Firstly i Have done projects which are totally related to Web-Development.

Technologies used in my projects are:

HTML/CSS,BOOTSTRAP,JAVASCRIPT,REACT JS,ROUTING,REST API CALLS,JWT TOKEN,AUTHORIZATION,AUTHENTICATION

---EXPLANATION OF MY MAJOR PROJECT(1)----

TITLE of PROJECT: ECOMMERCE APPLICATION(Nxt Trendz)::

PROJECT LINK: https://ecomapp123.ccbp.tech/

Login Details: UserName:raja

Password:raja@2021

Breif about project:

Implemented Nxt Trendz application which is a clone for ECommerce applications

like Amazon, Flipkart where users can login and can see list of products with search, filters, sort by, etc..

- *Implemented Different pages and routes for Login, Products, Product details using React Router components Route, Switch, Link, props, state, lists, event handlers form inputs.
- * Authenticating and authorizing users by taking username, password and doing login POST HTTP API Call and implementing filters by sending them as query parameters to product api calls.
- * Persisted user login state by keeping jwt token in local storage, or Cookies Sending it in headers of further api calls to authorize the user.

1. Elaborate how you tested your internship or projects:

In my project there are some important checklists based on the verification of checklists i made my application move further

->AUTHENTICATION TESTING:

- In this It used to verify the user before granting access to an application .if user entered details are valid .user can enter in to the application ---it's a successfull login
- If invalid details entered .there is an alert message Invalid details . so It's a
- failure login
- ** I tried out the valid details and invalid details and maintained accordingly.

-> ROUTING IN APPLICATION:

• Intially navigating to other sections are done with out using routing library .so some defaults I seen in it like – 1.full page reloading

2.problem in navigating to previous page.

** I tried out with implementing the REACT ROUTER.so it worked smoothly.and react router is the recommended to navitage to the other sections/web pages.

->SLOW NETWORK TESTING:

• I tried out the product list section with 3G/4G/5G networks .there is a loading dealy of product images and there information to be displayed comparatively with 5G network

->UI TESTING:

.I tried out in various devices and screen sizes .to work accordingly I implemented some **Media queries** –for various screen size.

->DATABASE TESTING:

- Database which stores the product data and items added in cart until unless closing the application
- ** I tried out just by logging out and re login to the application .i observed that cart items are same.But when closing the site and re login to the application cart items are removed directly i.e, this is because data is stored in cookies/session storage .cookies/session storage has expiry compared to local storage.

->FUNCTIONALITY TESTING:

- **1.Filtering of Products** tried out product selection based on category,price range and rating
- **2.Onclick functions:** when user clicks on shopnow button ,product section ,home section,cart section and other button functions it needed to be navigated to their specific destination.
- ** it is implemented by applying the **LINK** tag.LINK tag is used to navigate to given path/url.
- **3.Product details verification testing** tested that products are displayed correctly like product names, images, prices and description
- **4.Search functionality testing** Test the search functionality to ensure that users can easily find products using keywords or filters.

->API TESTING:

- . APIs to fetch and manipulate data from remote servers through HTTP methods.
- ** verified that I am getting appropriate data or not .Like it is a failure response or success response.

a.what did the system used to do?

An Ecommerce application allows users to shop online, browse products, add items to cart. these all can be done only when user enter valid details.

SYSTEM FUNCTIONS:

1.LOGIN PAGE:

.Login page is implemented by AUTHORIZATION, AUTHENTICATION -Need to enter valid username and password. And click on login button enters in to the application

These ensures the safety of user.

2.HOME PAGE:

Home page consists of:

.Header - it consists of path to home page section, products section, cart section and logout option

.center of page contains discription about the application and shopNow button option

when we click on products section, cart section, logout button and shop now button it needs to take us to the specificed destination.

3.PRODUCT DETAILS PAGE:

when user clicks on shopnow button or product section it will be taken to the product details page .it consists of Image or items with price and rating when clicks on image it need gives specific information.

- 1. Product specifications
- 2.Reviews
- 3.Increment and Decrement Option
- 4.Add to cart option
- 5. Availability information
- 6.Brand

And it shows the similar products

.Category Section - it consists of different categories when click on particular category it displays the items related to it.and every category is functional

.Clear Filters - when clicks on clear filters button it shows the defalut items.

4.CART DETAILS PAGE:

.if user adds the items to cart .it is displayed in the cart section.and if adds same item to cart ,the item count in cart is get incremented

.All items and total is dispalyed

.item deletion functionality is also added

5.LOGOUT CLICK OPTION:

.when user clicks on logout button .it takes us to the login page.

b.what other systems have you seen in the wild like this?

I have seen the Amazon and Flipcart applications very similary to mine.But some differnce in my application when compared with

amazon and flipcart applications like there will be payments gateway, delivery location option. i have nt implemented them in my application.

c. How do you approch the testing problem?

- 1. Analyzed the code thoroughly resolving the issues by several implementations. fixing the errors by recollecting information.
- 2.Seeking the external person help like I am stuck up in API Testing, Database testing and search & filtering issue. consulted the expert and he helped me out of this.

d.what are the intresting bugs?

- 1. Not Redirected to Notfound section when invalid option is clicked
- 2. Authentication issue when entered invalid details
- 2. Propdrilling issue
- 3.Image and Media issues
- 4. Clear cart buttons are not functioning as expected
- 5. Routing issues
- 6. Search and filtering problems
- 8.some syntax errors

e.How did you fix them?

- **1.Rediecting bug** Imported switch component and warpped all the routing elements in switch .if switch did not find appropriate route it choose the notfound component.
- 2. **Authentication bug** implemented the protected route where if invalid or undefined jwt token finds .it makes user does'nt entering in to the application and showing alert message.
- 3.**Image and media issue** image/product details are not appropriately displayed .resloved by implementing routing and passing the props as arguments to the component and applied separate css designs to display in systematic manner.
- 4.clear cart buttons are not functioning as expected still this is an issue in my project .resloved by creating another deleted button.but all the cart items can't be deleted at a time.
- 5.**Routing issue** just applied EXACT key word before the path attribute.
- 6.**search and filtering issue** -- Seeking the external person help like I am stuck up in search and filtering issue .consulted the expert and he helped me out of this
- **7.Propdrilling** Resloved by implementing the CONTEXT like consumercontext and providercontext
- 8.**Syntax issue** resolved by recollecting the concept and tried out using console.