

## **ABSTRACT**

The main goal of this project is to build an e-commerce website similar to Amazon. Our clone will allow users to register, login, add product to the cart, delete product from the shopping cart. Our clone will permit only an authenticated user to access the home page. IT world is changing. Evolution of cloud computing in recent past has brought forceful change in era of IT field. Major advantage of cloud computing is that the hardware need not to be upgraded as Cloud Services provides everything of demand basis. Consuming electricity is the best example by which cloud computing can be explained, just pay for whatever you used. during this paper, we present a comparative study of leading improvidence like Amazon Cloud Services, Rack space hopped-up by Open Stack and different open supply Cloud suppliers. Further discussing concerning a way to implement Open Stack or simply making an attempt out by Dev stack and Try stack only for testing purpose and finally covering releases and up to date work occurring in Open Stack. The aim of this paper is to point out the importance of Open Stack as a Cloud supplier and the method to induce started with Open Stack. Neutral. Using the dataset, these networks may be leveraged to produce task-specific outcomes. Using Transfer Learning, we utilized our dataset on a pre-trained network. The pre-trained network is used for both feature extraction and classification. Transfer Learning takes features and weights from previously trained models and applies them to subsequent models, even when there is less information on the most recent job. We will use Firebase for user authentication. Firebase provides developers with servers, APIs and datastore, all written so generically that developers can modify based upon user needs. It is user friendly. We will use firebase to store our data.

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 OUTLINE OF THE PROJECT**

Amazon could be a prime example of an internet site with all the key parts creating up a decent e-commerce website. Businesses, in any field have tons of competition. They're constantly on the lookout for a proven because of increase Revenue. If the business doesn't have an e-commerce website, they're deed money on the table. The e-commerce web site of Amazonas at first place in conjunction with easy hypertext mark-up language, CSS & JAVASCRIPT. Through this Project, We'll discover the simplest way to create a useful clone of Amazon e-commerce web site with React & Firebase. Cloud Computing has become the essential requirement for the IT companies. Cloud Industry is growing at a very good pace, and providing essential services i.e. infrastructure as a service (IaaS), network as a service (NaaS), platform as a service (PaaS) (SaaS). Because of important cost saving several smaller and medium sized organizations are trying forward for exploitation cloud services. The emerging demand for cloud services is driven by continuing globalization, consumer acceptance of technology, economic downturn and the growth of the extended enterprise. Cloud Computing enables many organizations to limit the large capital investment that is associated with costly data centres and for the applications and transforming these costs into operating expenses paying for cloud resources only as required.

## **CHAPTER 2**

## **LITERATURE SURVEY**

In this era of internet, e-commerce is growing by leaps and bounds keeping the development of brick-and-mortar businesses down. Individuals in the developed world and increasing number of people in the developing world currently use e-commerce websites on a routine for their everyday purchase. In recent times the role of information technology within the business enterprises has emerged with varied new levels of services, storage needs, resource management and handiness. Amazon is a vast Internet-based enterprise that sells books, music, movies, housewares, electronics, toys, and many other goods. In this article, we will explore the react hooks and context API as we build the amazon clone using the react context API for state management within our app. As the amount of data that is available now a days is too large for a single organization to regulate and manage therefore putting the data on cloud can act as a savoir. Cloud services are a true 'on-demand' services. Cloud servers work at a far more broader scale than even the largest non-public enterprises can work. Cloud computing is a method of enabling a convenient and present access to a shared pool of configurable computing resources (networks, servers, processors, storage, applications and services) which can be rapidly accessed with less effort. Through this project, we'll discover a way to create a functional clone of Amazon's e-commerce website with React and Firebase for database storage.

## **CHAPTER 3**

### **AIM AND SCOPE OF THE PRESENT INVESTIGATION**

### **3.1 PURPOSE OF THE PROJECT**

The goal of this project is to build an e-commerce application using React, which is inspired by Amazon. Amazon is a vast Internet-based enterprise that sells books, music, movies, housewares, electronics, toys, and many other goods. In this article, we will explore the react hooks and context API as we build the amazon clone using the react context API for state management within our app.

#### ***Pre-requisite:***

- Basic understanding of JavaScript ES6.
- Basic understanding of HTML and CSS.
- Have Node.js installed on your machine.
- Have Visual Studio Code installed on your machine.

#### ***Technologies:***

- React
- Firebase
- Font awesome(icons)

#### ***Project overview:***

Our clone will allow users to register, login, add products to the shopping cart, remove product from the shopping cart. Our clone will permit only an authenticated user to access the home page.

### **3.2 PROJECT ARCHITECTURE:**

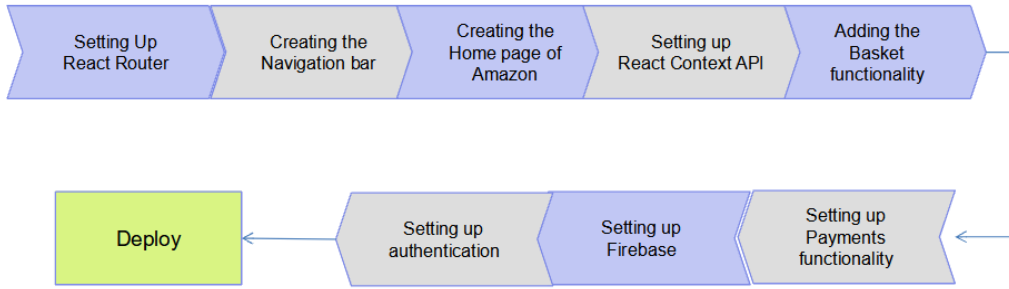


Figure 3.1 Project Stages

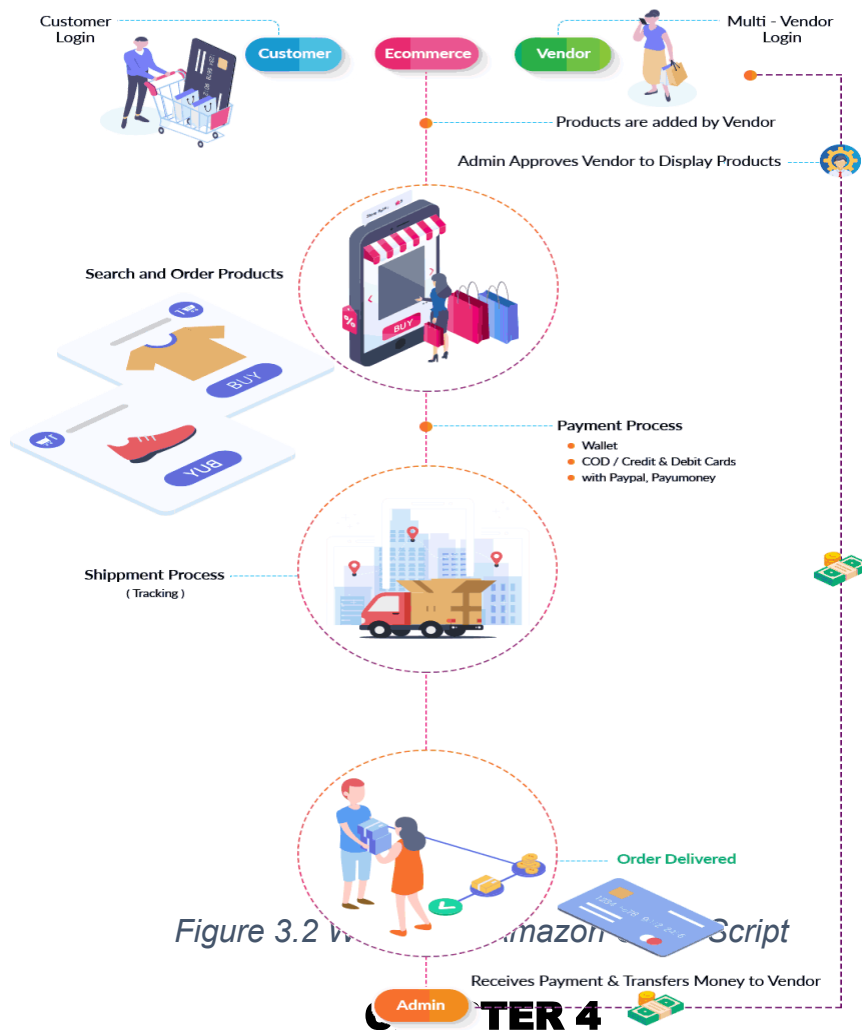


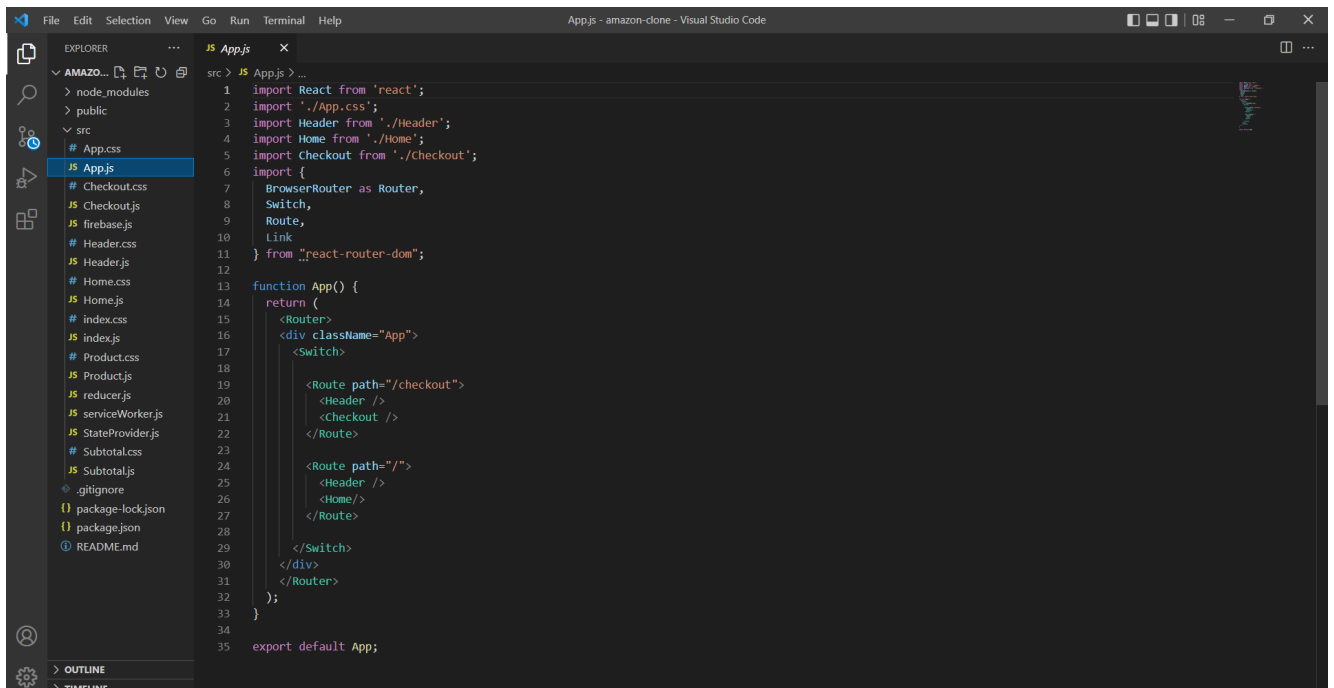
Figure 3.2 Amazon Script

## CHAPTER 4

### METHODS AND MATERIALS USED

#### 4.1 Designing of the Text Editor

The project will stick to the basic functionalities expected of a simple text editor – which includes the ability to write something on the notepad, save it and open and modify it whenever required. For the purpose of this tutorial we will design the Visual Studio Code Editor with React and CSS code to create the front-end part of the webpage and connect Firebase to the code to add the Database. We will use Stripe for Authentication.



The screenshot shows the Visual Studio Code interface. The Explorer panel on the left displays a file tree for a project named 'Appjs'. The file tree includes folders like 'node\_modules', 'public', and 'src'. Under 'src', there are files for 'App.js', 'Checkout.css', 'Checkout.js', 'firebase.js', 'Header.css', 'Header.js', 'Home.css', 'Home.js', 'index.css', 'index.js', 'Product.css', 'Product.js', 'reducer.js', 'serviceWorker.js', 'stateProvider.js', 'Subtotal.css', 'Subtotal.js', and '.gitignore'. The main editor area shows the code for 'App.js'. The code imports React, App.css, Header, Home, and Checkout. It uses BrowserRouter, Switch, Route, and Link from 'react-router-dom'. The App function returns a Router component with a div className 'App' containing a Switch with two Route components: one for '/checkout' and one for '/'. The code also includes a serviceWorker and a stateProvider.

Figure 4.1 Outline of the Web Page

## 4.2 WORKING EXPLANATION:

### 4.2.3 Primary Goals

Create header/navigation bar to navigate between pages. Create a home page to display products. Create a login page for user login. Add functionalities like basket,



payment and authentication login. Now we've our react project dead setup. Now we can start making the amazon clone.

#### **4.2.3.1 Set React Router**

A very necessary factor to contemplate during a React app is that the navigation(moving from one to another) of the users. Use this npm install react-router-dom.

#### **4.2.3.2 Creating the NavBar**

We are going to use a package for icons, and we need Material Icons to use them. So open your terminal and write the subsequent command. npm install @material-ui/core.

#### **4.2.3.3 React Context API**

The Context API may be an important part of React. It helps North American nation to form application level states and that we will get the information from those states through any part. There are many alternatives, one among them is revived. Setting up React API is additional of boiler plate. putting in place React Context API is more of a boilerplate and just about same in each project.

#### **4.2.3.4 FireBase**

We use base of operations for user authentication. Firebase provides developers with servers, APIs and data store, all written thus generically that developers will modify it to suit most desires. It is user friendly In this article we will use the fire store to store our data. Next you will be directed to your Firebase projects pagelike the following:-

**step1:-**Add the name of your project (amazon-clone)

**step2:-** check enable Google Analytics for this project and click continue

**step3:-** select default account for Firebase. After the Firebase project is successfully created, click on the web icon and follow the prompt to register your app. Next Install Firebase CLI .

**npm install -g Firebase-tools** and continue to console. Next, click on the net icon and choose the con-fig possibility as follow:-

## Firestore SDK snippet

Automatic   CDN   Config 

Copy and paste these scripts into the bottom of your <body> tag, but before you use any Firestore services:

```
const firebaseConfig = {
  apiKey: "AIzaSyBNZABReEqq_52BrVn5e0jmpBfpZ70rHVQ",
  authDomain: "test-3a3d4.firebaseio.com",
  databaseURL: "https://test-3a3d4.firebaseio.com",
  projectId: "test-3a3d4",
  storageBucket: "test-3a3d4.appspot.com",
  messagingSenderId: "871032883191",
  appId: "1:871032883191:web:37034251051928d77350f2",
  measurementId: "G-PF14G6HFM3"
};
```



Figure 4.2 Firestore Configuration

Connect our projects to firestore install firestore in the project.

## npm install firestore

### 4.2.3.5 React Hooks

“Hooks square measure a brand new addition in React They let you use state and alternative React options without writing a category.”THE use State Hook The North American nation Estate hook permits us rouse state in our purposeful elements similar this. State school primarily based component. A use State hook takes the initial price of our state because the solely argument, associated it returns an array of 2 elements. the primary part is our stat variable and also the second part may be a function within which we are able to use the update the value of the state variable.

Let’s take a look at the following example:

```
import React, {useState} from "react";
```

```
function Counter()
```

```
{
```

*Figure 6.1 Output*

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- Open Stack URL : <http://www.openstack.org/>
- Cloud Stack URL: <http://www.cloudstack.apache.org/>
- Open Nebula URL : <http://openebula.org/>
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