

# **ELECTRONICGADGETS SHOP**

## **AN INTERNSHIP REPORT**

*Submitted by*

**JAYKISHANSINH SHAILENDRASINH RAHEVAR**

**190320116051**

*In partial fulfillment for the award of the degree of*

## **BACHELOR OF ENGINEERING**

*in*

**Information Technology Department**

**L. J. Institute of Engineering & Technology**

**Ahmedabad**



**Gujarat Technological University, Ahmedabad**

**[May - 2023]**



**L. J. Institute of Engineering &  
Technology Ahmedabad**

**CERTIFICATE**

This is to certify that the project report submitted along with the project entitled **Electronicgadgets shop** has been carried out by **Jaykishansinh Shailendrasinh Rahevar** under my guidance in partial fulfillment for the degree of Bachelor of Engineering in **Information Technology** , 8<sup>th</sup> Semester of Gujarat Technological University, Ahmadabad during the academic year 2022-23.

Prof. Foram Gohel

**Internal Guide**

Prof. Prayag Patel

**Head of the Department**



**Enterprise Analytic**  
BUSINESS SOLUTIONS

211, Maruti Titanium, S.P. Ring Road,  
Nikol, Ahmedabad - 382350, Gujarat  
+91 9714844045  
[www.enterpriseanalytic.com](http://www.enterpriseanalytic.com)  
info@enterpriseanalytic.com

Date : 21 April, 2023

### TO WHOM IT MAY CONCERN

This is to certify that Jaykishansinh Shailendrasinh Rahevar, a student of L. J. Institute of Engineering & Technology, Ahmedabad has successfully completed his internship in the field of Web Development from 30/01/2023 to 21/04/2023 (Total number of Weeks:12) under the guidance of Mr. Sandip Patel.

The intern is involved in developing Web applications as part of his internship activities.

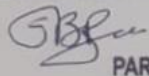
During the period of her internship program with us, he had been exposed to different processes and was found diligent, hardworking and inquisitive.

We wish him every success in his life and career.

**Sandip Patel**  
Co- Founder  
Enterprise Analytic LLP  
Email: [sandip@enterpriseanalytic.com](mailto:sandip@enterpriseanalytic.com)

**Signing Authority**

**FOR, ENTERPRISE ANALYTIC**

  
**PARTNER**



**L. J. Institute of Engineering &  
Technology Ahmedabad**

**DECLARATION**

We hereby declare that the Internship report submitted along with the Internship entitled **Electronicgadgets shop** submitted in partial fulfillment for the degree of Bachelor of Engineering in **Information Technology** to Gujarat Technological University, Ahmedabad, is a bonafide record of original project work carried out by me at Enterprise analytic LLP under the supervision of Sandip Patel and that no part of this report has been directly copied from any students' reports or taken from any other source, without providing due reference.

Name of the Student

Sign of Student

Jaykishansinh Shailendrasinh Rahevar

## ACKNOWLEDGEMENT

It is great pleasure for me to undertake this Internship as software engineer intern and a project at Enterprise analytic LLP. I feel highly doing the project entitled “**Electronicgadgets Shop**”. I offer my sincere appreciation for the learning opportunities provided by Enterprise analytic LLP

I am very grateful and would like to thank my supervisor and external guide **Mr. Sandip Patel** who has been mentoring me through the whole journey of this project and internship. I would also like to thank **Prof. Prayag Patel**, Head of Department and **Prof. Foram Gohel**, my Internal guide for their continued support.

This Internship and project would not have completed without their enormous help and worthy experience. Whenever I was in need, they were there behind me. Although, this report has been prepared with most care and deep routed interest. Even then I accept respondent and imperfection. This opportunity has proved to be very useful to me in a way of taking responsibilities and enhancing my coding skills and becoming more code friendly. And for that i am very happy.

Jaykishansinh Rahevar

(190320116051)

DATE:

## **ABSTRACT**

An establishment that specializes in selling electronic devices, including smartphones, tablets, laptops, gaming consoles, cameras, and other related accessories, is commonly known as an Electronicgadgets shop. These stores cater to customers seeking the latest technological advancements and offer a diverse range of brands and models to choose from.

The prosperity of an electronic gadgets shop is determined by its ability to keep up with the constantly evolving industry trends and meet the demands of its customers. To remain competitive, the shop must provide excellent customer service, employ knowledgeable staff, and offer competitive pricing.

To streamline the buying and selling process, a web application is utilized by the electronic gadgets shop to store all customer data and transaction details. This application includes features for recording payment and receipt information. The project also incorporates various components learned during the intern's experience. The implementation of these features ensures the efficient management of the store's operations, ultimately contributing to the success of the business.

## LIST OF FIGURES

Fig 1.1	Turnover center	1
Fig 1.2	Recruitment Platform	1
Fig 1.3	School Pandit	1
Fig 1.4	Organization Chart	2
Fig 2.1	SDLC	4
Fig 2.2	Layout of Process	4
Fig 3.1	Iterative Model	10
Fig 3.2	Gantt Chart (Internship)	16
Fig 4.1	Features of new system	21
Fig 4.2	List of Main Modules	22
Fig 5.1	System snap (Homepage)	24
Fig 5.2	System snap (cart checkout page)	25
Fig 5.3	System snap (Track your order)	25
Fig 5.4	System snap (your order details)	26
Fig 5.5	System snap (contactus page)	27
Fig 5.6	System snap (categories option)	27
Fig 5.7	System snap (after click on particular category)	27
Fig 5.8	Activity diagram of website	28
Fig 5.9	List of tables in database	29
Fig 5.10	Design of particular field in database	29
Fig 5.11	Product detail in database	30
Fig 5.12	Order details in database	30
Fig 5.13	Title, Menu and NavigationBar	31
Fig 5.14	Decided the layout of forms	31
Fig 6.1	Code snippet from adminside	34
Fig 6.2	CSS on firstpage	35
Fig 6.3	CSS on firstpage product hover effect	35
Fig 6.4	After Login success message show to user	35
Fig 6.5	Cart items add JQUERY	36
Fig 6.6	Cart items increment JQUERY	36
Fig 6.7	Login code in views.py	37

Fig 6.8	Orderupdate and orders field in models.py	37
Fig 6.9	After searching items	38
Fig 6.10	After successfully fill contactus page	38
Fig 6.11	Admin side	39
Fig 6.12	Adminside for orderupdate	39
Fig 6.13	Adminside item delete pop-up	39



## LIST OF TABLES

List of Figures	iii
List of Tables	v
List of Abbreviation	vi
Table of Content	vii
Table 3.1 Project Plan	11
Table 3.2 Estimated Code of Line	13
Table 4.1 Hardware Requirement	18
Table 7.1 Testcases	42

## LIST OF ABBREVIATION

Following is the list of abbreviations used in the report:

Abbreviation	Full Form
HTML	Hyper Text Markup Language
CSS	Cascading Style Sheet
JS	Java Script
SDLC	System Development Life Cycle
SRS	Software Requirement Specification

# TABLE OF CONTENTS

<b>Acknowledgement</b>	<b>i</b>
<b>Abstract</b>	<b>ii</b>
<b>List of Figures</b>	<b>iii</b>
<b>List of Tables</b>	<b>v</b>
<b>List of Abbreviations</b>	<b>vi</b>
<b>Table of Contents</b>	<b>vii</b>
<b>Chapter 1 Overview of the Company</b>	<b>1</b>
1.1 History	1
1.2 Different Products of work	1
1.3 Organization Chart	2
<b>Chapter 2 Overview of various activities in the company</b>	<b>3</b>
2.1 Information regarding the tasks performed in every department	3
2.2 Technical specifications of the major equipment used in each department.	4
2.3 Sequence of operation for end product	4
2.4 Details about each stage of production	5
<b>Chapter 3 Introduction</b>	<b>7</b>
3.1 Introduction to internship and project	7
3.2 Purpose	7
3.3 Objective	8
3.4 Scope	8

3.5 Technology and Literature Review	9
3.6 Project/ Internship Planning	10
3.6.1 Project/Internship Development Approach and Justification	10
3.6.2 Project/Internship Effort and Time, Cost Estimation	11
3.6.3 Roles and Responsibilities	14
3.6.4 Group Dependencies	15
3.7 Project/ Internship Scheduling (Gantt Chart)	15
<b>Chapter 4 System Analysis</b>	<b>17</b>
4.1 Study Of Current System	17
4.2 Problem and Weakness of Current System	17
4.3 Requirements of New System	17
4.4 System Feasibility	19
4.4.1 System's contribution to the overall objectives of the organization	20
4.4.2 System's implementation using the current system	21
4.4.3 System's integration with other systems	21
4.5 Features of Main System	21
4.6 List Main Modules	22
4.7 Selection approaches and Justification	23
<b>Chapter 5 System Design</b>	<b>24</b>
5.1 System Design and Methodology	24
5.2 Database Design	28
5.3 Input/ Output and Interface Design	31
5.3.1 Samples Of Forms Reports And Interface	31
5.3.2 Access Control/ Security	32

<b>Chapter 6 Implementation</b>	<b>33</b>
6.1 Implementation Platform/ Environment	33
6.2 Process/ technology/ specifications	33
6.3 Results/Outcomes	38
6.4 Result Analysis	40
<b>Chapter 7 Testing</b>	<b>41</b>
7.1 Testing Plan/ Strategy	41
7.2 Test Results and Analysis	42
<b>Chapter 8 Conclusions and Discussion</b>	<b>43</b>
8.1 Overall Analysis of Internship/ Project	43
8.2 Summary of Internship/ Project Work	43
8.3 Limitation and Future Enhancement	44
<b>References</b>	<b>45</b>

## **1. OVERVIEW OF THE COMPANY**

### **1.1 HISTORY**

Enterprise Analytic is a Technology solution provider specializing in the following solutions: Our aim is to analyse the specific needs of our customers and provide quality solutions on time and within budget. We leverage Agile and Lean principles for quick go-to-market and Return on Investment.

We provide business value with a clear focus on quality and long-term relationships. Our solutions are focused on meeting your strategic business objectives. Our delivery process encompasses industry best practices and proven quality frameworks.

### **1.2 DIFFERENT PRODUCTS OF WORK**



Figure 1.1 Turnover center



Figure 1.2 Recruitment Platform



Figure 1.3 School Pandit

As I mentioned earlier, the company is product based organization, it makes large scale software for its clients. It only works with big data. The main feature of the products this company creates is the management of huge database. It has a highly skilled team for organization and maintenance.

### 1.3 ORGANIZATION CHART



Figure 1.4 Organization Chart

<https://enterpriseanalytic.com/>

## **2. OVERVIEW OF THE VARIOUS ACTIVITIES IN THE COMPANY**

### **2.1 INFORMATION REGARDING THE TASKS PERFORMED IN EVERY DEPARTMENT**

- **Project Manager:**

Project managers are accountable for planning, organizing, and cheerleading the employees. These gate keepers ensure customer satisfaction, push documentation, and efficiently optimize the workflow.

- **Developer:**

Software developers are the creative, brainstorming eminence grise that power computer programs of all kinds. Among their daily duties are software development and testing, upgrading, quality monitoring, and documenting all processes for future reference.

- **Designer:**

UI/UX designer creates user-friendly and intuitive interactions by building a route that logically flows from one stage to the next. A user interface designer focuses on the user's visual experience that goes with that route.

- **Business Analyst:**

Although the responsibilities of business analysts can differ on the waterfall and agile projects, strive to help guide businesses. They do this by gathering, analyzing, developing, and documenting business requirements. In a broader sense, they bridge the gap between the business and IT to improve efficiency.

- **Quality Assurance engineers:**

They are more than just testing a feature or a product. These specialists advocate for the quality of a product by monitoring each stage of software development, debugging, and defining corrective measures.



## 2.2 TECHNICAL SPECIFICATIONS OF THE MAJOR EQUIPMENT USED IN EACH DEPARTMENT.

List of major equipment used in each department individually is not provided to us by the company. Hence, I have specified the equipment I used as a software developer intern:

Back end and Frontend coding: Visual Studio code 2020

Framework and library: django framework from Visual Studio Libraries

Database: Microsoft SQL Server 2008 R2

## 2.3 SEQUENCE OF OPERATION FOR END PRODUCT

The process of software development is carried out by adhering to the fundamental rules of the Software Development Life Cycle (SDLC), which has proven to be the most effective method. Therefore, the company employs the same SDLC approach for software development.

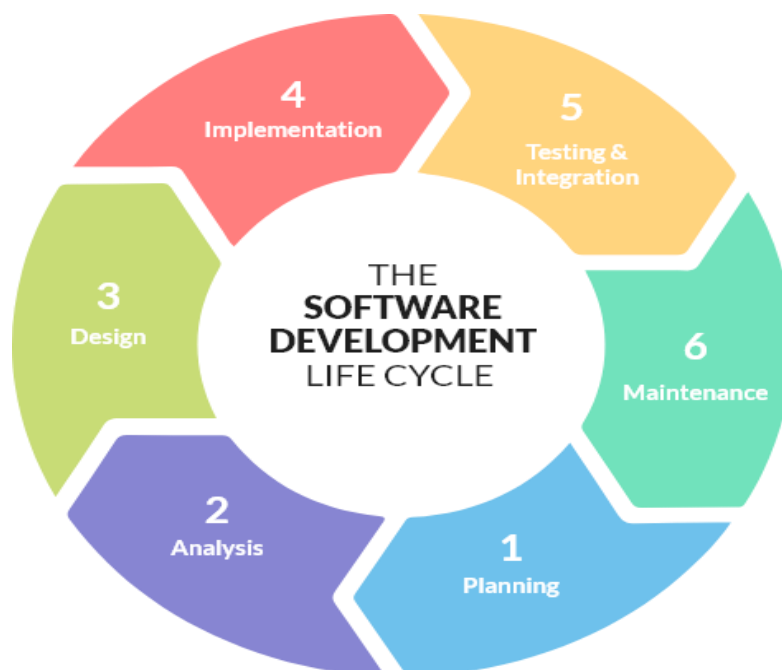


Figure 2.1 SDLC

## 6 Phases of the Software Development Life Cycle

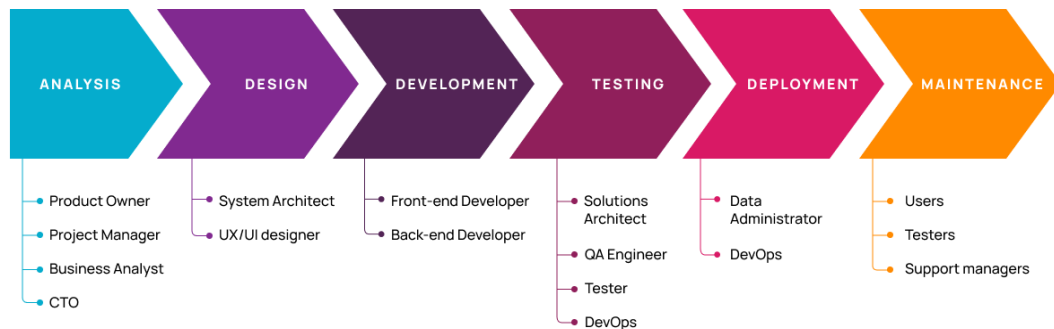


Figure 2.2 Layout of Process

The process depicted above illustrates the sequence of steps that the software development team follows to create software. It is essentially a Software Development Life Cycle (SDLC) described using different terminology.

The process shown above is a visual representation of the series of phases that the software development team goes through to develop software. It is essentially an SDLC expressed using alternative vocabulary.

<https://brocoders.com/blog/agile-software-development-life-cycle/>

## 2.4 DETAILS ABOUT EACH STAGE OF PRODUCTION

### 1.Gather the information about Requirements:

The initial step in any software development project is to collect information about the requirements. It is crucial to understand both the functional and non-functional requirements, and the project manager is responsible for communicating these requirements clearly to the development and design teams.

**2. Begin with the design of the front-end.**

It is the role of UI/UX designers of the company. Once the requirements about the design and user interface is understood the team starts with developing the visual solution of the product. This part of the process is known as user interface design, and it stands for how users perceive the app.

**3. Focus on Coding:**

During the third step, the development team begins coding the concepts that were listed in the previous stages. All the models, business logic, and service integrations that were defined earlier are implemented in this stage. Since this phase is critical to the entire process, it usually takes the most time. The development team follows the software requirements to ensure that the final product meets the expectations of the stakeholders.

**4. product review is performed by the QA team.**

In the QA phase, the testing specialists uncover and communicate any problems that surface while using the system. Depending on the project, the testing frameworks employed may include manual and automated testing.

**5. deployment phase of the software development cycle**

Finally, the application is deployed in a production environment. This stage involves performing deployment, support, and maintenance activities that are necessary to ensure the system remains operational and current.

### **3. INTRODUCTION**

#### **3.1 INTRODUCTION TO INTERNSHIP AND PROJECT**

The Electronicgadgets Shop is an innovative software for purchasing electronicgadgets. Users are required to have an account upon entering the website. If a user does not have an account, they will need to create one to order gadgets. Creating an account entails providing a unique username, email address, new mobile number, and password. The user is also required to provide their address for gadget delivery. Upon accessing the website, the user can browse through various gadget categories such as headphones, keyboards, and routers. They can then search for gadgets that pique their interest, select the gadgets they wish to order, and confirm their address before placing the order. The website provides several payment options to choose from, including cash on delivery and various online payment methods that offer additional benefits.

This project used languages like PYTHON, DJANGO , JAVASCRIPT , JQUERY, HTML, CSS along with asp components. During the whole term of internship, I firstly learnt about the new language and framework I was going to work with. Later on I was provided with the system they wanted me to work on. After getting familiar with the language.

#### **3.2 PURPOSE**

The reason for selecting to work at Enterprise Analytic LLP under Mr. Sandip Patel was due to his extensive experience of over one decades in the field and his ability to manage over 30 clients at present. The objective of working on this project was to apply the knowledge acquired during the internship period to practical use. I attempted to persuade the client to consider the convenience of using a user-friendly system for managing their company records.

In the current situation with the impact of the online, we tend to rely on online options for almost everything. While it was already challenging to find skilled employees to manage the entire operation of the organization, it has become even more difficult now. So this website gives an effective way not just by saving time but also by giving them multiple options to make the work easier.

1. Time-saving
2. Wide variety of options/choices
3. Convenient ordering process
4. Ability to place multiple orders
5. Easy contact options

### **3.3 OBJECTIVES**

Our project has multiple objectives, primarily to develop a system that is useful and personalized for the clients of the company, helping them to save time and reduce their workload. The platform is designed to meet the specific requirements of each client.

The project aims to achieve various goals, such as creating a personalized and helpful system for the company's clients to save time and ease their workload. The main objectives of this platform include providing immediate and easy help to clients, implementing a user-friendly system with various features such as saving and updating data, recording order details and storing order details. Additionally, the system will only allow the admin to log in.

### **3.4 PROJECT SCOPE**

The electronicgadgets shop website project aims to create an online platform that allows users to easily browse and purchase electronic gadgets. The website will require users to create an account in order to place orders, with options for both cash on delivery and online payment methods.

The website will have different categories of gadgets such as headphones, keyboards, and routers, with a search feature to help users find the specific gadget they are looking for. The project also includes a feature for storing delivery and reception of stocks, as well as allowing only the admin to log in to maintain security.

Overall, the project aims to provide a user-friendly experience for purchasing electronic-gadgets online.

### 3.5 TECHNOLOGY AND LITERATURE REVIEW

The front end used in my project is HTML, CSS ,Bootstrap , JavaScript, JQUERY, Python and the back end used is Django.Also django provide inbuilt databse dbsqlite3.

I followed the Spiral Model for developing this Project and whole Project will be developed using the SDLC scenario.

- **HTML ,CSS and BOOTSTRAP**

HTML is a crucial part of building web pages, as it allows for the organization of text, images, and videos. It serves as the foundation for creating attractive and interactive web pages, and by learning the various HTML tags, one can structure websites effectively. Additionally, one can use HTML tables to present data in a clear and concise manner. However, for styling and design, CSS is typically used. Bootstrap is another tool that can be used to create responsive and visually appealing web pages.

- **JAVASCRIPT and JQUERY**

JavaScript is a scripting language that is lightweight, interpreted, and can run on various platforms. It can be used for both server-side and client-side development. On the other hand, jQuery is an open-source JavaScript library that makes it easier to interact between an HTML/CSS document, specifically the Document Object Model (DOM), and JavaScript. In the project, I have utilized both JavaScript and jQuery for client-side scripting on specific components.

- **PYTHON and DJANGO**

Python Django is a popular web framework used for developing robust, scalable, and secure web applications. It provides a powerful and flexible toolkit for building complex web applications with clean and pragmatic design patterns. Django emphasizes reusability and pluggability, making it easier to build complex web applications with less code. Additionally, Django's templating system makes it easy to build dynamic and responsive web pages. Overall, Python Django is a great choice for building web applications with high scalability, security, and maintainability.

- **DBSQLITE3**

SQLite3 is a lightweight, serverless, and self-contained database management system that is widely used for small to medium-sized applications. It is built into Python, making it easy to use in web development. In the Electronic Gadgets Shop website

project, SQLite3 was used as the database to store user information, gadget details, and order history, among other things. It provides a simple, efficient, and reliable way to manage data for the website.

### 3.6 PROJECT/INTERNSHIP PLANNING

The SDLC is a model used in Project Management to explain the stages of an information system development project, from feasibility study to application maintenance. SDLC can be used for both technical and non-technical systems, although it's most commonly applied to IT technologies such as software and hardware. The SDLC typically involves the participation of project and program managers, system and software engineers, development teams, and end-users.

#### **3.6.1 Project / Internship Development Approach and Justification**

Our project was developed using the Iterative Model, which involves the iterative creation and refinement of individual parts of the software rather than starting with full specifications. The rough product is created in each iteration, then reviewed and improved in the next iteration, and so on. This model involves step-by-step development of the whole product, which includes the stages of Design/Develop, Test, and Implement.

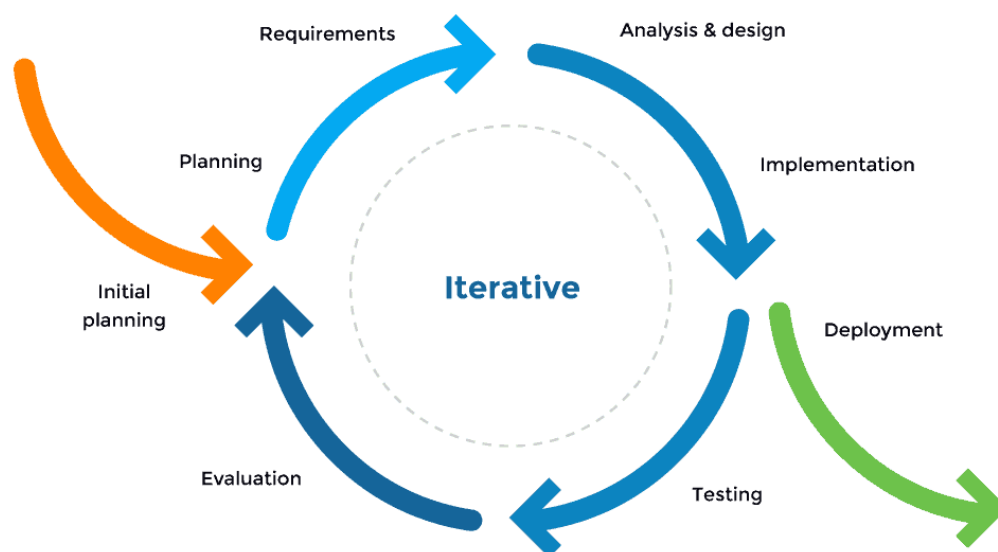


Figure 3.1 Iterative Model

Table 3.1 Project Plan

<b>TASKS</b>	<b>Start Date</b>	<b>End Date</b>
Introduction to the company system	30/01/2023	03/02/2023
Getting started with frontend development languages	06/02/2023	10/02/2023
Web page design and JavaScript	13/02/2023	17/02/2023
Creating the structure of a user interface with CSS	20/02/2023	24/02/2023
Python basics and learn some programs	27/02/2023	03/03/2023
Understanding Django Framework	06/03/2023	10/03/2023
Starting with Backend programming using DB SQLite	13/03/2023	17/03/2023
Learnt how to Database Integration and SMTP authentications	20/03/2023	24/03/2023
Connect navigationbar to backend	27/03/2023	31/03/2023
Understanding Requirements and programming for Transaction	03/04/2023	07/04/2023
Product editing from admin side	10/04/2023	14/04/2023
AdminLTE3 introductions and implementation	17/04/2023	21/04/2023

### **3.6.2 Project / Internship Effort and Time, Cost Estimation**

#### **COCOMO Model**

all estimation models for software, the COCOMO models require sizing information.

Three different sizing options are available as part of the model hierarchy:

object points, function points and lines of source code.

Like function points, the object point is in direct software that is computed using counts of the number of

1. Screens (at the user interface),
2. Reports, Components likely to be required to build the application.
3. There are three types of software project

- Organic project



- Semi-detached project
- Embedded project
  
- **Cost required to develop project= effort\*RS/month**

**Effort Estimation(E):**

In Organic=2.4 (KLOC)1.05PM

In semidetached=3.0(KLOC)1.12PM

In Embedded=3.6(KLOC)1.20PM

**Duration Estimation(D):**

In Organic=2.5(effort)0.38months

In semidetached=2.5(effort)0.35months

In Embedded=2.5((effort)0.32months

**Person Estimation:**

1.  $P=E/D$  **KLOC=Kilo Line of Code**

Table 3.2 Estimated Lines of code

<b>Apps</b>	<b>Page</b>	<b>Estimated lines of code</b>
<b>Store</b>	-	<b>1989</b>
	About	308
	Basic	234
	Checkout	183
	Contact	300
	Index	178
	Order view	234
	Password reset	129
	Payment Status	22
	Product view	63
	Searchbar	185
	Tracker	153
<b>Admin</b>		<b>962</b>
	Index	453
	Settings.py	150
	Views.py	259
	Models.py	60
	Urls.py	40
<b>CSS</b>		<b>10141</b>
	Style	1533
	Animate	4072
	Bootstrap-grid	3871
	Bootstrap-reboot	325
	Bootstrap-reboot-min	340

<b>JS</b>	-	<b>4904</b>
	Main	198
	Bootstrap	4432
	jQuery-sticky	274

- Total line of code=17,996 (actual value is more than calculated figure)
- KLOC=17.99

### **Effort Estimation(E):**

$$=2.4(\text{KLOC})^{1.05}\text{PM}$$

$$=49.88\text{PM}$$

### **Duration Estimation(D):**

$$=2.5(\text{effort})^{0.38}\text{month}$$

$$=2.5(49.88)^{0.38}\text{months}$$

$$\sim 11 \text{ months}$$

### **Project Cost:**

$$=\text{effort} * \text{RS/month}$$

$$=49.88 * \text{RS/month}$$

### **3.6.3 Roles and Responsibilities**

My roles and Responsibilities throughout the internship were:

1. Communication
2. Reporting
3. Analysis
4. Database Connectivity
5. Coding
6. Testing

### **3.6.4 Group Dependencies**

We were a group of two people during the internship and we both worked on the project together. In this project, the speaker and their teammate Deven worked together on various aspects of the project, including design, coding, and testing. While Deven handled the system connectivity on her desktop for communication, the two of them collaborated closely to ensure the success of the project. The speaker's use of the word " collaborated " suggests that the work was done in a spirit of teamwork and mutual support, and that both parties played an active role in all phases of the project. Overall, it seems that the speaker had a positive experience working with Deven and was pleased with the results of their joint effort.

### **3.7 PROJECT / INTERNSHIP SCHEDULING (GANTT CHART)**

Gantt charts also typically include a timeline along the top of the chart, which shows the overall duration of the project. This helps project managers to visualize the project timeline and identify any potential delays or bottlenecks.

One of the key benefits of using a Gantt chart is that it allows project managers to easily track progress and identify any issues that arise. By monitoring the progress of tasks on the chart, project managers can quickly see if tasks are falling behind schedule or if there are any dependencies that are causing delays. This enables them to take corrective action and keep the project on track.

Overall, Gantt charts are a valuable tool for project management, particularly for large or complex projects. They provide a visual representation of the project timeline and allow project managers to easily track progress and make adjustments as needed.

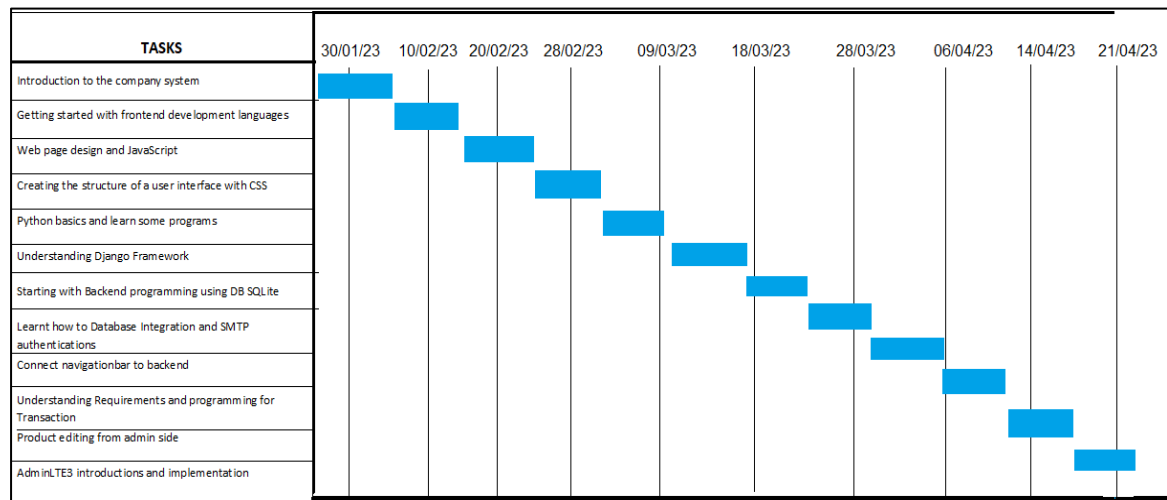


Figure 3.2 Gantt Chart (Internship)

## **4. SYSTEM ANALYSIS**

### **4.1 STUDY OF CURRENT SYSTEM**

- I started internship with learning phases to learn some languages after that I started working on project which is website for buy electronic gadgets online in easy way for particular shop.
- This webapp provide different types of gadgets and easy way to buy I complete some of module of this app as per Sandip sir give me task.
- The system I was assigned to work on was a web application version of the electronic gadgets shop application.

### **4.2 PROBLEM AND WEAKNESSES OF CURRENT SYSTEM**

- Though it saves time and lessen the man power required in the on-paper management system. It lacks user-friendliness and requires highly skilled employees to operate the system.
- Database management is not strong enough to store large data.
- Some of the delivery side function are not available yet.
- Website have limited features more features are need to build on this website like Discount coupon , track order in map etc..

### **4.3 REQUIREMENTS OF NEW SYSTEM**

- A common system to user details, product details, order update, contact us , delivery details etc.
- More of a user-friendly system so that no highly skilled employee are required to employ for operation.

#### **User Requirement:**

- It describes the type of user which deals with the applications. Basically, this application has one type of user as given below:

#### **1. Administrator (Adminside)**

The administrator is accountable for the management of the application database and

ensuring that data is regularly updated. This includes managing data related to order gadgets and cancellations. Also reply to the customers who has query and contact through contact us.

- Simply clicking on the navigation bar will open up the corresponding page.

### Hardware and Software Characteristics:

#### Hardware Requirements:

Component	Minimum	Recommended
Processor	Intel(R) Core(TM) i3-3220 CPU @ 3.30GHz 3.30 GHz	Intel(R) Core(TM) i5-220 CPU @ 2.5GHz 2.5 GHz
Memory	4-GB RAM	4-GB RAM or more
Display	resolution of 1024 x 768	resolution of 1024 x 768

Table 4.1 Hardware requirement

#### Software Requirements:

Editor Required: Visual Studio code (version 1.77)

Database Server: Django inbuilt db.sqlite3

Install Django Framework in the system through visual studio code installer Install

Web Application library from visual studio code installer

#### Functional and Non-Functional Requirements:

Functional requirements are product features or functions that developers must implement to enable users to accomplish their tasks. Non-Functional Requirements, not related to the system functionality, rather define how the system should perform

#### Functional Requirement

It uses search bar in navigationbar. As the user types in the search bar it implements live search and filter the options to choose product from for the user.

As the user chooses an option from category it shows its hierarchy from the database through.

Customers can easily login , signup, order for product , change order, review product also log out.

Admin can login and it he had ability fully control whole app and modify it simply if any issues occurred.

The values in gridview should summed and output a total value on the same page for a clear idea about the website.

### **Non-Functional Requirement**

Some fields only allow number of a specific length like phone numbers allow 10 digits.

Portability refers to the ability of a system to run on one platform and then be easily converted to run on another platform.

Availability The system should be available at all times, meaning the user can access it using a web browser, only restricted by the down time of the server on which the system runs.

Security Secure access of confidential data (customer information).

User-friendliness refers to the ease with which customers can use the system.

Performance refers to the speed at which the system operates.

Reliability The ability of the system to behave consistently in a user-acceptable manner when operating within the environment for which the system was intended.

## **4.4 SYSTEM FEASIBILITY**

As the name suggests, a feasibility study is an analysis of the practicality or feasibility of a software product in terms of its potential benefits for the organization. It serves as a measure of whether product development would be advantageous from a practical perspective.

analyze whether software product will be right in terms of development, implantation, contribution of project to the organization etc.

### **Types of Feasibility Analysis:**

- Technical Feasibility
- Operational Feasibility
- Economic Feasibility
- Scheduling Feasibility

### **Technical Feasibility:**

In technical feasibility, the current hardware, software, and required technology resources are analyzed and evaluated to determine whether they are suitable for the project development. The study provides a report on whether the correct resources and



technologies are available for the project. Additionally, the feasibility study also assesses the technical skills and capabilities of the team, determines whether the existing technology can be used or not, and evaluates whether maintenance and upgrades are easy for the chosen technology. Therefore, the system should be maintained periodically.

**Operational Feasibility:**

The system is intended for general users, and as such, we aim to make it user-friendly and easy to use. Additionally, the administrator may not be technically proficient, so we will design the user interface to be easy to operate for non-technical individuals. Our goal is to create a system that is accessible to everyone and can be used without extensive technical knowledge.

**Economic Feasibility:**

In economic feasibility, the cost and benefits of the project are analyzed. A detailed analysis is conducted to determine the cost of the project, which includes all required expenses for final development such as hardware and software resources, design and development costs, operational costs, etc. Then, it is assessed whether the project will be financially beneficial for the organization or not. For the system to be economically feasible, the profits from the project must be greater than or equal to the cost of development.

**Scheduling Feasibility:**

Scheduling feasibility assesses whether the project can be completed within a given timeline. The study considers the availability of resources, the scope of work, and the project's complexity. It ensures that the project can be completed within a reasonable timeframe and that the project timeline aligns with the organization's goals and objectives.

**4.4.1 System's contribution to the overall objectives of the organization**

The contribution of the system to the overall objectives of the organization for the electronicsgadgets website project is to provide a platform for customers to access a wide range of electronic gadgets easily. The system aims to increase sales, improve customer satisfaction, and enhance the overall reputation of the organization.

Currently I worked on this project it was only for my learning a new technology and also for corporate work environment. Additionally, the system is intended to streamline processes, reduce costs, and improve efficiency, thereby helping the organization achieve

its overall objectives.

#### 4.4.2 System's implementation using the current system

The system was developed with the current system serving as a reference point. While the system was built from scratch, the developers analyzed the initiation of the existing system. The company provided the database, but the flow of data from one page to another and its corresponding table was studied in detail. The existing system was useful in identifying shortcomings and areas where improvements were needed for the new system.

#### 4.4.3 System's integration with other systems

The system's integration with other systems is a crucial aspect to ensure seamless operations. Integration enables the system to interact with other systems or applications, allowing for data sharing and better communication. The system may need to integrate with third-party applications, databases to access data or functionality. Effective integration ensures that the system can function as part of a larger ecosystem and enables the organization to achieve its objectives more efficiently.

Also delivery side of website will building in company to make whole process easily.

User can choose time when to deliver product from options of different days or weekend surprise.

### 4.5 FEATURES OF SYSTEM

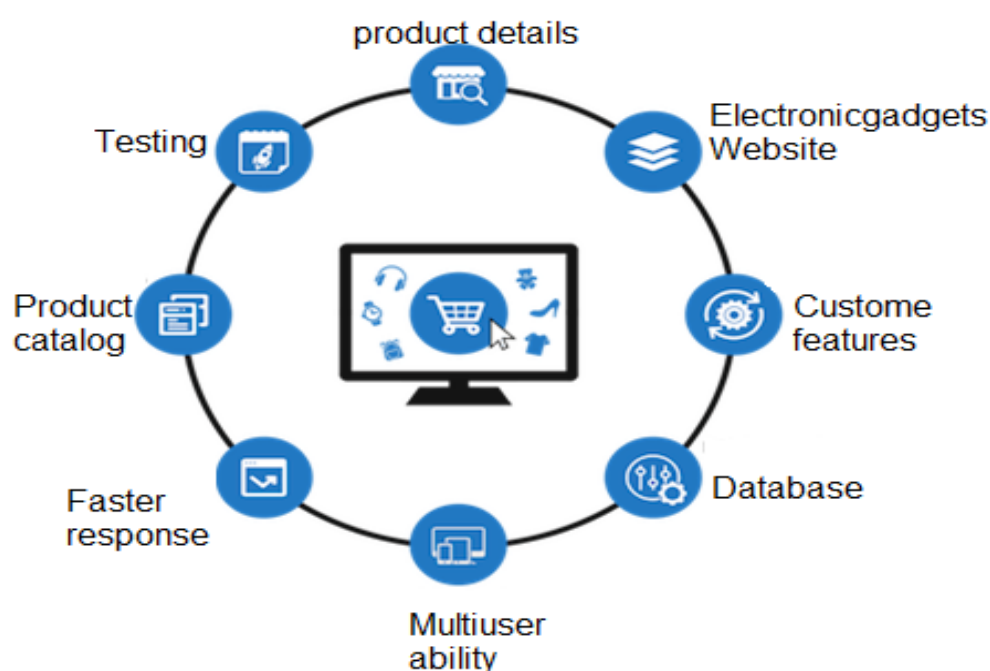


Figure 4.1 Features of new system

## 4.6 LIST MAIN MODULES

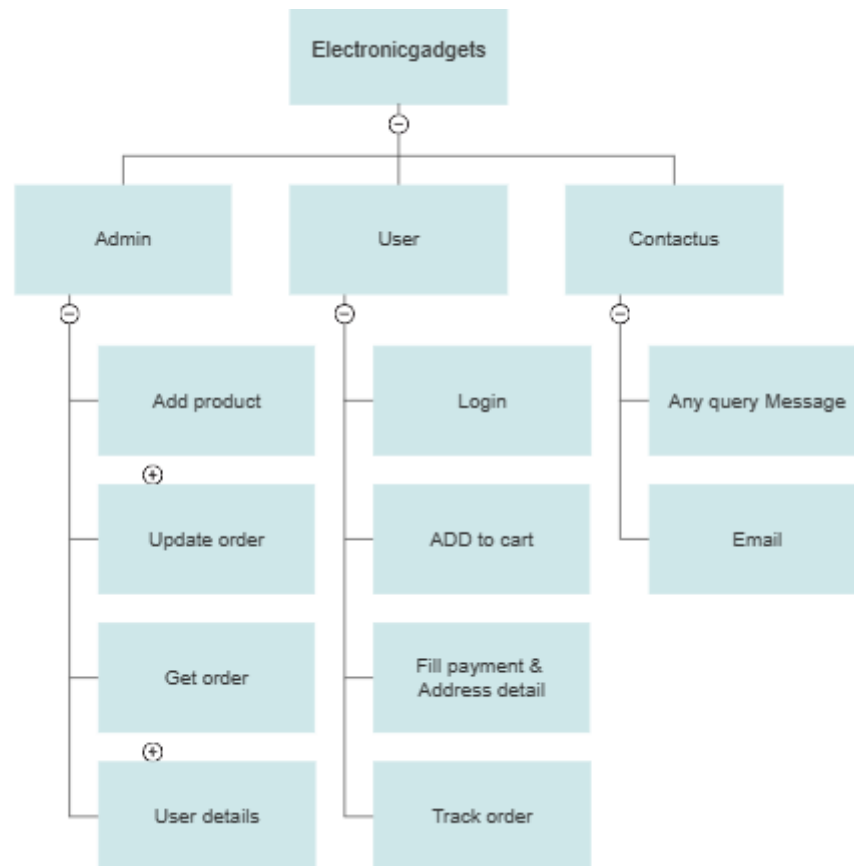


Figure 4.2 List of Main Modules

An electronic gadgets shop website typically consists of several main modules that provide the functionality to showcase and sell products online. These modules may include a home page that highlights featured or new products, a product catalog with detailed descriptions and images, a shopping cart for customers to add items and proceed to checkout, and a payment gateway for secure online transactions. Other important modules may include customer account management, order tracking, and customer support through chat, email, or phone. Additionally, the website may incorporate social media integration, product reviews, and email newsletters to engage with customers and promote new products.

## **4.7 SELECTION APPROACHES AND JUSTIFICATION**

Django is a framework used for web development, designed for creating dynamic web applications on the server-side. It is open-source and provides developers with a portable implementation for building web pages and applications for small and large enterprises. The framework helps in producing back-end applications that can generate dynamic web pages, making it an efficient tool for creating interactive and user-friendly web pages. It is widely used due to its flexibility and ability to handle high traffic. It provides a variety of features such as authentication, URL routing, and database modeling that make web development easier and faster for developers.

Python has various selection approaches that can be used for making decisions in programming. These approaches include if-else statements, switch statements, and conditional expressions. If-else statements are used when there are two outcomes to choose from based on a condition. Switch statements are used to select from multiple options based on a single variable value. However, switch statements are not directly supported in Python. Combination of both will give great web application as output.

## **5. SYSTEM DESIGN**

### **5.1 SYSTEM DESIGN AND METHODOLOGY**

An application heavily relies on system design, as it involves outlining the necessary components, interfaces, modules, and data to fulfill particular requirements.

The company's current desktop application boasts a unique and user-friendly design, complete with toolbars, menus, and submenus. Several snapshots of the existing system are shown below.

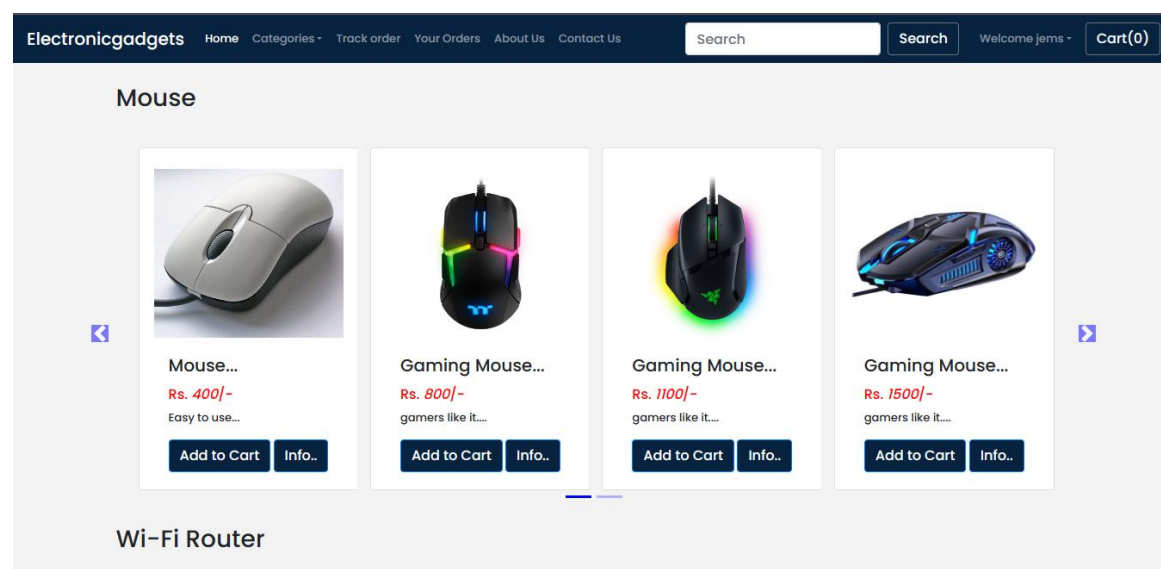


Figure 5.1 System snap (Homepage)

Above Picture show home page of website which can show different product categories , Track order, Your order, Also Cart option to add items than one information but to see product insformation too.

Next is the title of the web page with the respective form underneath, that consists of different HTML elements like labels, input, text boxes, checkboxes, drop down lists, etc.

Also serach option provide easily find gadgets very easily and smoothly.

Category button provide easily show particular gadget in varients with their information too.

Some other snapshots of the desktop application are as follow:

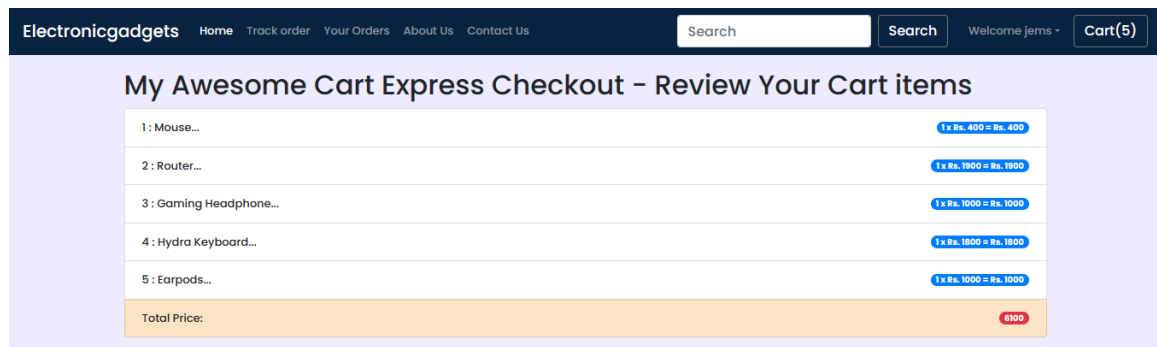


Figure 5.2 System snap (cart checkout page)

Our checkout process is designed to be simple and user-friendly, with clear instructions and easy-to-follow steps. We offer a variety of payment options, including online pay and cash on delivery(COD) accommodate your preferences. Our checkout page is also equipped with the latest security measures to protect your personal information and ensure safe transactions. With Electronicgadgets, you can shop with confidence and enjoy the convenience of fast and reliable delivery. Thank you for choosing electronic gadgets.

**Enter your Order Id and Email address to track your order**

Order Id:

Email:

Password:

**Track Order**

Figure 5.3 System snap (Track your order)

In Electronicgadgets , we understand that keeping track of your orders is important to you. That's why we provide a convenient and easy-to-use order tracking system. Once your order has been processed and shipped, we will send you a tracking number via email. You can use this number to track your order in real-time on our website or the shipping carrier's website. Our order tracking system is updated regularly to provide accurate and up-to-date information about your shipment's location and delivery status.

If you have any questions or concerns about your order, our customer service team is always available to assist you. With Electronicgadgets, you can shop with confidence knowing that your order is in good hands.

No.	Order Id	Name	Address	Email	Phone	Order Date	Amount	Items
1	1	jaykishan	A/24 B.K...	jaykishansinh8@gmail.com	9409045150	April 16, 2023, 5:20 p.m.	400	→
2	4	jaykishansinh Rahevar	A/24 B.K...	jaykishansinh10@gmail.com	9898989889	April 17, 2023, 4:29 p.m.	550	→

Figure 5.4 System snap (your order details)

At Electronicgadgets, we provide our customers with detailed order information to ensure complete transparency and satisfaction with their purchase. When you place an order on our website, you will receive an order confirmation email that includes your order number, a summary of the items you have purchased, and the total cost of your order. Once your order has been processed and shipped.

If you have any questions or concerns about your order, you can always access your order details on our website by logging into your account. Our order details page includes information about the status of your order, shipping information, and payment details. At Electronicgadgets, we are committed to providing our customers with a seamless and stress-free shopping experience.

As per below figure we value our customers to provide exceptional customer service. If you have any questions, concerns, or feedback about our products or services, we encourage you to get in touch with us. You can easily contact us by filling out the contact form on our website, sending us an email, or calling our customer service hotline. Our friendly and knowledgeable customer service representatives are available to assist you with any inquiries or issues you may have. We are committed to resolving any problems promptly and ensuring that our customers are completely satisfied with their experience at Electronicgadgets.

## Contact With Us

We would love to respond to your queries and help your succeed.  
Feel free to get in touch with us.

### Sent your request

Name  Phone

Email  Subject

Message

How May We Help You ?

**SEND**

### Reach us

Email [Jaykishansinh8@gmail.com](mailto:Jaykishansinh8@gmail.com)

Phone [+919409045150](tel:+919409045150)

Figure 5.5 System snap (contactus page)

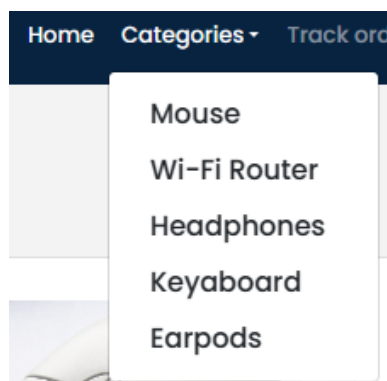


Figure 5.6 System snap (categories option)

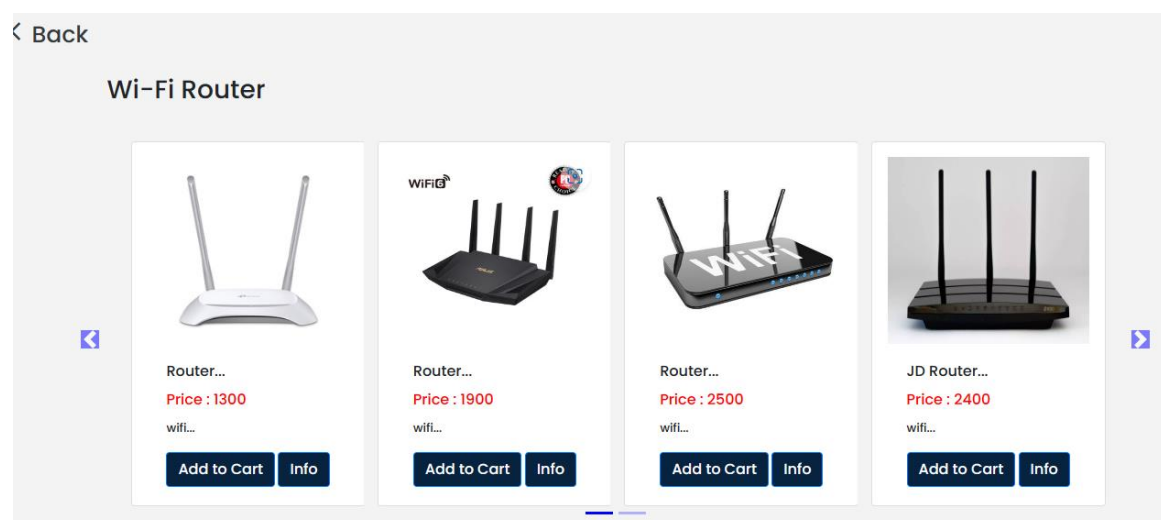


Figure 5.7 System snap (after click on particular category)



Above two figure show categories view after apply it and how it show particular gadgets to user can easily find and order it.

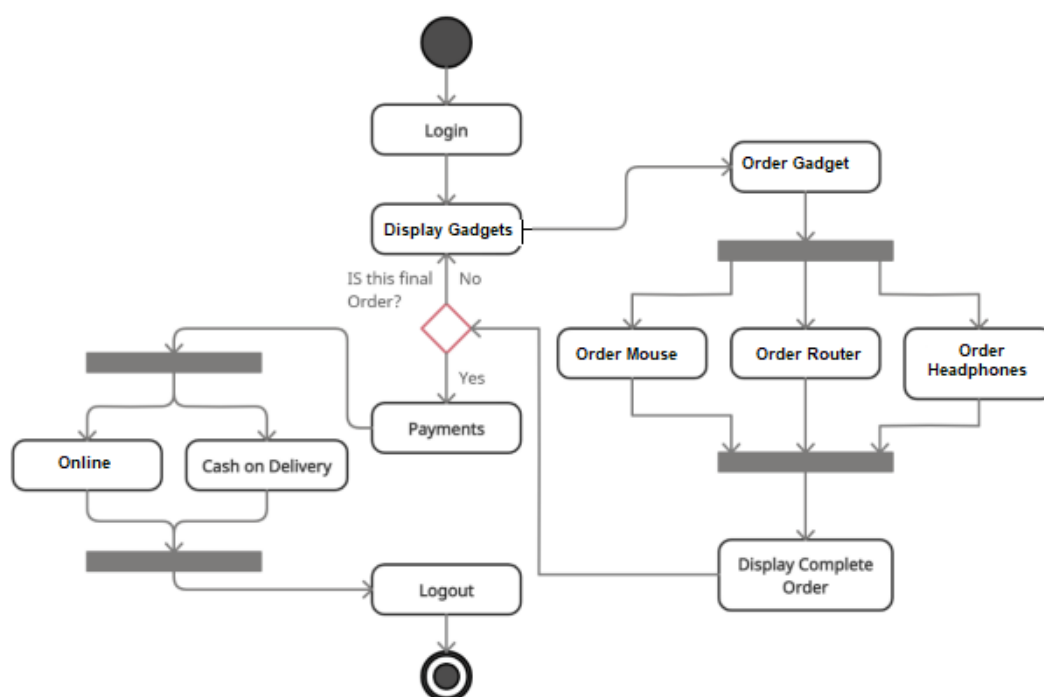


Figure 5.8 Activity diagram of website

## 5.2 DATABASE DESIGN / DATA STRUCTURE DESIGN

The database design of Electronicgadgets website is critical to ensure efficient and effective management of the website's data. Our database is designed using a relational database model, which provides a flexible and scalable solution to manage the website's products, orders, and customer information. The database consists of several tables, including products, customers, orders, and payment information.

Each table contains specific fields that store relevant data, and they are linked together through primary and foreign keys. We also use indexing and caching techniques to improve the performance of the database and ensure fast retrieval of data. At Electronicgadgets, we prioritize the security and integrity of our database by implementing strict access control and data encryption protocols to protect sensitive information.

Some of the Screenshot of the system database

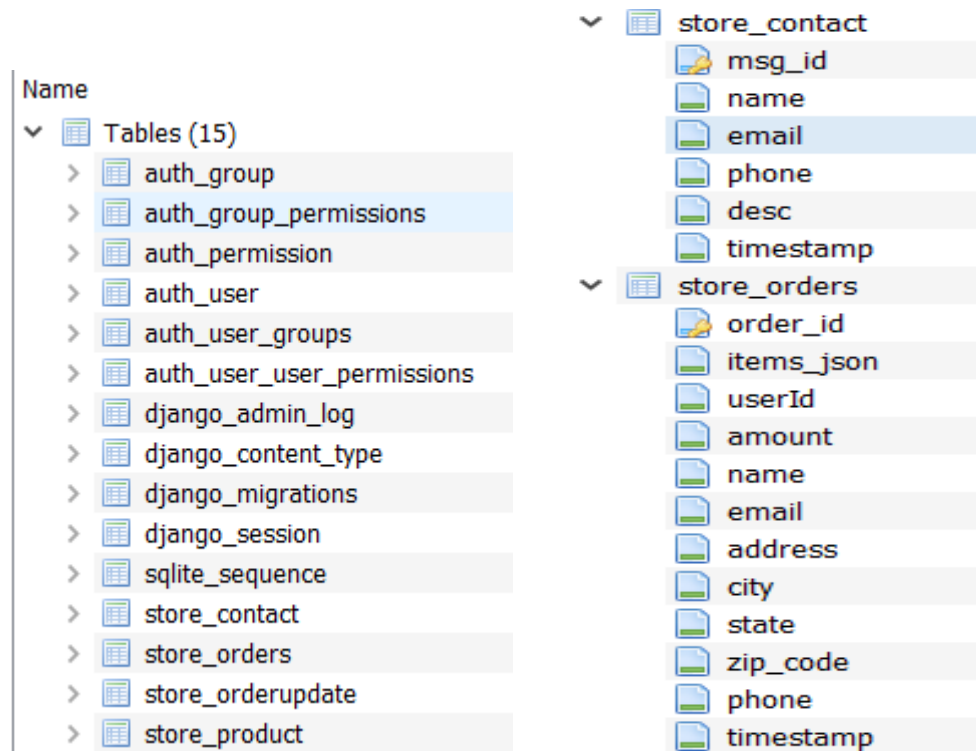


Figure 5.9 List of tables in database

store_orders		CREATE TABLE "store_orders" ("order_id" integer NOT NULL PRIMARY KEY AUTOINCREMENT, "items_json"
order_id	integer	"order_id" integer NOT NULL
items_json	varchar(5000)	"items_json" varchar(5000) NOT NULL
userId	integer	"userId" integer NOT NULL
amount	integer	"amount" integer NOT NULL
name	varchar(90)	"name" varchar(90) NOT NULL
email	varchar(111)	"email" varchar(111) NOT NULL
address	varchar(111)	"address" varchar(111) NOT NULL
city	varchar(111)	"city" varchar(111) NOT NULL
state	varchar(111)	"state" varchar(111) NOT NULL
zip_code	varchar(111)	"zip_code" varchar(111) NOT NULL
phone	varchar(111)	"phone" varchar(111) NOT NULL
timestamp	datetime	"timestamp" datetime NOT NULL
store_orderupdate		CREATE TABLE "store_orderupdate" ("update_id" integer NOT NULL PRIMARY KEY AUTOINCREMENT, "order"
update_id	integer	"update_id" integer NOT NULL
order_id	integer	"order_id" integer NOT NULL
timestamp	datetime	"timestamp" datetime NOT NULL
update_desc	varchar(5000)	"update_desc" varchar(5000)
store_product		CREATE TABLE "store_product" ("id" integer NOT NULL PRIMARY KEY AUTOINCREMENT, "product_name" va
id	integer	"id" integer NOT NULL
product_name	varchar(50)	"product_name" varchar(50) NOT NULL
category	varchar(50)	"category" varchar(50) NOT NULL
subcategory	varchar(50)	"subcategory" varchar(50) NOT NULL
price	integer	"price" integer NOT NULL
desc	varchar(200)	"desc" varchar(200) NOT NULL

Figure 5.10 Design of particular field in database

	id	product_name	category	subcategory	price	desc	pub_date	image
	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	1	JD headphones	Headphones	Headphones	550	Wireless headphones are a type of headphones ...	2023-03-28	store/images/h1.jpeg
2	2	Gaming Headphone	Headphones	Headphones	1000	Surround Sound: Many gaming headphones com...	2023-03-28	store/images/h2.jpeg
3	3	Gaming Headphone	Headphones	Headphones	1000	Surround Sound: Many gaming headphones com...	2023-03-28	store/images/h5_4r8ZEI.jpeg
4	4	Gaming Headphone	Headphones	Headphones	1150	Comfort: Gaming headphones are designed to b...	2023-03-28	store/images/h6_kUM2tKG.jpeg
5	5	Gaming Headphone	Headphones	Headphones	950	Gaming headphones are a type of headphones ...	2023-03-28	store/images/h7_msxvsDX.jpeg
6	6	Headphone	Headphones	Headphones	800	Wireless headphones have become increasingly ...	2023-03-28	store/images/h4_z3R8Sbd.jpeg
7	7	Keyboard	Keyboard	Keyboard	400	simple keyaboard	2023-03-28	store/images/...
8	8	Keyboard	Keyboard	Keyboard	1150	simple keyboard	2023-03-28	store/images/Roccat-Vulcan-II-Max.JPG
9	9	Keyboard	Keyboard	Keyboard	1200	keyboard is simple and easily available.	2023-03-28	store/images/Gear-Steelseries-Apex-Pro-Source-...
10	10	Hydra Keyboard	Keyboard	Keyboard	1800	keyboard is simple and easily available.	2023-03-28	store/images/Hydra101200x12001.jpg
11	11	Keyboard	Keyboard	Keyboard	2000	gaming keyboard	2023-03-28	store/images/...
12	12	Router	Wi-Fi Router	Wi-Fi Router	1300	wifi	2023-03-28	store/images/tp-link-tl-wr840n-300mbps-wireles...
13	13	Router	Wi-Fi Router	Wi-Fi Router	1900	wifi	2023-03-28	store/images/ASUS-RT-AX3000-Dual-Band-WiFi-...
14	14	Router	Wi-Fi Router	Wi-Fi Router	2500	wifi	2023-03-28	store/images/wifi-router-500x500-1-400x400.jpg
15	15	JD Router	Wi-Fi Router	Wi-Fi Router	2400	wifi	2023-03-28	store/images/86805645.jpg
16	16	Router	Wi-Fi Router	Wi-Fi Router	2100	wifi wireless	2023-03-28	store/images/wifi-wireless-router.jpg
17	17	Mini Router	Wi-Fi Router	Wi-Fi Router	1600	wifi	2023-03-28	store/images/594988913_max.jpg
18	18	Mouse	Mouse	Mouse	400	Easy to use	2023-03-28	store/images/3-Tasten-Maus_Microsoft.jpg

Figure 5.11 product detail in database

File Edit View Tools Help

New DatabaseOpen DatabaseWrite ChangesRevert ChangesOpen ProjectSave ProjectAttach DatabaseClose Database

Database StructureBrowse DataEdit PragmasExecute SQL

Table:store\_orders

<

Figure 5.12 order details in database

Above databases photos shows the\_details of customer order , product store details and many more contact us detail also order update to show order is delivered or not.

This database only access by Admin only no one can enter without administrator permission.

## 5.3 INPUT/ OUTPUT AND INTERFACE DESIGN

### 5.3.1 Samples Of Forms Reports And Interface

We began creating various components of the current system based on its design and flow. Our primary objective was to comprehend the system's design, familiarize ourselves with creating the new elements, and select the best option among multiple possibilities to ensure the system's seamless operation.

In this process, we selected the layout that looked the best, the color scheme that engages the most with the user and the features that provide an easy and smooth navigation throughout the system.

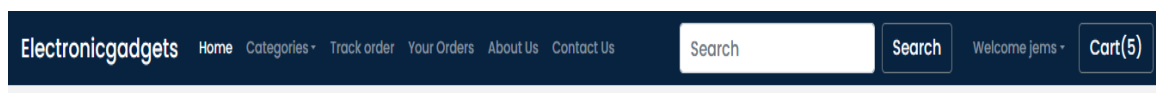


Figure 5.13 Title, Menu and NavigationBar

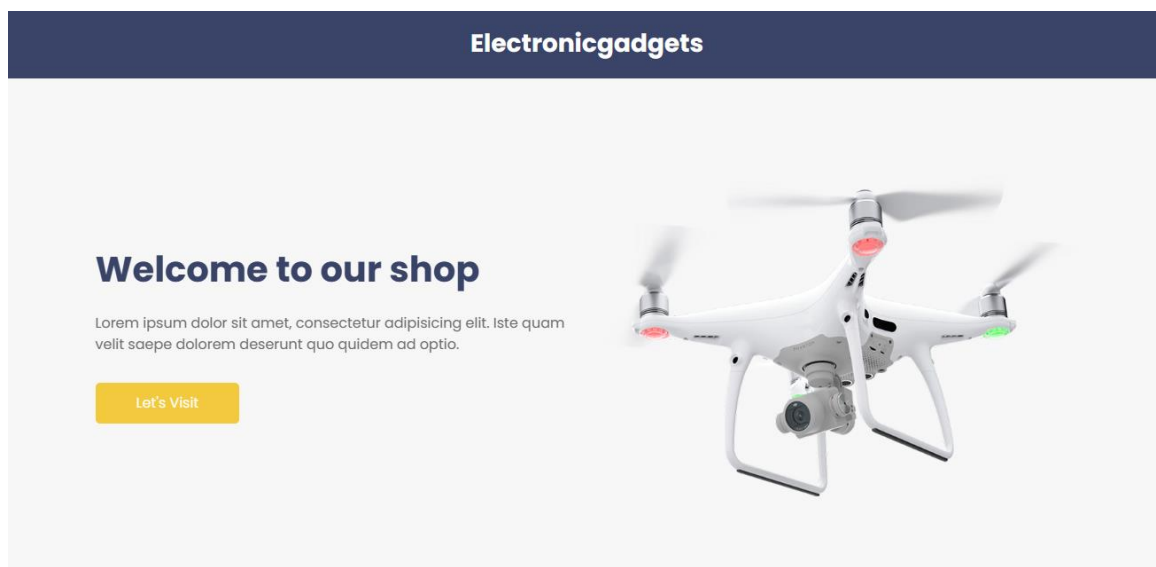


Figure 5.14 Decided the layout of forms

### **5.3.2 Access Control/ Security**

In today's age of easy access to information through the internet, the risk of data leaks and breaches is always a concern. With this in mind, ensuring data security and protecting user privacy is of utmost importance. As a result, we have implemented user identification and authentication as a crucial component of our web application.

Accessing, inserting, or modifying data on the system requires the user to provide their correct username and password. This measure ensures that only authorized users can access and manipulate data on the application, preventing any unauthorized access or security breaches. By implementing these security measures, we prioritize the protection of our users' data and privacy.

## **6. IMPLEMENTATION**

### **6.1 IMPLEMENTATION PLATFORM/ ENVIRONMENT**

The next step after the completion of system design was to start implementing the ideas, layout, features, and functionalities of the system based on the requirements

The two main software that were used by us for the development of the system were:

**Visual Studio code 2022 (version 1.77)** Visual Studio Code is a popular source code editor that offers a wide range of features and extensions to enhance productivity and streamline the coding process. It supports multiple programming languages, including Python, Java, C++, and many more.

On Windows, Visual Studio Code can be installed by downloading the installation file from the official website and running the setup wizard. It also supports different installation options, including a standalone version or an integrated version with the Visual Studio IDE.

### **6.2 PROCESS/ TECHNOLOGY/ SPECIFICATIONS**

#### **TECHNOLOGY SPECIFICATIONS**

There were certain different technologies/ languages that were used in the development of the web application. We worked with languages like HTML, CSS, JAVASCRIPT, JQUERY, Python and django.

The designing, framework and styling of elements of the system was done using HTML and CSS . Certain validations like numeric fields, required fields, etc were implied with the help of languages like JavaScript and jQuery.

Functions like database connectivity, inserting, storing, updating of the data and many more were performed using the python language. Also certain functionalities of the system.

#### **PROCESS SPECIFICATIONS**

The entire process of the system development was carried out in following steps:

- Deciding the system design and features as per the requirements
- Implementing the layout designed in the previous step and creating a framework of the web application

- Adding necessary styling elements to the forms
- Applying validation to the required fields
- Finally connecting the database to the system and respective forms of the application

In the initial days of our internship we were made familiar with the languages like python and django, their framework, working, etc. Also we were familiarized with the softwares that were to be used in the development process.

After receiving the basic training we moved on to start implementing the knowledge gained to practical application. As the design, features and functionalities etc we were discussed and finalized in the earlier stages of the SDLC, we first started establishing a basic layout and framework for the web application. We first incorporated the menu bar, tool bar and different menus of the system.

Next ,we moved on create all the webpages and forms present in different menus of the system using HTML,CSS & Bootstrap.

We began with the adminside, Navigationbar, and then moved on to the other respective menus like add to cart, order, Store, Features, etc.

```
Electronicgadgets > templates > < index.html
1  {% load static %}
2  <html lang="en">
3  <head>
4  <meta charset="utf-8">
5  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
6  <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" in
7
8  {% block extrastyle%}
9  <link rel="stylesheet" href="{% static 'store/assets/css/bootstrapad.css'%}" />
10 <link rel="stylesheet" href="{% static 'store/assets/css/stylead.css'%}" />
11 {%endblock %}
12
13 <!-- fonts style -->
14 <link href="https://fonts.googleapis.com/css?family=Poppins:400,700&display=swap" rel="stylesheet">
15 <title>Electronicgadgets</title>
16 </head>
17 <body>
18 <div class="hero_area">
19 <!-- header section strats -->
20 <header class="header_section">
21 <div class="header_bottom">
22 <div class="container-fluid">
23 <nav class="navbar navbar-expand-lg justify-content-center">
24 <a class="navbar-brand justify-content-center">
25 <span >
26 Electronicgadgets
```

Figure 6.1 Code snippet from adminside

Once the structure and layout of the pages was done, we further added CSS and Bootstrap properties to different elements like margins, width, background and text colour and many more.

```

1  body {
2    font-family: 'Poppins', sans-serif;
3    color: #0c0c0c;
4    background-color: #ffffff;
5    overflow-x: hidden;
6  }
7
8  .layout_padding {
9    padding: 90px 0;
10 }
11
12 .layout_padding2 {
13   padding: 75px 0;
14 }
15
16 .layout_padding2-top {
17   padding-top: 75px;
18 }
19
20 .layout_padding2-bottom {
21   padding-bottom: 75px;
22 }
23
24 .layout_padding-top {
25   padding-top: 90px;
26 }

```

Figure 6.2 CSS on firstpage

```

352
353 .slider_section .img-box img {
354   width: 100%;
355 }
356
357 .slider_section .carousel_btn_box {
358   position: absolute;
359   bottom: 0;
360   left: 0;
361   display: -webkit-box;
362   display: -ms-flexbox;
363   display: flex;
364   -webkit-box-pack: justify;
365   -ms-flex-pack: justify;
366   justify-content: space-between;
367   width: 110px;
368   height: 50px;
369   -webkit-transform: translateY(50%);
370   transform: translateY(50%);
371   z-index: 3;
372 }

```

Figure 6.3 CSS on firstpage product hover effect

After the designing and styling of the system, we moved on to apply necessary validation to fields as required per the requirement of the system. Certain validations like required fields, error messages for the same, restricted input length or data type, etc were applied to the system where needed. Languages like JavaScript and JQuery were used for the same. Some code snippets for django and jQuery are as follow:

```

{% if messages %}
  {% for message in messages %}
    <div class="alert alert-{{ message.tags }}" alert-dismissible mb-0" role="alert">
      <button type="button" class="close" data-dismiss="alert"><span aria-hidden="true"></span></button>
      {{ message }}
    </div>
  {% endfor %}
{% endif %}
{% block body %} {% endblock %}

```

Figure 6.4 After Login success message show to user



```

92 <script>
93 if (localStorage.getItem('cart') == null) {
94     var cart = {};
95 } else {
96     cart = JSON.parse(localStorage.getItem('cart'));
97 }
98
99 var sum = 0;
100 var sumPrice = 0;
101 var totalPrice = 0;
102 if ($.isEmptyObject(cart)) {
103     // If object is empty
104     mystr = "<div class='alert alert-info'><font style='font-size:22px'>"
105     mystr = mystr + "<center>Your cart is <strong>Empty</strong>, please <strong>Add</strong> some items before checking out ! </center>"
106     mystr = mystr + "<center>Click <a href='/' store/' class='alert-link'>Here</a> to Add items.</center></font></div>";
107     $('#items').append(mystr);
108     document.getElementById('info').innerHTML = "";
109     document.getElementById('title').innerHTML = "";
110 } else {
111     var i = 0;
112     for (item in cart) {
113         let name = cart[item][1];
114         let qty = cart[item][0];
115         let itemPrice = cart[item][2];
116         sum = sum + qty;
117         sumPrice = qty * itemPrice;
118         totalPrice = totalPrice + sumPrice;
119         mystr = `<li class="list-group-item d-flex justify-content-between align-items-center">${i++} : ${name}<span class="badge badge-primary`
120         $('#items').append(mystr);

```

Figure 6.5 Cart items add JQUERY

```

{%if msg|length != 0 %}
alert('{{msg}}');
window.history.back();
{%endif%}

if (localStorage.getItem('cart') == null) {
    var cart = {};
} else {
    cart = JSON.parse(localStorage.getItem('cart'));
    updateCart(cart);
}

// If the add to cart button is clicked, add/increment the item
// $(''.cart').click(function() {
$($('.divpr').on('click', 'button.cart', function() {
    var idstr = this.id.toString();
    //console.log(idstr);
    if (cart[idstr] != undefined) {
        qty = cart[idstr][0] + 1;
    } else {
        qty = 1;
        name = document.getElementById('name'+idstr).innerHTML;
        price = document.getElementById('price'+idstr).innerHTML;
        cart[idstr] = [qty, name, parseInt(price)];
    }
    updateCart(cart);
}));

```

Figure 6.6 Cart items increment JQUERY

```
def handleLogin(request):
    if request.method == "POST":
        # Get the post parameters
        loginusername = request.POST['loginusername']
        loginpassword = request.POST['loginpassword']

        user = authenticate(username=loginusername, password=loginpassword)
        if user is not None:
            login(request, user)
            messages.success(request, "Successfully Logged In")
            return HttpResponseRedirect(request.META.get('HTTP_REFERER'))
        else:
            messages.warning(request, "Invalid ! Please try again")
            return HttpResponseRedirect(request.META.get('HTTP_REFERER'))

    return HttpResponse("404- Not found")
```

Figure 6.7 Login code in views.py

Views.py is use for what action is taken for given data by user.

```
class Orders(models.Model):
    order_id = models.AutoField(primary_key=True)
    items_json = models.CharField(max_length=5000)
    userId = models.IntegerField(default=0)
    amount = models.IntegerField(default=0)
    name = models.CharField(max_length=90)
    email = models.CharField(max_length=111)
    address = models.CharField(max_length=111)
    city = models.CharField(max_length=111)
    state = models.CharField(max_length=111)
    zip_code = models.CharField(max_length=111)
    phone = models.CharField(max_length=111, default="")
    timestamp = models.DateTimeField(default=timezone.now)

class OrderUpdate(models.Model):
    result = (
        ('Pending', 'Pending'),
        ('Order Confirmed', 'Order Confirmed'),
        ('Out for Delivery', 'Out for Delivery'),
        ('Delivered', 'Delivered'),
    )
    update_id = models.AutoField(primary_key=True)
    order_id = models.IntegerField(default="")
    update_desc = models.CharField(max_length=5000, null=True, choices=result)
    timestamp = models.DateTimeField(default=timezone.now)

    def __str__(self):
        return self.update_desc
```

Figure 6.8 orderupdate and orders field in models.py

## 6.3 RESULTS / OUTCOMES

By successfully implementing both front end and backend programming, you have created a system that is not only visually appealing but also functional and efficient. Your users will be able to interact with the application seamlessly, and the application will be able to process their requests quickly and accurately.

Some of the snapshots of the web application created are as follow

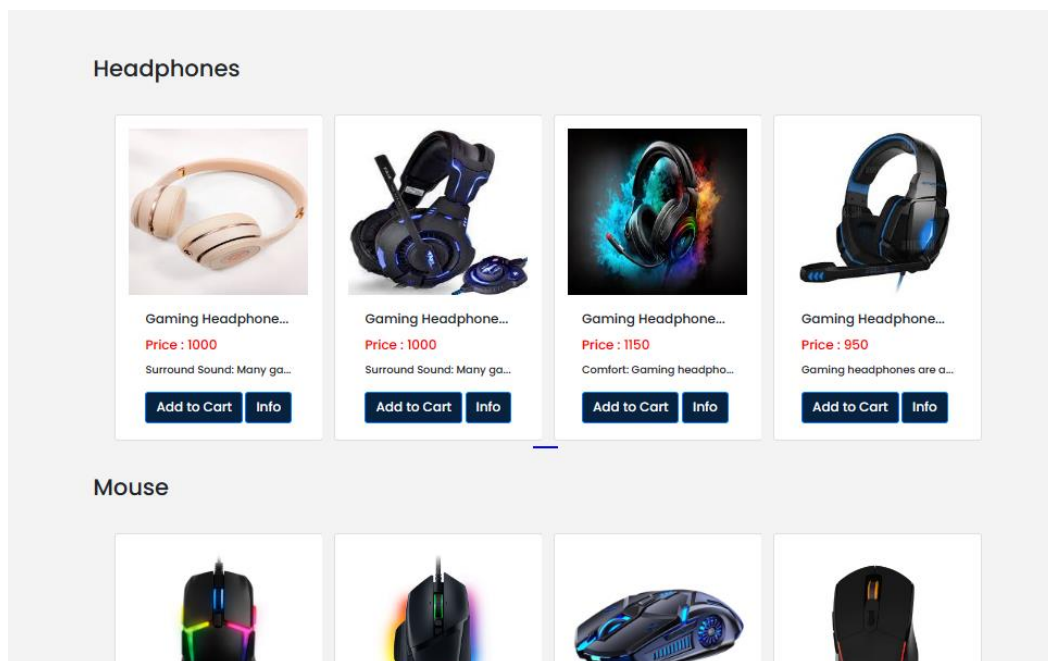


Figure 6.9 after searching items

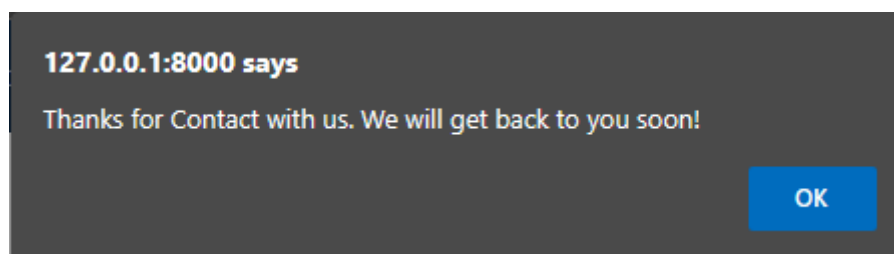


Figure 6.10 after successfully fill contactus page



Figure 6.11 admin side

Order id	↑↓ Update desc	↑↓ Timestamp
1	Delivered	April 18, 2023, 5:20 p.m.
2	Pending	April 16, 2023, 5:53 p.m.
3	Pending	April 16, 2023, 5:56 p.m.
4	Pending	April 17, 2023, 4:29 p.m.
Order id	Update desc	Timestamp

Figure 6.12 adminside for orderupdate

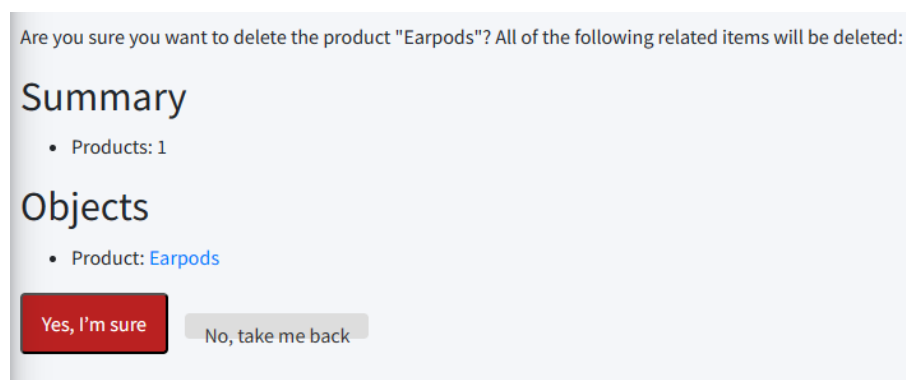


Figure 6.13 adminside item delete pop-up

## 6.4 RESULT ANALYSIS

After achieving a smooth functioning system as envisioned! It's great to hear that all the efforts and time invested in designing and programming the software have paid off.

Now, let's compare the features of the web application you have created with the current desktop application. Based on your description, we can infer the following features:

It's great to hear that the web application you have created has an attractive and smooth user interface that is easy to navigate. A user-friendly interface is crucial for ensuring that users can browse through the application easily and efficiently.

It's also excellent to hear that the web application's functioning and features are the same as the desktop application. This ensures that users who are familiar with the desktop application can easily transition to the web application without any issues.

User identification and authentication are essential for maintaining the privacy of the user. It's good to hear that the web application has these features, which ensure that only authorized users can access the application.

## **7. TESTING**

### **7.1 TESTING PLAN / STRATEGY**

System testing is typically performed by a dedicated team of software testers who use a combination of manual and automated testing techniques to thoroughly evaluate the system. This may involve running tests to ensure that the system can handle large volumes of data, testing the system's security features, and verifying that all system components work together as expected.

Once system testing is complete, the testing team will provide feedback to the development team regarding any issues or bugs that were identified. The development team will then work to address these issues and make the necessary modifications to ensure that the system functions as intended.

Overall, system testing is a critical step in the software development process that ensures the system meets the end-users' requirements and functions as expected.

Different testing strategies used are as follow:

- 1. Functionality Testing:** Function testing, also known as functional testing, is a software testing technique that evaluates the system's functionality by testing its individual components or functions.
- 2. Usability Testing:** Usability testing is a type of testing that evaluates the user interface of a software application or system to determine its usability, effectiveness, and efficiency. This type of testing is typically performed by a group of users who are representative of the target audience for the application.
- 3. Interface Testing:** Interface testing is a type of software testing that evaluates the interactions between different components or systems in a software application. The purpose of interface testing is to ensure that the different components or systems of the application communicate with each other effectively and without errors.
- 4. Database Testing:** Database testing is a type of software testing that evaluates the functionality, performance, and security of a database system. The purpose of database testing is to ensure that the database system meets the specified requirements and functions correctly in a production environment.
- 5. Compatibility Testing:** During compatibility testing, the testing team will typically create test cases that evaluate the performance of the application or system in different configurations and environments. This may involve testing the application

or system on different operating systems, hardware platforms, web browsers, or mobile devices.

## 7.2 TEST RESULTS AND ANALYSIS

TEST ID	TEST CONDITION	EXPECTED OUTPUT	ACTUAL OUTPUT	REMARKS
T001	Launch application	Electronicgadgets	Electronicgadgets	Success
T002	Category option click headphone	Category show with results	Category show with results	Success
T003	Live search	Display only the related options	Display only the related options	Success
T004	Add new item in cart	New gadget inserted	New gadget inserted	Success
T005	Password forgot Through email	Successfully link send to given email id	Successfully link send to given email id	Success
T006	Required field Validation	Show alert on empty field	Show alert on empty field	Success
T007	Numeric field validation	Accept only numeric values	Accept only numeric values	Success
T008	Store gadgets data in database	Inserted data stored correctly	Inserted data stored correctly	Success
T009	Display data from database	Required data displayed	Required data displayed	Success
T010	Contact us detail	Send to admin	Send to admin	Success

Table 7.1 Testcases

## **8. CONCLUSIONS AND DISCUSSIONS**

### **8.1 OVERALL ANALYSIS OF INTERNSHIP/ PROJECT**

On taking a final look at our 12-week internship at Enterprise analytic LLP and the Electronicgadgets project we can evaluate the following:

1. We learned about industry culture and software development practices.
2. Our knowledge of industry practices and software development was enhanced.
3. We were introduced to python with django and gained practical experience with them.
4. We gained hands-on experience python with django after being introduced to them.
5. The guidance and feedback during the development process was helpful in creating an efficient system.
6. We received valuable guidance and feedback during development which facilitated the creation of an efficient system.
7. The system was successfully replicated as a web application.
8. We efficiently build system to a functional web application.
9. The web application is user-friendly and provides a satisfying experience.
10. The web application has an engaging user interface and is easy to use.
11. The web application is capable of storing, displaying, and updating data in the database.
12. The web application has the ability to manage and update data in the database.

### **8.2 SUMMARY OF INTERNSHIP / PROJECT WORK**

The team's dedication and hard work in developing the web application resulted in a comprehensive solution for the Electronicgadgets shop manufacturers to manage their customers, materials, transactions, updateorders, and other critical information in one place. The web application provides a user-friendly interface that ensures the user's privacy and data security.

The Enterprise Analytic LLP 12-week internship program was an excellent chance to gain hands-on experience and learn about the industry's methods and working techniques. The program opened our eyes to the vast opportunities available in the industry. Working under the guidance of an experienced mentor like Mr. Sandip Patel was a blessing, and we learned a lot from him. Through the project work, we gained insight into the development process



and the effort that goes into it. We were able to put into practice what we have learned so far, including the use of new languages like python and django which was an exciting experience. We are confident that the skills and experience we gained from the Enterprise Analytic LLP internship program will be invaluable in our future endeavors.

### **8.3 LIMITATION AND FUTURE ENHANCEMENT**

The web application we created was an efficient replication of the desktop application; however, upon receiving user feedback, we identified certain limitations. For instance, the system lacked a homepage, and the insertion process took some time to process completely. We also identified some design flaws. Moving forward, we intend to work on the system to address these issues and create an even more effective and user-friendly system.

For the future of the system we envision the following:

- enhance the security of the system.
- To develop a mobile app for improved accessibility.
- To integrate numerous companies or agencies into a single centralized system.
- Enhance the system's database capacity and improve its efficiency.

## **REFERENCES**

Throughout the project, we received assistance from various external sources. The following are some examples:

1. <https://practice.geeksforgeeks.org/>
2. <https://www.djangoproject.com/>
3. <https://www.w3schools.com/>
4. <https://www.python.org/>
5. <https://www.youtube.com/@wscubetech>
6. <https://www.youtube.com/@Telusko>