

MINI PROJECT REPORT

“REACT TECH SHOP”

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About the Project

Introduction

1.1 Overview

The ‘**TECH SHOP**’ Services department strives to provide solutions to develop and transfer easy and efficient way in the digital age and to help reduces the human pressure and time. To help support shop collections, the digital initiatives, and external partner institution digital projects, It provide services that include the digitization of analog objects, metadata management, digital preservation, and discovery and access of digital collections. “**TECH SHOP**” is a web application written for all operating systems, designed to help users maintain and organize shop virtually. This software is easy to use for both beginners and advanced users. It features a familiar and well thought out, an attractive user interface, combined with strong searching Insertion and reporting capabilities. The report generation facility of shop system helps to get a good idea of which are the various items brought by the members, makes users possible to get the product easily.

1.2 Background Study

Technology is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web sites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace.

The objective of this project is to develop a technology specific tech store where any product (such as books, CDs, computers, mobile phones, electronic items, and home appliances) can be bought from the comfort of home through the Internet. However, for implementation purposes, this paper will deal with an online ecommerce store.

An online store is a virtual store on the Internet where customers can browse the catalog and select products of interest. The selected items may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction.

Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as a credit card number.

1.3 Project Planning

Project planning is part of project management, which relates to the use of schedules such as Gantt charts to plan and subsequently report progress within the project environment. Initially, the project scope is defined and the appropriate methods for completing the project are determined. Following this step, the durations for the various tasks necessary to complete the work are listed and grouped into a work breakdown structure. The logical dependencies between tasks are defined using an activity network diagram that enables identification of the critical path. Float or slack time in the schedule can be calculated using project management software. Then the necessary resources can be estimated and costs for each activity can be allocated to each resource, giving the total project cost. At this stage, the project plan may be optimized to achieve the appropriate balance between resource usage and project duration to comply with the project objectives. Once established and agreed, the plan becomes what is known as the baseline. Progress will be measured against the baseline throughout the life of the project

1.4 Purposes

The project is about to handle all the information of the shop regarding members. Also it manages resources which were managed and handled by manpower previously. The main purpose of the project is to integrate distinct sections of the shop into consistent manner so that complex functions can be handled smoothly. The project aims at the following matters

- Automation of product manipulation.
- Buying products.
- To manage information of different types of items.
- Consistently update information of all the item.
- Managing security by providing authorized email & password.
- Manages database efficiently.

1.5 SOURCES

The source of our project along with the all the project work (documentation and presentations) can be found and is available at the following link

GITHUB REPOSITORY LINK : <https://github.com/ArpitMittal468/React-Tech-Shop>

Video Link:

<https://drive.google.com/file/d/1Ry7BP9PM-RFXjmQa5IPVI6QFmr6GhWe3/view?usp=sharing>

1.6 Existing System

A very viable existing system that we can see in our day to day life is the physical shops that we encounter. The problem with such existing systems is that not all the products available in these shops are readily available at our disposal. Another of such existing systems are the e-commerce website that provide customers with all they want , but the catch with such websites is that since they focus so much on the quantity and variety of the products , the quality often tends to go down. In case of other accessories the compromise on products can be compensated with the enhancement of other factors but in case of gadgets and other electronic appliances these compromises can never be compensated to a negotiable extent. Therefore the need for an online tech store arises. To solve such a problem there is the idea of tech shop that we derived.

System Design

2.1 Design

The system is divided into some parts these are Register system, Login System, Search System, Buying System, Order Received System, Viewing System side .

2.2 User Characteristics

Users The user can log in to the system by using his specific email and password. User can view the products and order the products according to their own needs. He can view his profile and update his details. He can update his personal information by logging into the system. User can find various product by using search option easily. update his details. He can update his personal information by logging into the system. User can find various product by using search option easily.

2.3 System Information

This system is an automated Shop Management System. Through the software user can add members, add product, search product, update information, edit information, buy the product in quick time. The system has the following advantages:

- User friendly interface
- Fast access to database
- Search facility
- Look and Feel Environment

2.4 System Analysis

System Analysis refers into the process of examining a situation with the intent of improving it through better procedures and methods. System Analysis is the process of planning a new system to either replace or complement an existing system. But before any planning is done the old system must be thoroughly understood and the requirements determined. System analysis is therefore, the process of gathering and interpreting facts, diagnosing problems and using the information to re comment improvements in the system. System analysis is conducted with the following objectives in mind:

- ✓ Evaluate the system concept for feasibility.
- ✓ Perform economic and technical analysis.
- ✓ Allocate functions to hardware, software people, database and other system elements.

- ✓ Establish cost and schedule constraints.

2.5 Feasibility Analysis

Whatever we think need not be feasible .It is wise to think about the feasibility of any problem we undertake. Feasibility is the study of impact, which happens in the organization by the development of a system. The impact can be either positive or negative. When the positives nominate the negatives, then the system is considered feasible. Here the feasibility study can be performed in two ways such as technical feasibility and Economical Feasibility.

Technical Feasibility

It is technically feasible, since there will not be much difficulty in getting required resources for the development and maintaining the system as well. All the resources needed for the development of the software as well as the maintenance.

Economical Feasibility

Development of this application is highly economically feasible .The organization needed not spend much m one for the development of the system already available. The only thing is to be done is making an environment for the development with an effective supervision. If we are

doing so , we can attain the maximum usability of the corresponding resources .Even after the development , the organization will not be in a condition to invest more in the organization .Therefore , the system is economically feasible.

Hardware and Software Requirement

3.1 Hardware Required

Processor : Pentium IV or Above

RAM : 2GB or above

Hard Disk : 50GB or above

Input Devices : Keyboard, Mouse

Output Devices : Monitor

3.2 Software Required

- ✓ Operating System :** Linux, Ubuntu, Mac, Windows XP, 7, 8, 8.1, 10

- ✓ Frontend :** HTML,CSS, Bootstrap, JavaScript,REACT

SYSTEM ANALYSIS

REACT

Declarative

React makes it painless to create interactive UIs. Design simple views for each state in your application, and React will efficiently update and render just the right components when your data changes.

Declarative views make your code more predictable and easier to debug.

Component-Based

Build encapsulated components that manage their own state, then compose them to make complex UIs.

Since component logic is written in JavaScript instead of templates, you can easily pass rich data through your app and keep state out of the DOM.

Learn Once, Write Anywhere

We don't make assumptions about the rest of your technology stack, so you can develop new features in React without rewriting existing code.

React can also render on the server using Node and power mobile apps using React Native.

A Simple Component

React components implement a `render()` method that takes input data and returns what to display. This example uses an XML-like

syntax called JSX. Input data that is passed into the component can be accessed by `render()` via `this.props`.

JSX is optional and not required to use React. Try the Babel REPL to see the raw JavaScript code produced by the JSX compilation step.

A Stateful Component

In addition to taking input data (accessed via `this.props`), a component can maintain internal state data (accessed via `this.state`). When a component's state data changes, the rendered markup will be updated by re-invoking `render()`.

An Application

Using props and state, we can put together a small Todo application. This example uses state to track the current list of items as well as the text that the user has entered. Although event handlers appear to be rendered inline, they will be collected and implemented using event delegation.

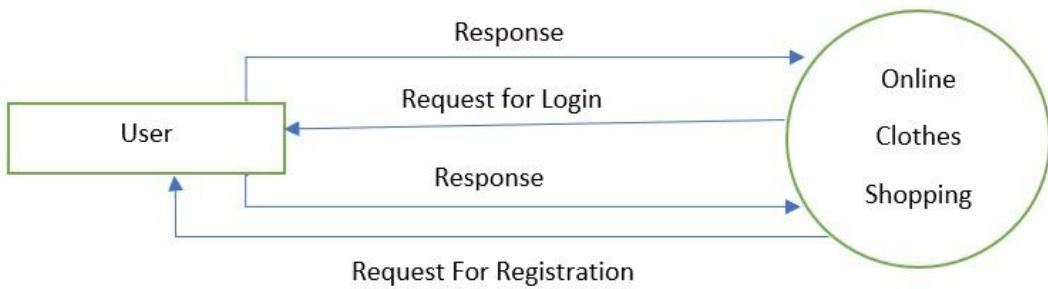
A Component Using External Plugins

React allows you to interface with other libraries and frameworks.

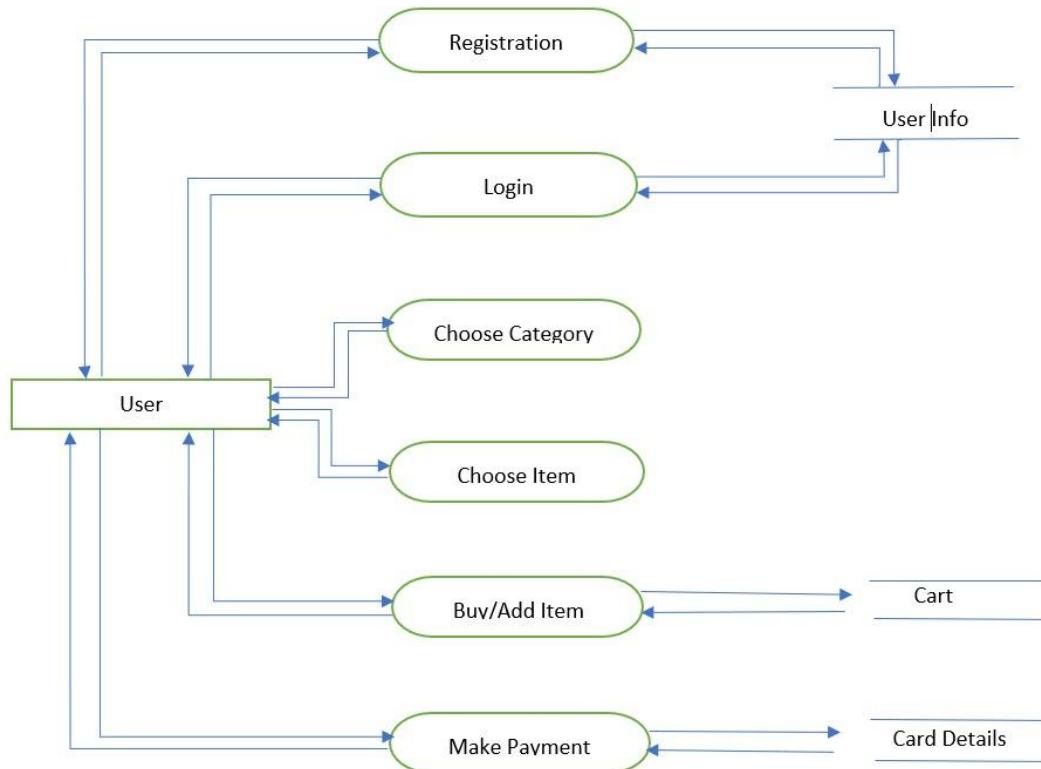
This example uses remarkable, an external Markdown library, to convert the <textarea>'s value in real time.

DATA FLOW DIAGRAM

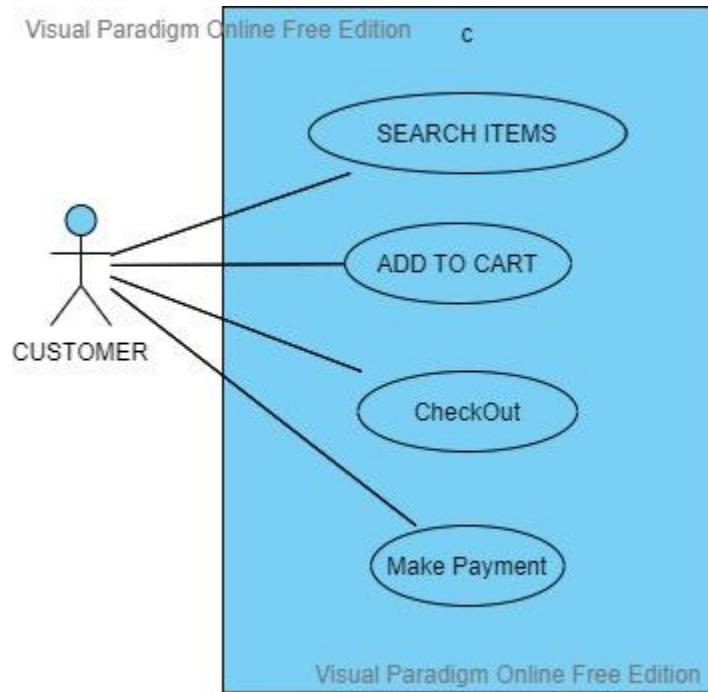
Zero-Level-DFD



First-Level-DFD

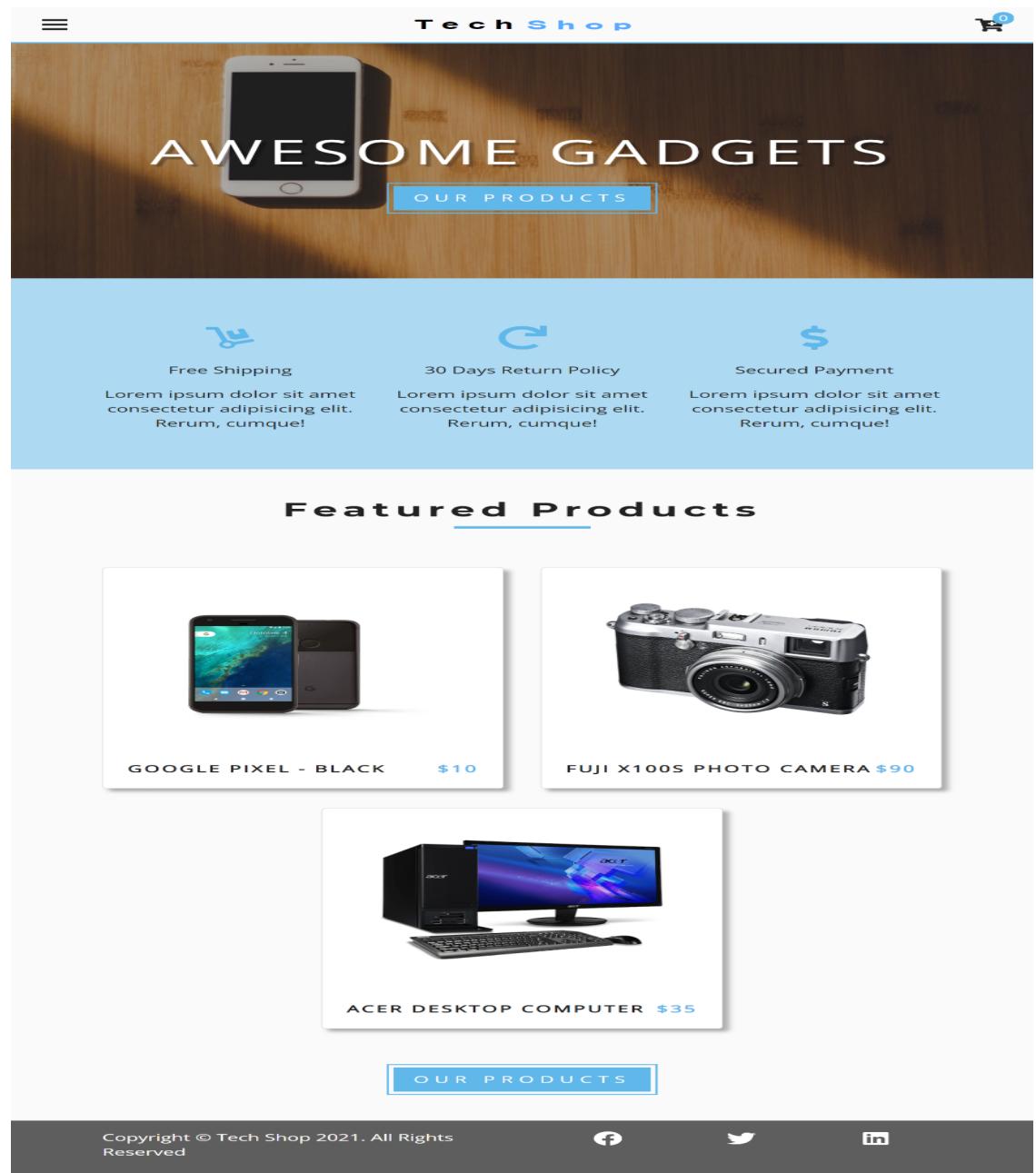


Use Case Diagram



PROJECT VIEW

1. HOME PAGE



The screenshot displays the homepage of a website named "Tech Shop". The header features a navigation menu icon, the brand name "Tech Shop" in blue, and a shopping cart icon with a notification badge showing "1". Below the header is a large banner with a smartphone on a wooden background and the text "AWESOME GADGETS" in bold, with a "OUR PRODUCTS" button below it. The main content area includes three service icons: "Free Shipping" (with a delivery truck icon), "30 Days Return Policy" (with a circular arrow icon), and "Secured Payment" (with a dollar sign icon). A section titled "Featured Products" shows three items: "GOOGLE PIXEL - BLACK" (black smartphone) for \$10, "FUJI X100S PHOTO CAMERA" (silver camera) for \$90, and "ACER DESKTOP COMPUTER" (black desktop setup with monitor and keyboard) for \$35. At the bottom is a footer with copyright information, social media links for Facebook, Twitter, and LinkedIn, and a "OUR PRODUCTS" button.

Tech Shop

AWESOME GADGETS

OUR PRODUCTS

Free Shipping

30 Days Return Policy

Secured Payment

Featured Products

GOOGLE PIXEL - BLACK \$10

FUJI X100S PHOTO CAMERA \$90

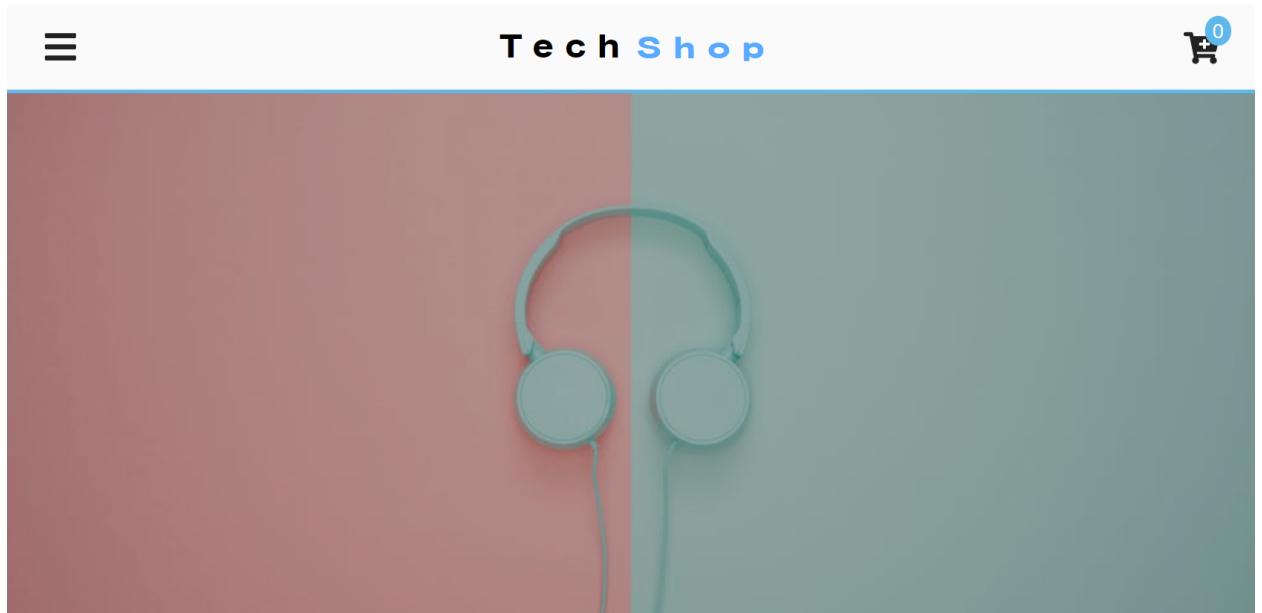
ACER DESKTOP COMPUTER \$35

OUR PRODUCTS

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[Facebook](#) [Twitter](#) [LinkedIn](#)

2. About



About Us

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Consectetur deleniti labore ipsam reiciendis quisquam voluptatem nisi delectus iure quos modi.

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[MORE INFO](#)

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3. Products

The screenshot displays the homepage of a website named "Tech Shop". At the top, there is a banner featuring a close-up image of a smartphone. Below the banner, the page title "Our Products" is centered above a search bar and filter options. The search bar includes fields for "Search Products" and "Company", and a dropdown menu for "Product Price" set to "\$ 120". A blue progress bar indicates "Free Shipping 1.1". The main content area shows a grid of 13 product items, each with an image, name, and price:

Product Name	Price
GOOGLE PIXEL - BLACK	\$10
SAMSUNG S7 - WHITE	\$20
HTC 10 - BLACK	\$30
HTC 10 - WHITE	\$15
SAMSUNG S7 - BLACK	\$45
SAMSUNG GALAXY A8 - BLACK	\$55
FUJI X100S PHOTO CAMERA	\$90
CANON EOS 3D PHOTO CAMERA	\$120
NIKON D 3100 PHOTO CAMERA	\$55
ACER DESKTOP COMPUTER	\$35
HP DESKTOP COMPUTER	\$75
LENOVO DESKTOP COMPUTER	\$110
DELL DESKTOP COMPUTER	\$28

At the bottom of the page, a dark footer bar contains the text "Copyright © Tech Shop 2021. All Rights Reserved" and social media icons for Facebook, Twitter, and LinkedIn.

4. Contact Us

**Tech Shop**0



Contact Us

Write your message

Send

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5. Cart



Your Cart Items

Price: \$10

 1 


Item Total: 1



Product: Fuji X100s Photo Camera

Price: \$90

 1 


Item Total: 1

[Clear Cart](#)

Subtotal: \$100

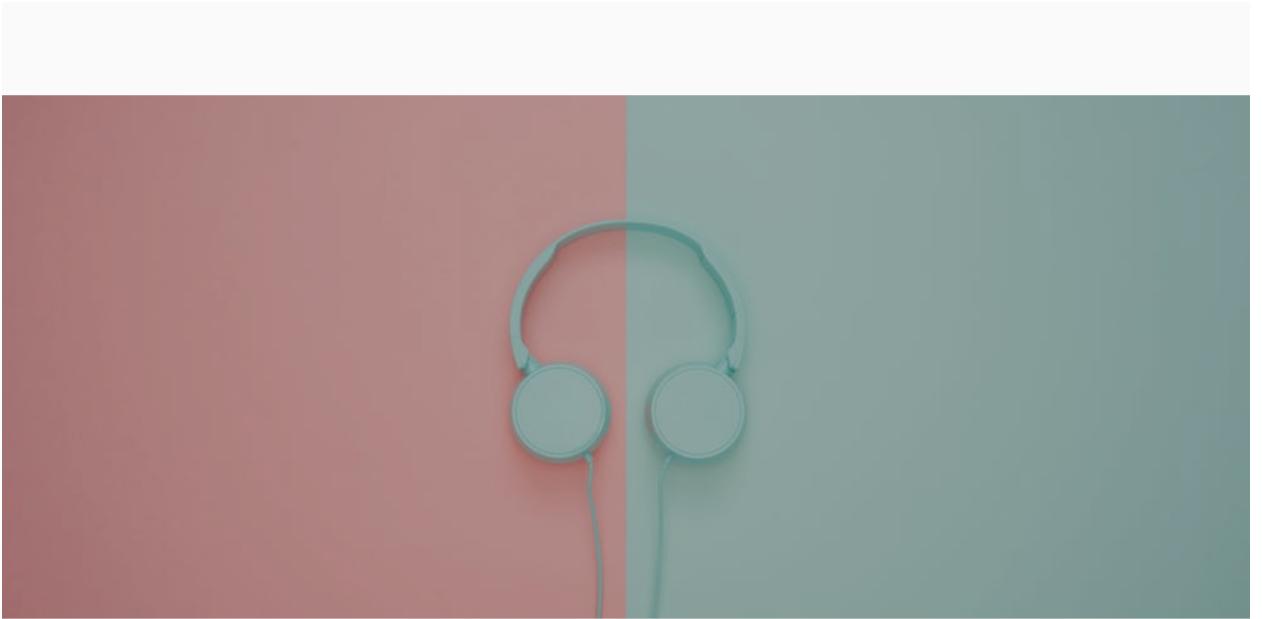
Tax: \$20

Total: \$120

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6. Sidebar-1



Tech Shop

Home

About

Products

Contact

Cart

About Us

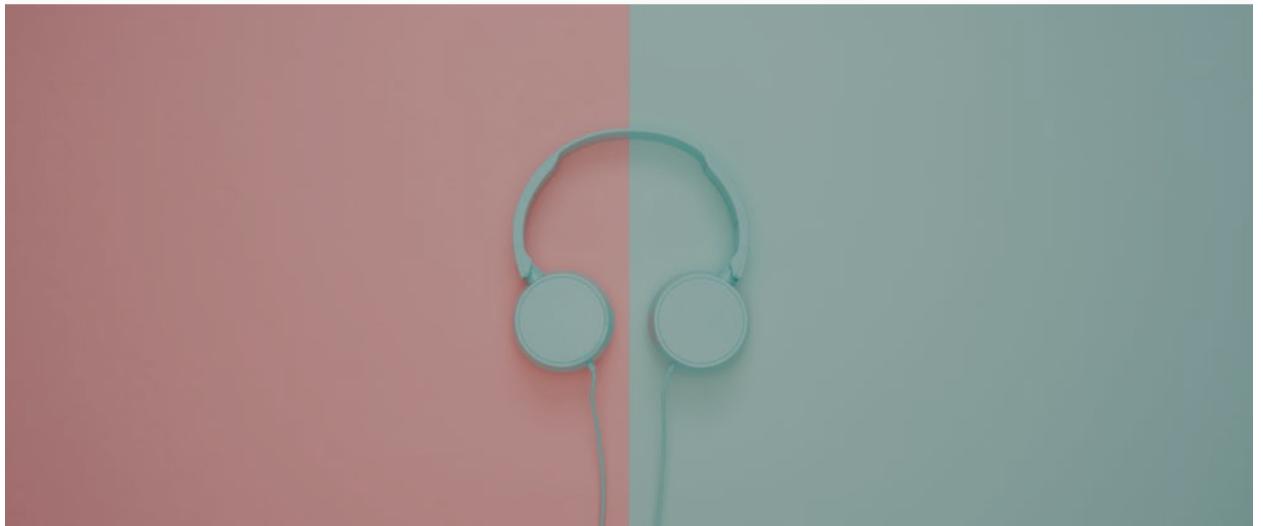
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MORE INFO

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7. Sidebar-2



Tech Shop

A b c

 GOOGLE PIXEL - BLACK
Amount: 1

 FUJI X100S PHOTO CAMERA
Amount: 1

Cart Total: \$120

M O R

CART PAGE

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Software Testing

DESCRIPTION	EXPECTED	RESULT
CLICKING THE HAMBURGER ICON	SIDE BAR OPENS	PASS
CLICKING THE PRODUCTS BUTTON	PRODUCT SECTION OPENS	PASS
CLICKING THE CART BUTTONS	OPENING THE CART	PASS
CLICKING THE ABOUT BUTTON	OPENING THE ABOUT BUTTON	PASS

CLICKING THE CARTS ICON	OPENING THE CART	PASS
CLICKING THE SEARCH ICON ON A PARTICULAR COMPONENT	OPENING THE PRODUCT PAGE	PASS
CLICKING CART ICON ON A PARTICULAR COMPONENT	ADD ITEM TO THE CART	PASS
SEARCHING ITEM ON THE SEARCH BAR	IF THE PRODUCT RELATED TO THE KEYWORD IS PRESENT THEN THE PRODUCT IS SHOWN ELSE ERROR MESSAGE	PASS
SEARCHING ITEM VIA COMPANY BAR	IF THE COMPANY IS VALID THEN PRODUCTS ARE SHOWN	PASS

PRICE BAR FLUCTUATION	PRODUCTS WITHIN THE RANGE ARE SHOWN	PASS
FREE SHIPPING RADIO BUTTON	PRODUCTS WITH THE FREE DELIVERY OPTION ARE SHOWN BELOW	PASS
CLICKING THE REMOVE ICON	THE ITEM WHOSE REMOVE ICON HAS BEEN CLICKED SHOULD BE REMOVED FROM THE CART	PASS
CLICKING THE CLEAR CART	THE CART SHOULD BE CLEARED COMPLETELY	PASS

Conclusion & Future Enhancement

8.1 Conclusion

This project is only a humble venture to satisfy the needs in a shop. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the organization. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

This website provides a computerized version of shop manipulate system which will benefit the users as well as the visitor of the shop. It makes entire process online where users can search product, and buy various product. It also has a facility for common user by login into the system where user can login and can see status of ordered item as well request for items or give some suggestions. It provide the facility of admin's login where admins can add various item, review users activity and also give occasional discount and also add info about different events for the customer.

8.1 Future aspect

The project has a very vast scope in future. The project can be implemented on intranet in future. Project can be updated in near future as and when requirement for the same arises, as it is very flexible in terms of expansion. With the proposed software of database Space Manager ready and fully functional the client is now able to manage and hence run the entire work in a much better, accurate and error free manner.

The following are the future scope for the project.

- ✓ Should be added payment gateway
- ✓ Can be added inventory management system
- ✓ Can be added multiple branches
- ✓ Can be added multilingual to this site
- ✓ And many features can be added to this project making it

9. Bibliography

- <https://www.geeksforgeeks.org/>
- <https://en.wikipedia.org/>
- <https://stackoverflow.com/>