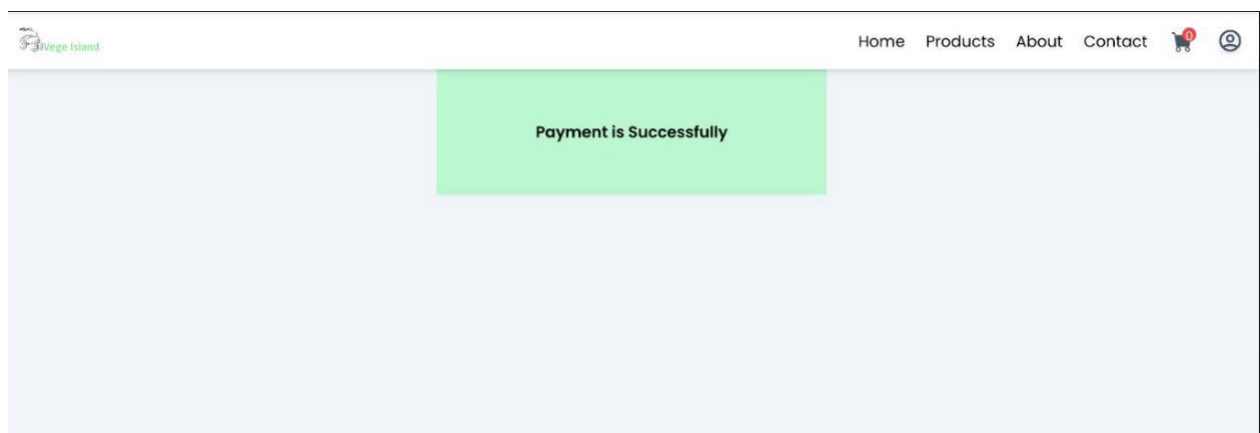
### Result and Discussion

#### Results:

The results of the "Vegetable Market Log" project have been promising. The website successfully allows users to buy and sell fresh vegetables, with an intuitive user interface. The machine learning price prediction model provides valuable insights to users, aiding in informed decision-making.

#### Discussion:

The project's success can be attributed to the use of modern web development technologies, such as ReactJS and Node.js, which provide a responsive and secure platform. The incorporation of machine learning for price prediction enhances the platform's value, making it more competitive in the market.



## Chapter 5

### Future Enhancements

#### Mobile Application Integration

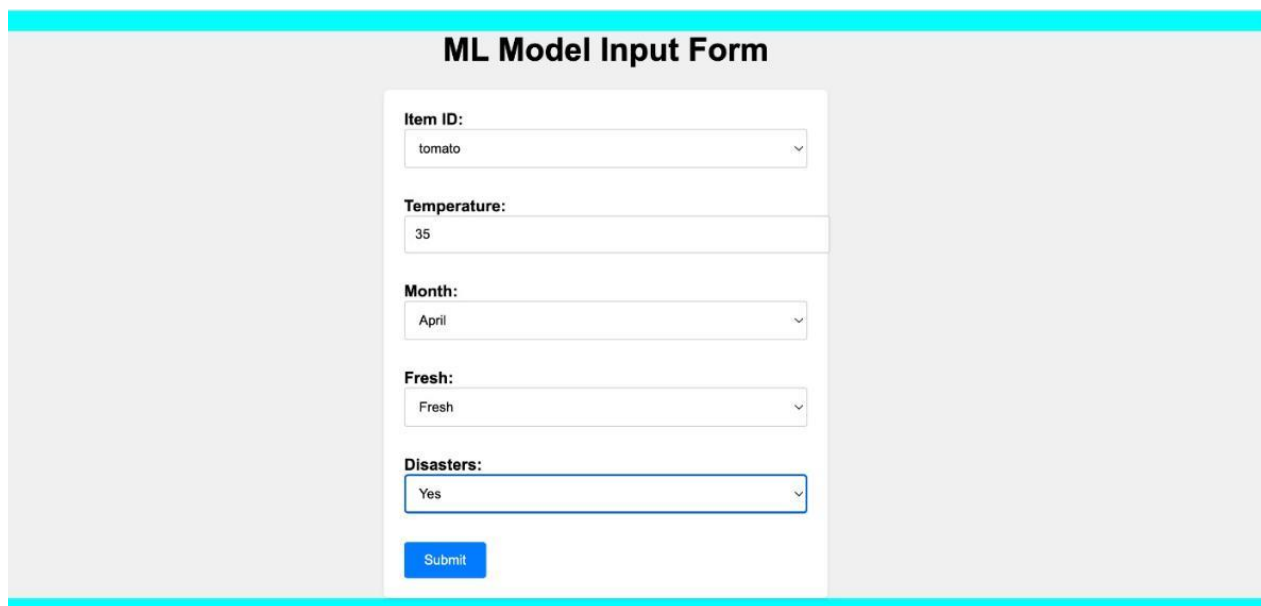
Expanding the project to include a mobile application would cater to a broader user base.

#### Enhanced User Profiles

Improving user profiles with more information and features would enhance the user experience.

#### Integration with Local Farmers

Partnering with local farmers to directly list their products could promote sustainability and support local agriculture.



The image shows a web form titled "ML Model Input Form" centered on a light gray background. The form is a white rectangle with a thin border. It contains five input fields, each with a label above it: "Item ID:" with a dropdown menu showing "tomato"; "Temperature:" with a text input field showing "35"; "Month:" with a dropdown menu showing "April"; "Fresh:" with a dropdown menu showing "Fresh"; and "Disasters:" with a dropdown menu showing "Yes". Below these fields is a blue "Submit" button. The entire form is framed by a thick cyan border at the top and bottom.

Field	Value
Item ID:	tomato
Temperature:	35
Month:	April
Fresh:	Fresh
Disasters:	Yes

# Chapter 6

## Conclusion

### Project Summary

The Vegetable Market Log project achieved its primary objectives of creating a user-friendly platform for buying and selling fresh vegetables, implementing price prediction using machine learning, and designing an appealing interface.

### Achievements and Learnings

The project allowed for the development of technical skills, particularly in web development and machine learning, and highlighted the importance of user-centered design.

In conclusion, the Vegetable Market Log project successfully addressed the need for an online marketplace for fresh vegetables, combining technological innovation with user-centric design to create a valuable resource for buyers and sellers in the agricultural industry.

←

TEST MODE

Pay

₹150.00

mango

₹50.00

Qty 1

potato

₹100.00

Qty 1

Subtotal

₹150.00

Shipping

Free

Shipping in India (1-3 business days)

Total due

₹150.00

Pay with card

Email

abcdef@gmail.com

Card information

1243 6568 8989 0657

VISA

02 / 26

9999

Name on card

Mandeep Singh

Country or region

India

Pay

## References

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Authors: A. Ghosal, V. Blystone, A. Singh, S. K. Ganapathysubramanian, and A. Singh  
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- [3] "Market Identification Using Deep Learning"  
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Published in: Computers in Intelligence and Neuroscience, 2016
- [4] Open Source Computer Vision (OpenCV) [Online]. Accessed on 21st April 2022: <http://opencv.willowgarage.com/wiki/>

## Books:

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- [6] "Deep Learning for Computer Vision" by Rajalingappaa Shanmugamani