PimpriChinchwadEducationTrust's

PIMPRICHINCHWADCOLLEGEOFENGINEERINGNIGDI,PUNE-44

DEPARTMENTOFINFORMATIONTECHNOLOGY



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PFCMINIPROJECT

ON

"E-CommerceWebsite - Nike Shoes"

BY

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I. Introductionandaims/motivationandobjectives.

Thewebsiteinquestionservesasaplatformforelectroniccommerce, whichindicates thatitwilmakeiteasierforpeopletobuyandselgoodsandservicesonline. The overalgoaloftheprojectistoprovideastraightforwardanduser-friendlyexperience acrossitswhole. It will provide users with numerous option to gothrough.

- 1.1Purpose:Thepurposeofthisdocumentistoprovideadetaileddescriptionofthe requirementsforthee-commercewebsite.Thesystem isdesignedtoalowusersto navigatethroughthewebsitecontentandtocreateauser-friendlyexperience
- 1.2Scope:Thee-commercewebsitewilbeaweb-basedapplicationthatenablesusers to find the required product. The system wila low users to search for product sby location, specialization, and availability, view profiles, and schedule purchase. The system wila location and availability products, and postnew products.

Motivations:

- Reachawideraudience
- Waitingforanyproductistime-consuming
- Peoplefindithectictoactualyvisitthestore
- Tocombatthisproblemandfindaproductassoonaspossibleistheneed Objectives:
- ToProvideAdvanceSearchfacilitytousers.
- ToReduceeffortsofusers.
- ToProvidefulsatisfactiontousers.
- Toenablethefunctionalitiesthatarenecessaryfortheusers
 - I. ProblemStatement/definition.

Ourmainaimistocreateawebapplicationthatwilbebeneficialforthe usersandvendorstofindsuitableproductsaspertherequirementsmuch more conveniently. Users can find the productbydescribing their requirementsandgettheproductwithease.

I. SystemArchitecture

Aproposed system architecture for an e-commerce website using the MERN stack (Mongo DB, Express, React, and Node. js) would consist of several components:

Front-end:Theuserinterfaceofthesystem,builtwithReact,wilberesponsiblefor renderingtheuserinterfaceandcommunicatingwiththeback-endAPI.

Back-end:ThebackendwilbebuiltwithNode.jsandExpress,whichwilberesponsible forhandlingrequestsfromthefront-endandcommunicatingwiththedatabase

Database: Mongo DB will be used as the database for storing althein formation related to patients, doctors, appointments, and any other relevant information.

API:Theback-endAPIwilprovideasetofendpointsthatwilbeusedbythefrontend tocreate,read,update,anddeletedatafromthedatabase.

Authentication: Asystem for user authentication and authorization will be implemented to ensure that only authorized users can access sensitive information.

Deployment: The system will be deployed on a cloud platform like AWS to ensure scalability and availability.

IV. SystemImplementation

The Mern Store is a webapplication built using the MERN stack (Mongo DB, Express.js, React.js, and Node.js) that a low susers to browsethrough different products. The application is divided into two main parts: the backendand the front end.

Backend:

The backend of the application is built using Node. js and Express. js. It is responsible for handling althebusiness logicand interacting with the database.

Thebackendconsistsofthefolowingmodules:

- AuthenticationModule:Thismoduleisresponsibleforauthenticatingusersand ensuringthatonlyauthorizeduserscanaccesstheapplication.
- UserManagementModule:Thismoduleisresponsibleformanagingusers'data suchastheirprofilesandpurchaserecords.
- ItemsModule:Thismoduleisresponsiblefordisplayingthestatusoftheitemi.e whetheritisinstockoroutof-stock.
- DatabaseModule:Thismoduleisresponsibleforinteractingwiththedatabaseto storeandretrievedata.

The backend of the application is designed using the REST ful API architecture, which a low store as you munication between the frontend and the backend.

Frontend:

The frontend of the application is built using React. js. It is responsible for presenting the user interface to the users and interacting with the backendth rough REST ful APIs. The frontend consists of the following modules:

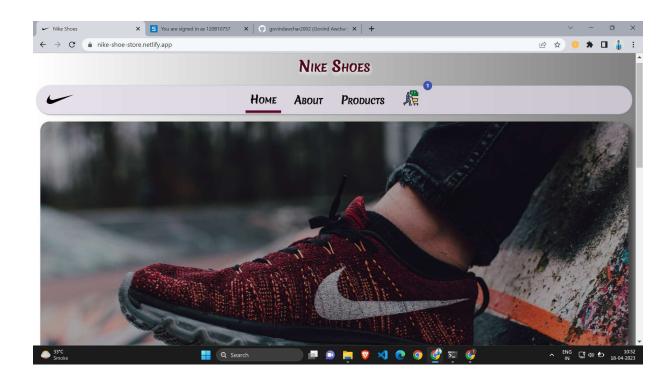
- AuthenticationModule:Thismoduleisresponsibleforauthenticatingusersand ensuringthatonlyauthorizeduserscanaccesstheapplication.
- UserProfileModule:Thismoduleisresponsibleformanagingusers'profilesand alowingthemtoviewtheirappointments.
- ItemsModule:Thismoduleisresponsiblefordisplayingthestatusoftheitemi.e whetheritisinstockoroutof-stock.
- AddtoCartModule:Thismoduleisresponsibleforalowinguserstoaddtocart theirproductwhichcanbepurchasedlater.

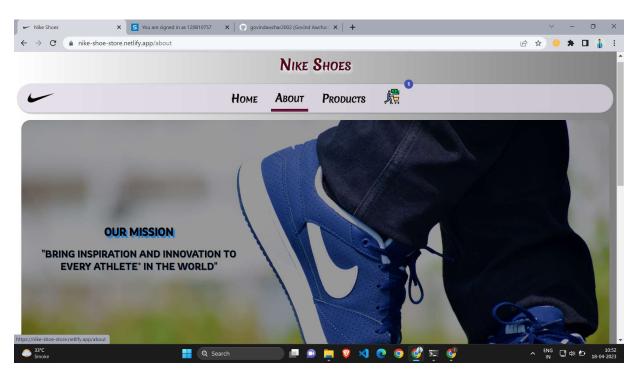
The frontend of the application is designed using the React. jslibrary and is built using modern webdevelop ment technologies such as Redux, React Router, and Axios. The

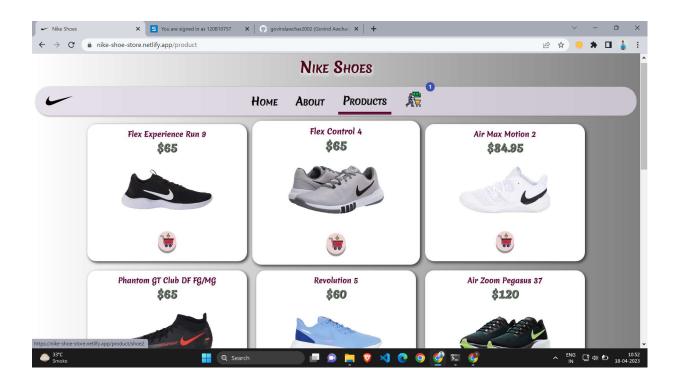
frontendisalsoresponsive, which means it can be accessed from any device, including mobile phones and tablets.

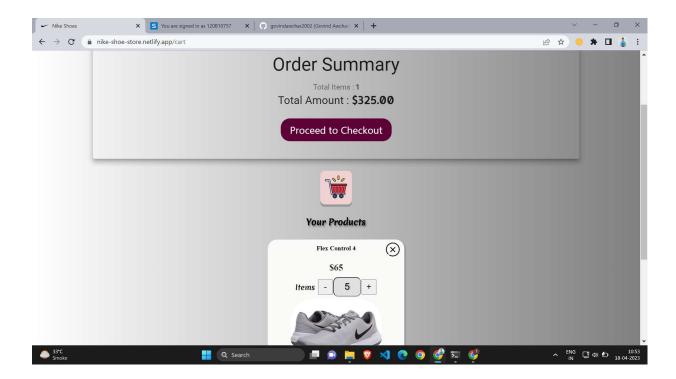
V. Results

HomePage:









Conclusion

TheMERNStoreisavaluabletoolforsimplifyingtheprocessofpurchasingandseling goods. Whiletherearesomelimitationstoconsider, the benefits of the system outweighthepotential drawbacks. With its comprehensive features, the system provides an efficient and cost-effective

solution for product purchase facilities and users alik

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