Bolt Ecommerce

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Bolt Ecommerce

Introduction:

Buying and selling goods and services using the Internet is a regular occurrence for all businesses and consumers.

So, we have created Bolt which is an e-commerce website where we offer a wide range of products to the clients in one store. We also provide delivery to clients over the globe. Giving Limited Edition shoes as well. Allowing the seller to sell their products.

Benefits of doing this project: (Developer view)

* Going across globe.
* User Authentication.
* Implementing Admin dashboard to organize the products.
* Routes Protection based on whether the customer is Logged in or admin is Logged in.
* Storing the password in the encrypted format for the security of the customer.
* Products filtering and sorting.
* Making sure that customer information is safe.
* Integrated Stripe Payments using Credit and Debit Cards.

Benefits of doing this project: (User/ Client view)

* A more Pleasant Customer Experience.
* Allowing user to buy multiple products in one go.
* Easy Checkouts.
* Customer information is secure.
* No time restrictions.
* 24 \* 7 Operations.

Design and Data Flow

The importance of the design and data flow for e-commerce site is to show the designers the real happenings within the framework.

Data flow as per client:

When client lands on the homepage they can browse the site from menu bar and select the alternatives from it. As they come to browse and purchase items, they can specifically go to products page to see the available items and from there they can select the specific item that they need to purchase which will automatically added to the cart and after that they can select a method of payment to buy the item.

Payment

Cart

Customer

Homepage

Customer

Data flow as per Admin:

Admin must Sign In to access the admin dashboard with mail and password. After signing the admin automatically diverted to the admin dashboard where they can Manage the categories, Products as well as make the products. They can specify the categories where the product will be show as well as they can select the featured product option that will appear products on the homepage. The API will get the items from database and appear it on the site. In case in Future, they need to alter product that they can also do that from manage products.

Admin

Sign In

Admin Dashboard

Website

Manage

Products

API

Database

Product Created

Product Created

Create Products

Manage Categories

Create categories

Challenges While developing this project:

* Integrating Payment processing through stripe.
* User Friendly Design
* Biggest challenge we deal with front end implementation issues, specifically related to design.
* Encryption of password for the security.
* We need to know which services are involved, how they’re connected to one another, and what workflows will be necessary to bring them into the new system.
* Review each design change request and consider its impact on both the success of the project and the timeline before moving forward with it.
* Provide feedback in a timely manner to keep things on schedule.
* Decide early on who will be responsible for page and other decisions from the very beginning of the build.
* Knowledge of Framework and Platforms - every group member was not comfortable in react.
* It has never been easier to get your website up and running on the web within a few hours. S0, it took lots of time to fix bugs.

Technology used:

* Frontend – ReactJs
* Database – MongoDB
* Backend – NodeJs & ExpressJs

ReactJs:

* Ability to create our own elements rather than just depending upon HTML Elements.
* Ability to use HTML and JavaScript at one place using JSX
* Make JavaScript coding easier.
* Easy to maintain large codebase using MVC Architecture.

NodeJs:

* High Performance for real time application (Takes less time to send response as compared to other Server-Side Languages).
* Ability to work in cross platform environment.
* Asynchronous event driven IO helps concurrent request handling.

MongoDB:

* Ability to handle highly diverse datatypes.
* High Performance because of its document-based data storage.
* Ability to handle large amount of unstructured data.
* Handle large scale application more efficiently as compared to Relational Database.

Software Used:

* Trello – For Communication purpose.
* GitHub – Source Code Management.
* Postman – For API testing.
* Visual Studio Code
* Cloud – Netlify

Conclusion

E-Commerce has evidently become a critical portion of our society. The fruitful companies of long run will be those that take E-Commerce seriously, committing adequate assets to its improvement. E-Commerce is not an IT issue but an entirety business undertaking. Companies that utilize it as a reason for completely re-designing their business forms are likely to procure the most prominent benefits. Besides, E-Commerce may be a supportive innovation that gives the customer get to business and companies all over the world.

Future Extension and Limitations:

* Varied modes of payment: Keeping the customer’s needs for varying modes of payment.
* Regular Subscriptions for clients: Most e-commerce giants are introducing subscription plans for clients that allow the clients early get to rebates and offers.
* Customers engage with videos: Videos explaining products helps grab the attention of potential customers.
* The convenience of mobile shopping: Clients favor comfort over individual interaction. Leveraging the comfort of portable shopping could be a trend that businesses are utilizing permitting more prominent client retention.

Links:

Promotional Video link:

<https://conestogac.zoom.us/rec/play/-bwpvJR3bQLOxxTQf9l8JIazB-kaTSY-1PaZhOHEnSYl1MTGqxEkYYbD6JMIVc2GG1sFPyyC8DS4zGGU.sHnb_XE96QbFioDu?startTime=1660332751000>

Live link/ URL:

* <https://pridhingra-bolt.netlify.app/>
* <https://bolt-sports.herokuapp.com/>

GitHub Link:

* Front end: <https://github.com/Gurjessi/capstone_frontend>
* Back end: <https://github.com/Gurjessi/capstone-backend>