



**Rayat Shikshan Sanstha's**  
**Karmaveer Bhaurao Patil College of Engineering, Satara**

**Computer Science and Engineering**  
**Innovative Teaching Activity**

Course Name- Full Stack Development

A.Y. – 2021-22

Class- Final Year B.Tech. Computer Science and Engineering

Innovative Teaching Activity Name- Project Based Learning

Activity Details-

Students work on a project over an extended period of time – from a week up to a semester – that engages them in solving a real-world problem or answering a complex question. They demonstrate their knowledge and skills by creating a website.

A web project is the process of developing and creating a Web site. The goal of Web projects is the transfer of static and dynamic content - both directly to end users, as well as indirectly through means of various kinds of interfaces.

Number of students Participated: 55 (83.33%)

Rules-

- Students must form a group of min. 2 to max. 6 students for developing a project.
- Students should submit their project group and project title to course co-ordinator in first month of the semester
- Project must be a dynamic website.
- Students project group should show their progress of project once in a month to course co-ordinator.
- Students project group must complete their Respective project before semester end.
- Students project group must submit PBL report of their Respective project at the end of semester.

Project Group List with their project Title-

<b>Group No.</b>	<b>Student Names</b>	<b>Project Title</b>
1	1). Shreyas Popatrao Salunkhe 2). Aniket Anandrao Salunkhe 3). Sachin Maruti Kokare 4). Rajkumar Dilip Dhane	RECIPELY
2	1. Prerana Sanjaykumar Patil 2. Sandhya Eknath Awaghade 3. Shweta Sharad Jamdade 4. Vedika Pradip Lawand	Online Cake Ordering Website
3	1. Najuka Vijay Lasure. 2. Ishika Shivaji Jadhav. 3. Prajakta Ravsaheb Sathe. 4. Neha Raju Chavan.	Beauty Product Shopping Website
4	1] Tasmiya Faiyaj Bagwan 2] Rutuja Nathuram Mahangade 3] Pooja Vijay Kadam 4] Rohan Satish Raje	Food ordering system

5	1). Phalke Aishwarya Sanjay 2). Bhingare Pooja Rahul 3). Aishwarya Hanmant Sontakke 4). Supriya Dilipkumar Mane	Student Result Management System
6	1. Patil Vaishnavi Kalpesh 2. Pawar Vaishnavi Milind 3. Patil Isha Vikas 4. Naikawadi Shivani Umakant	Website For Cakes
7	1.Kenjale Shrinivas Suresh 2.Joshi Sourabh Pramod	ElectroKart: Electronics E-Commerce Web Application
8	1. Abhijeet Sakate 2. Vaishnavi Devi 3. Astha Vairat 4. Shreyas Mohite	Healthy Diet Clinic Website
9	1.Avadhoot Kadam 2.Vipul Pawar 3.Sanket Jadhav 4.Nishant Chavan	Travel Agency System
10	1). Bagwan Shifa Nasir. 2). Khude Janhavi Avinash. 3). Bhate Ila Anand. 4). Mahajan Neha Milind.	Ice Cream Shop Website
11	1.Omkar Shankar Daphale 2.Shruti Rajendra Dolzake 3.Aishwarya Ajay Shete 4.Sourabh Sanjay Gavate	STAFF ATTENDENCE MONITORING SYSTEM
12	1). Patil Shrutika Rajendra 2). Mote Komal Tatoba	Website For Photographer's Studio
13	1. Snehal Sidwadkar 2. Prerana Takale 3. Govind Vyas 4.Vikas Bandgar	Basic Banking System
14	1.Vishwajeet Sanjay Kadam 2.Shubham Anandrao Kumbhar 3.Abhishek Harishchandra Phadtare 4.Aditya Dilip Kudale	Automatically opening door with Face Recognition and Temperature Detecting Device
15	1. Prachi Badekar 2. Kajal Awale 3.Purva Shinde	Gym management system

### Sample Project Based Learning Report from one group-



**Rayat Shikshan Sanstha's**  
**Karmaveer Bhaurao Patil College of Engineering, Satara**



# **ElectroKart: Electronics E-Commerce Web Application**

**Project**

**Report**

**By**

**Kenjale Shrinivas Suresh**  
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**Under the guidance**

**of Prof. Bhosale**

**V.U.**

**Department of Computer Science & Engineering Karmaveer**  
**Bhaurao Patil College of Engineering, Satara Dr. Babasaheb**  
**Ambedkar Technological University, Lonere 2021-2022**



## I. Introduction:

ElectroKart is a web-based application which is developed for remote- shopping of Electronic Products through Internet. As the technology is being advanced the way of life is changing accordingly. Now a day's we can place the order for anything from our home. There is no need to go to the shop to buy the things we want. The order can be placed online through Internet. The payment, the confirmation of purchasing; we can do everything we want.

## II. Existing system: About Existing system and Advantages and Limitations

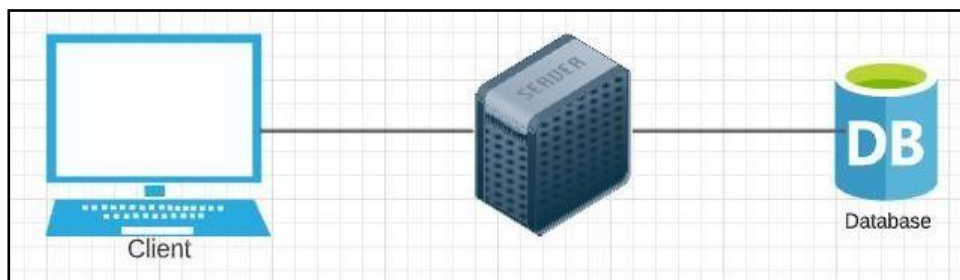
This existing system of buying goods has several disadvantages. It requires lots of time to travel to the particular shop to buy the goods. It is having lots of manual work. Since everyone is leading busy life now-a-days, time means a lot to everyone. Also there are expenses for travelling from house to shop. It is less user-friendly. In current system user must go to shop and order products. It is difficult to identify the required product. More over the shop from where we would like to buy something may not be open 24\*7. Hence we have to adjust our time with the shopkeeper's time or vendor's time. In current e-commerce system users can purchase products from home.

## III. Proposed Work:

The proposed system helps in building a website to buy, sell products or goods online using internet connection. Unlike traditional commerce that is carried out physically with effort of a person to go and get products, ecommerce has made it easier for human to reduce physical work and to save time. The basic concept of the application is to allow the customer to shop virtually using the Internet and allow customers to buy the items and articles of their desire from the store. E- commerce is fast gaining ground as an accepted and used business paradigm.

ElectroKart is an E-Commerce web application with both admin and user layouts. This website provides electronics products. This system uses Node.js and MongoDB.

### a. Architecture:



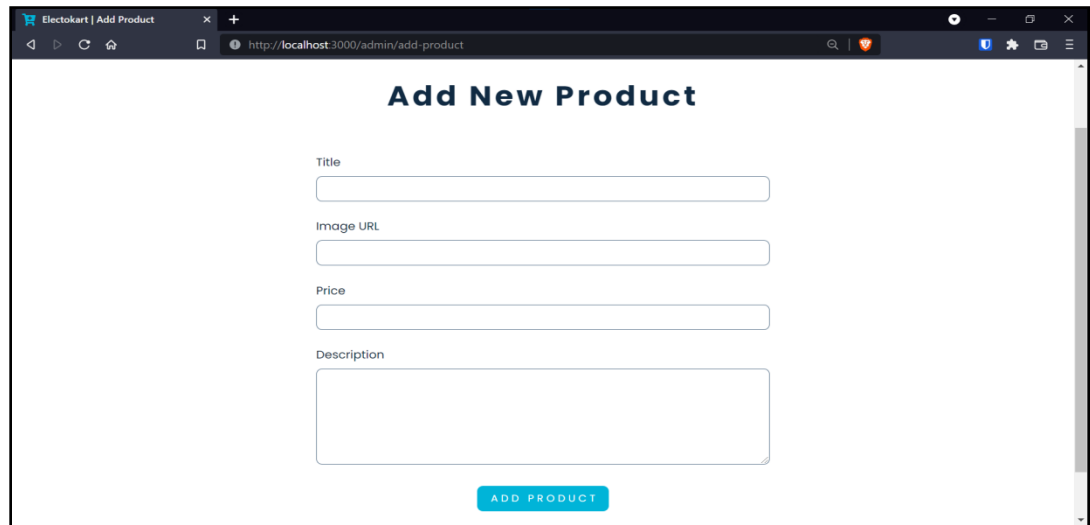
## b. Modules:

- Admin is one who can add, delete or modified the products.
- Admin is the one having overall control of the website.
- Only Admin comes to know about the order placed on the site and ensure the delivery of the product at time.

- Add New Product

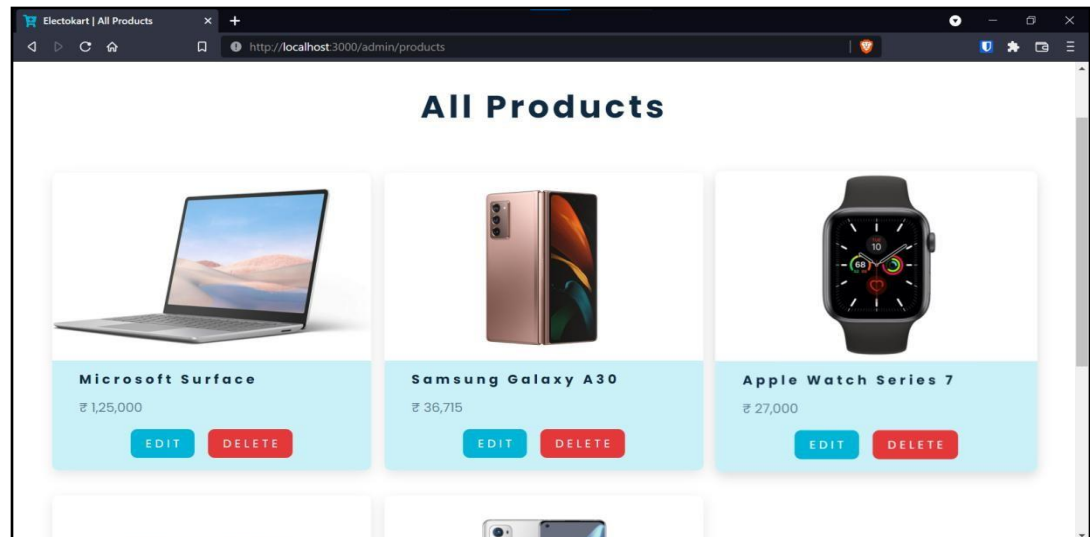
## 2. Admin Module

- Admin LOGIN using username and password.

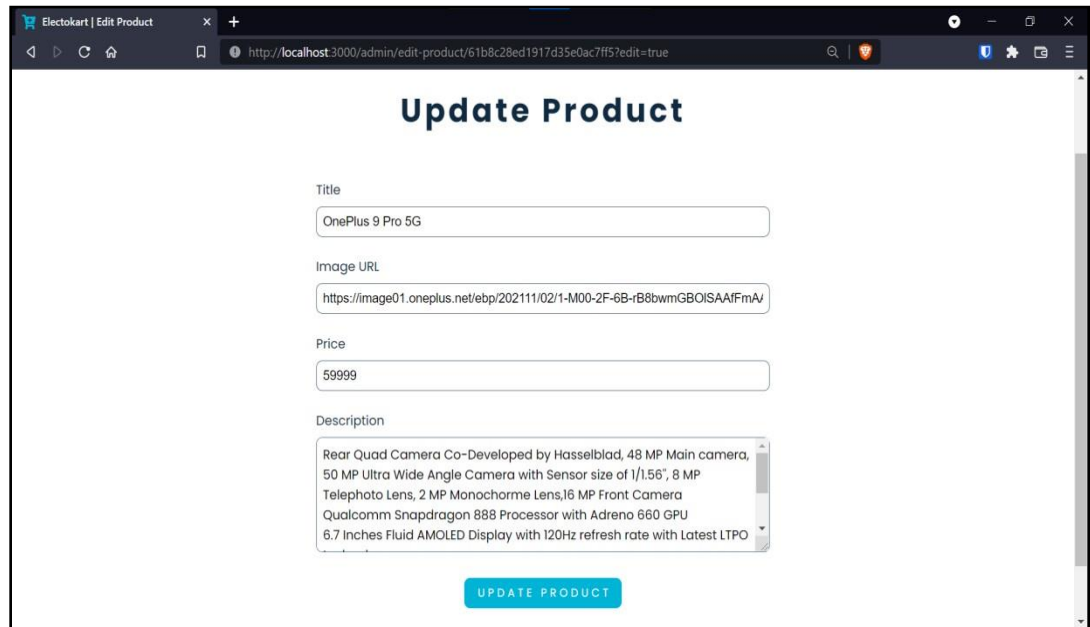


The screenshot shows a web browser window with the URL `http://localhost:3000/admin/add-product`. The page title is "Electokart | Add Product". The main heading is "Add New Product". Below the heading, there are four input fields: "Title", "Image URL", "Price", and "Description". At the bottom of the form, there is a blue button labeled "ADD PRODUCT".

- View Products



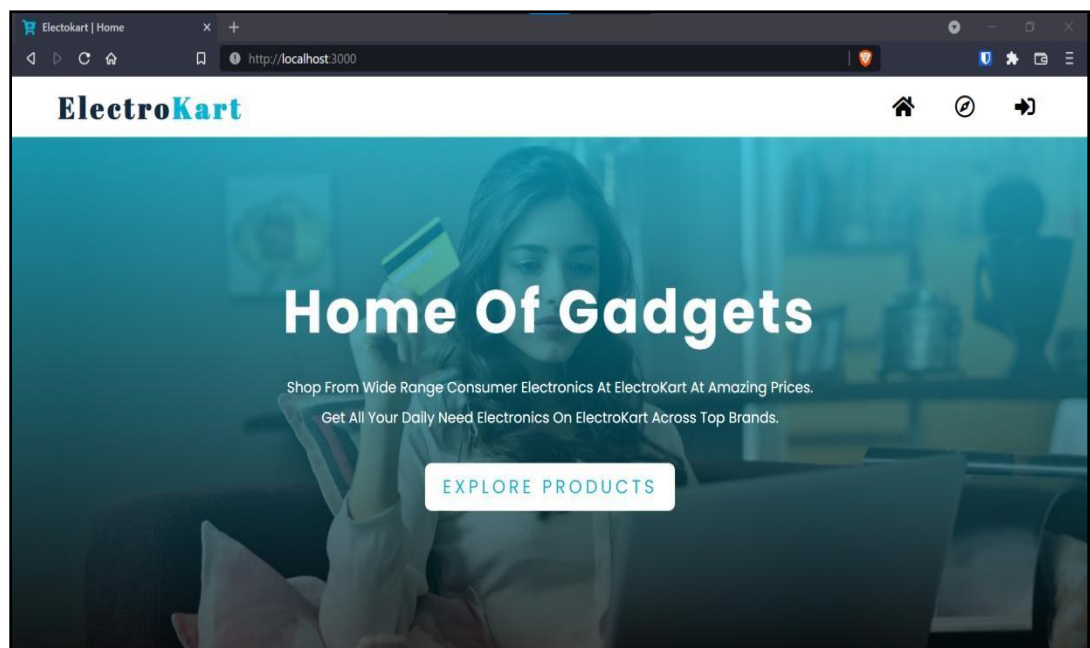
- Update Products



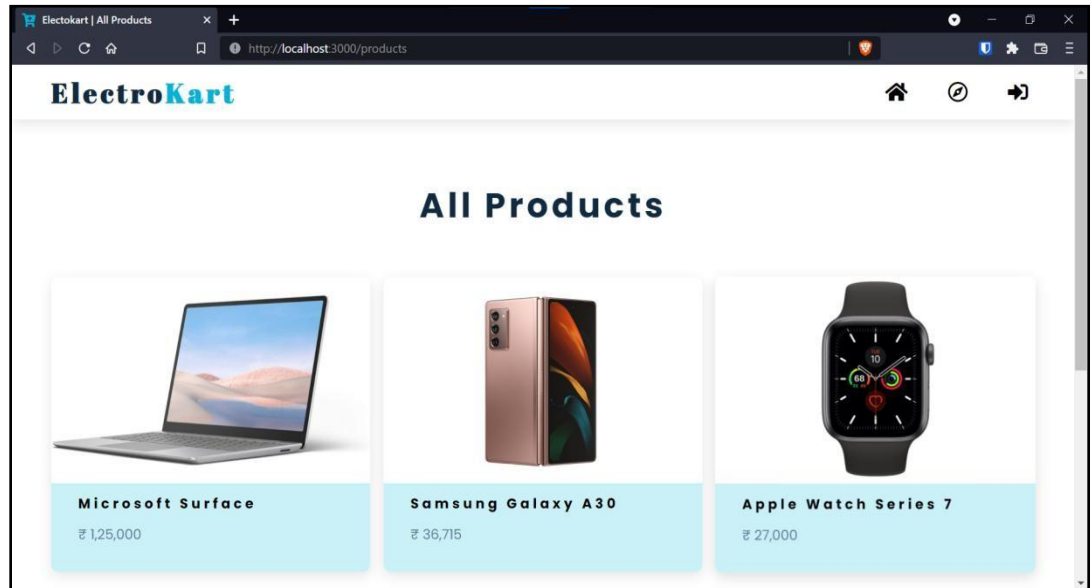
### 3. User Module

- This is a public link of the website used by the user for shopping purpose.
- Firstly user needs to Login the account to order the product from the website if the user is not the registered user then he/she cannot login directly. They need to create an account; otherwise, he or she (user) can see the products on the site but cannot order them.
- User can explore products, select category wise products, add products to cart and order the product.

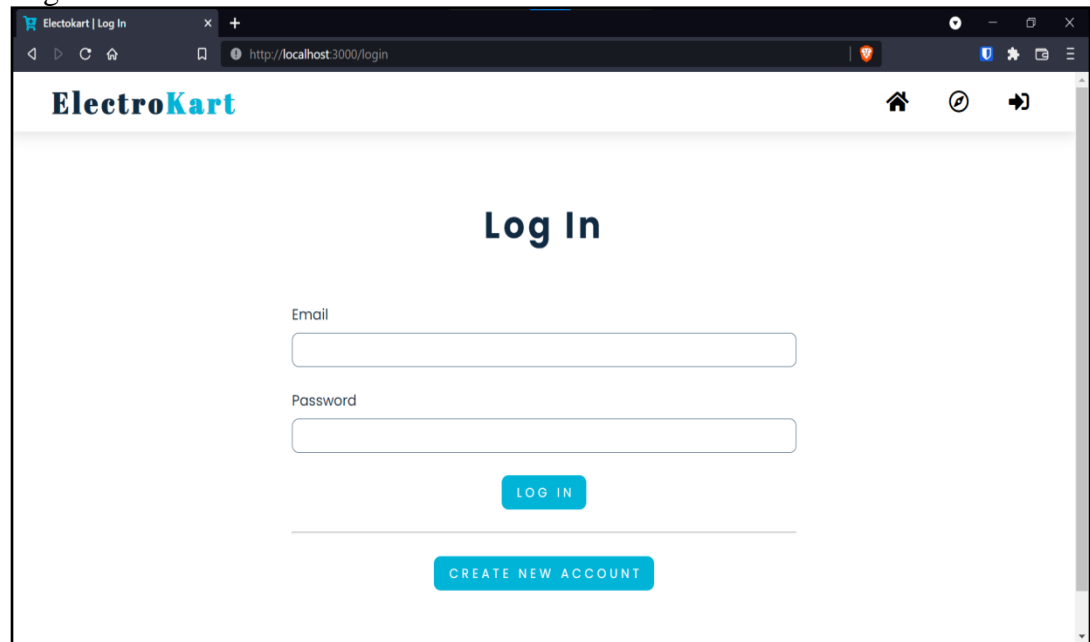
➤ Homepage



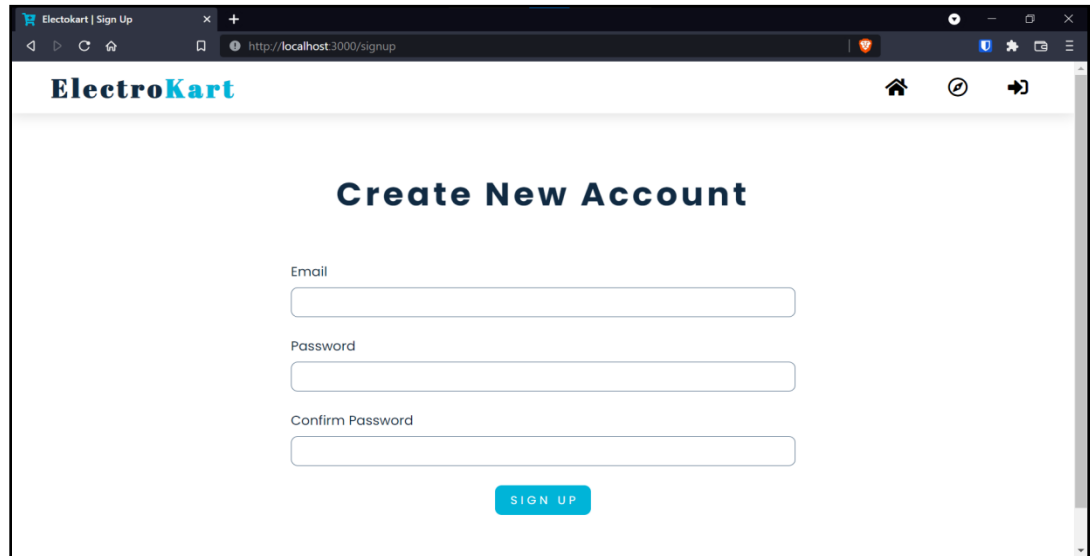
➤ Explore Products



➤ Login

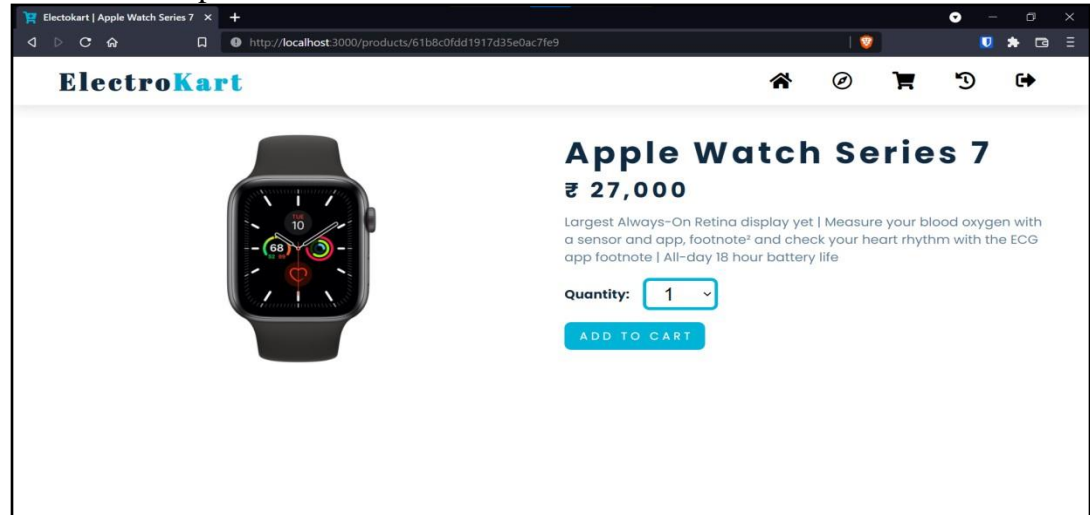


➤ Register



The screenshot shows a web browser window with the URL `http://localhost:3000/signup`. The page features the ElectroKart logo in the top left and navigation icons in the top right. The main heading is "Create New Account". Below this, there are three input fields labeled "Email", "Password", and "Confirm Password". A blue "SIGN UP" button is positioned at the bottom center of the form.

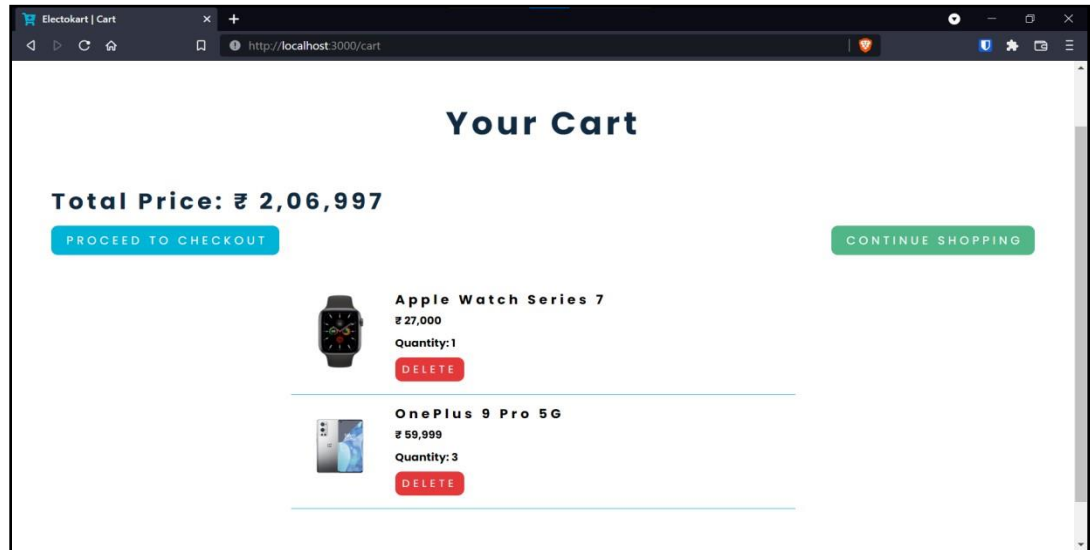
➤ Product Description



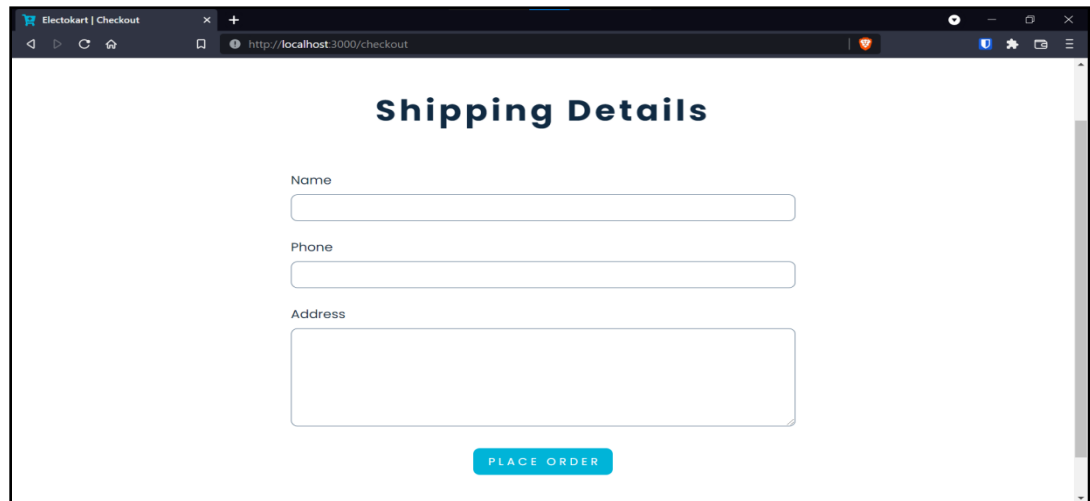
The screenshot displays a product page for the "Apple Watch Series 7" on the ElectroKart website. The URL is `http://localhost:3000/products/61b8c0fdd1917d35e0ac7fe9`. The page includes the ElectroKart logo and navigation icons. On the left, there is an image of a black Apple Watch Series 7. To the right of the image, the product name "Apple Watch Series 7" is displayed in a large font, followed by the price "₹ 27,000". Below the price, there is a short description: "Largest Always-On Retina display yet | Measure your blood oxygen with a sensor and app, footnote² and check your heart rhythm with the ECG app footnote | All-day 18 hour battery life". A "Quantity:" label is followed by a dropdown menu showing the number "1". At the bottom right, there is a blue "ADD TO CART" button.



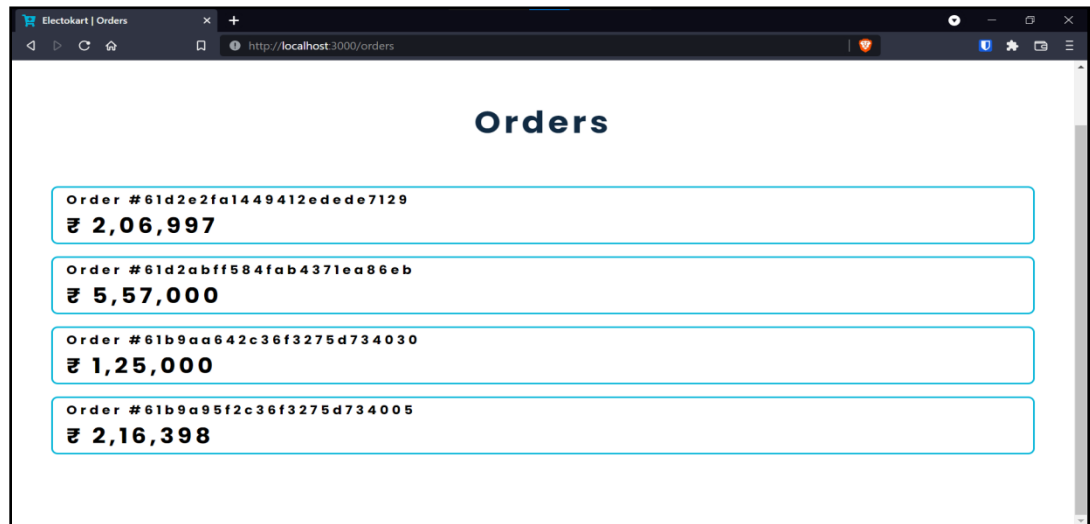
## ➤ Shopping Cart



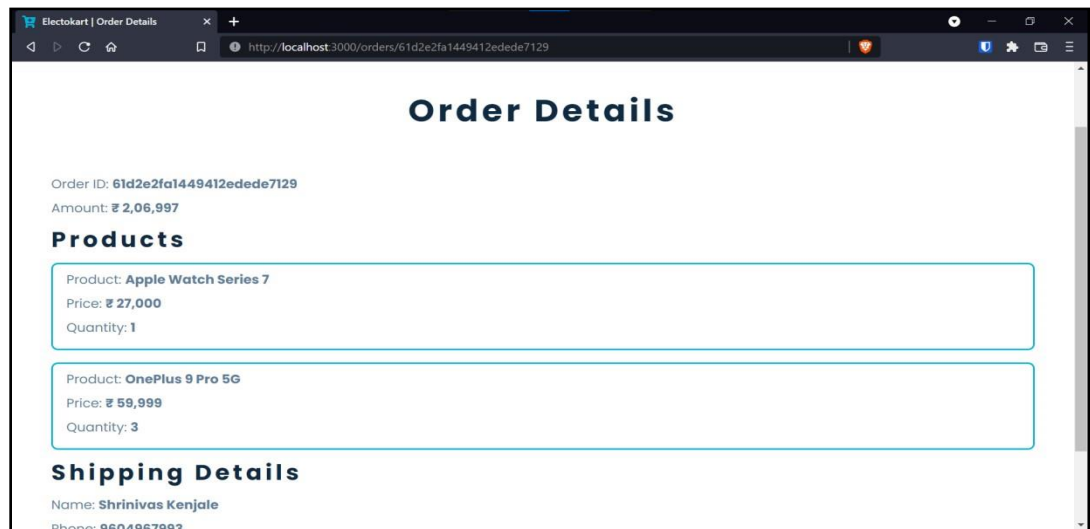
## ➤ Checkout



## ➤ Orders History



## ➤ Order Details



## IV. Project Objectives

- The purpose of online shopping is to save time, save money.
- To improve customer service.

## V. Academic Objectives

- To learn and implement application development tactics and workflow
- To learn database design and implement in real world applications
- To be familiar with Node.js, MongoDB.

## **VI. Requirement analysis:**

- Software requirements:
  - Visual Studio Code
  - Node.js
  - MongoDB
  - HTML, CSS, JS
  - Web Browser
- OS Requirement:
  - Windows 7+

## **VII. Advantages of the Proposed System**

- Time Saving
- Responsive design: layout adapts to screen size
- Choose products faster and easier at one place.
- To offer a quality experience for customers that matches the aspirations of a customer
- It avoids a lot of manual work.

## **VIII. Limitations of the Proposed System**

- Requires internet connection

## **IX. Future Scope**

- In future we will try to make this website work so flexible.
- We can add more functionalities such as Filters, Search bar etc.

## **X. References**

- <https://www.digitalocean.com/community/tutorials/how-to-use-ejs-to-template-your-node-application>
- Node.js documentation: <https://nodejs.org/en/docs/>

