

DAY 5 - TESTING, ERROR HANDLING, AND BACKEND INTEGRATION REFINEMENT

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(Roll # 101142)

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Step # 1: Functional Testing

Objective:

We have tested all website functionalities to ensure they work as expected.

➤ Test Core Features

Test Case: TC001

- **Task Name: Verify Home Page Functionality**
- **Feedback & Result:** Verified that **Home Page functionality** is working fine and displayed correctly as expected.
- **Status:** Passed
- **Security:** Low
- **Remarks:** No Issue were found during the test.

Test Case: TC002

- **Task Name: Product Listing Functionality**
- **Feedback & Result:** Verified that **Product Listing Functionality** is working fine and displayed correctly as expected.
- **Status:** Passed
- **Security:** Medium
- **Remarks:** No Issue were found during the test.

Test Case: TC003

- **Task Name: Filter and Search Functionality**
- **Feedback & Result:** Verified that **Filter and Search Functionality** is working fine and displayed correctly as expected.
- **Status:** Passed
- **Security:** Low
- **Remarks:** Work as expected

Test Case: TC004

- **Task Name:** Cart Operations Functionality
- **Feedback & Result:** Verified that **Cart Operations 'Add', 'Update' and 'Delete'** functionality are working fine.
- **Status:** Passed
- **Security:** Low
- **Remarks:** Work as expected

Test Case: TC005

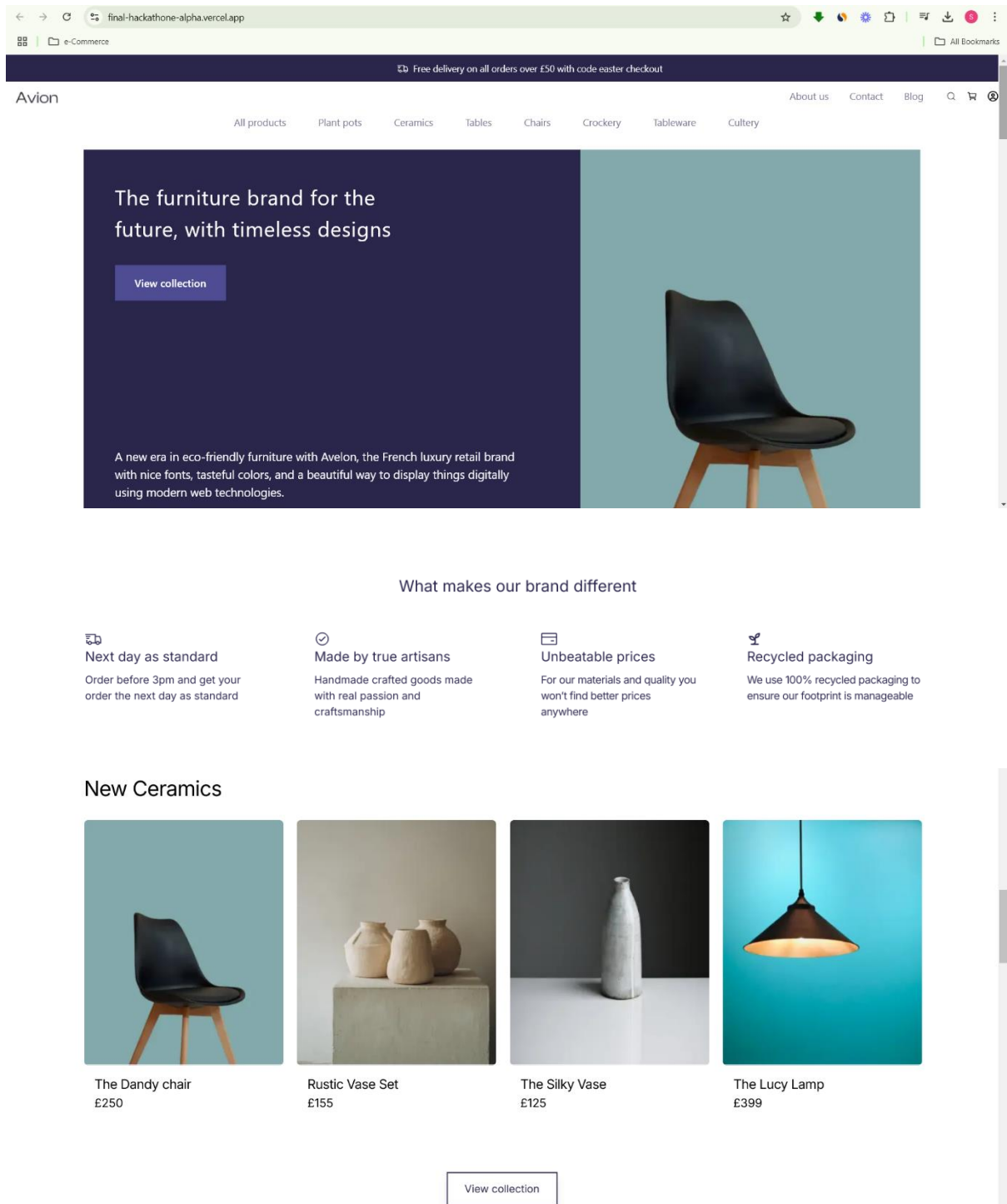
- **Task Name:** Dynamic Routing Functionality
- **Feedback & Result:** Verified that **Dynamic Routing Functionality** is working fine.
- **Status:** Passed
- **Security:** Low
- **Remarks:** No Issue were found during the test.

Test Case: TC006

- **Task Name:** Comment Section Functionality
- **Feedback & Result:** Verified that **Comment Section Functionality** is working fine.
- **Status:** Passed
- **Security:** Medium
- **Remarks:** Successful Test

Below are the screenshots of all performed tasks.

a. Main Page:



Our popular products



The Poplar suede sofa
£980



The Dandy chair
£250



The Dandy chair
£250

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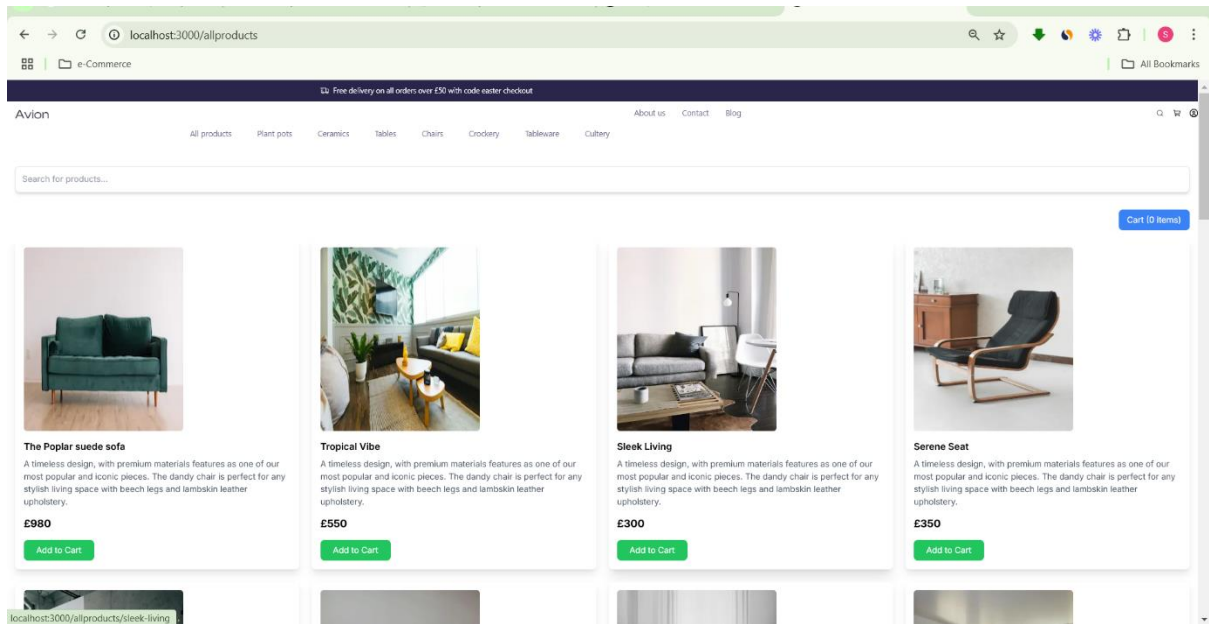
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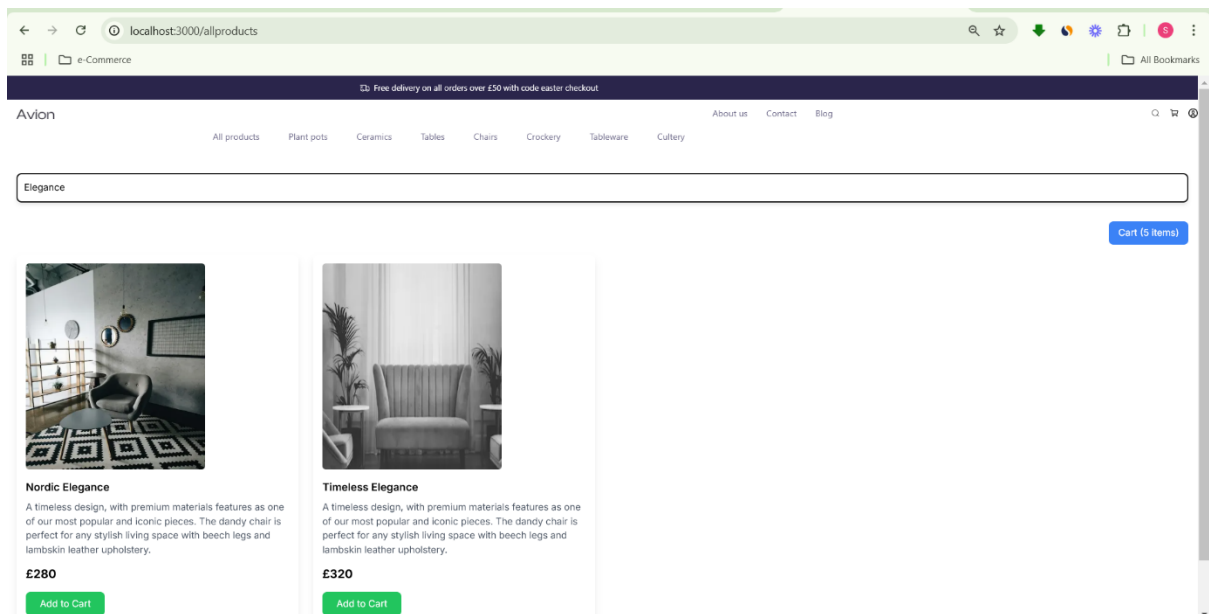
Copyright 2022 Avion LTD



b. Product Listing:

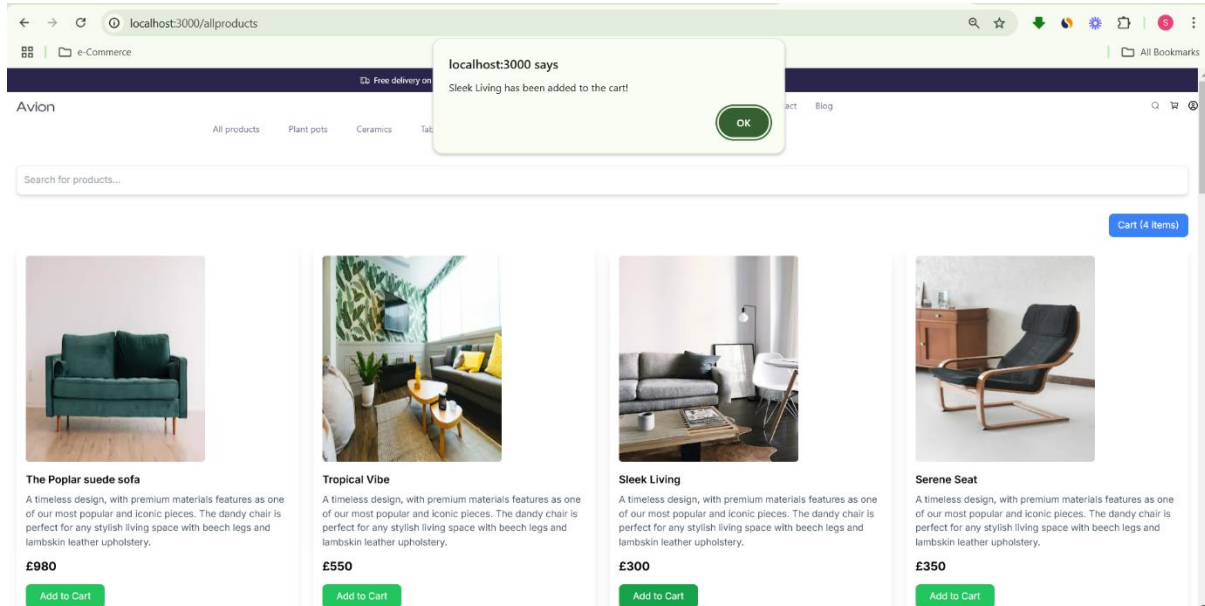


c. Filters and search:

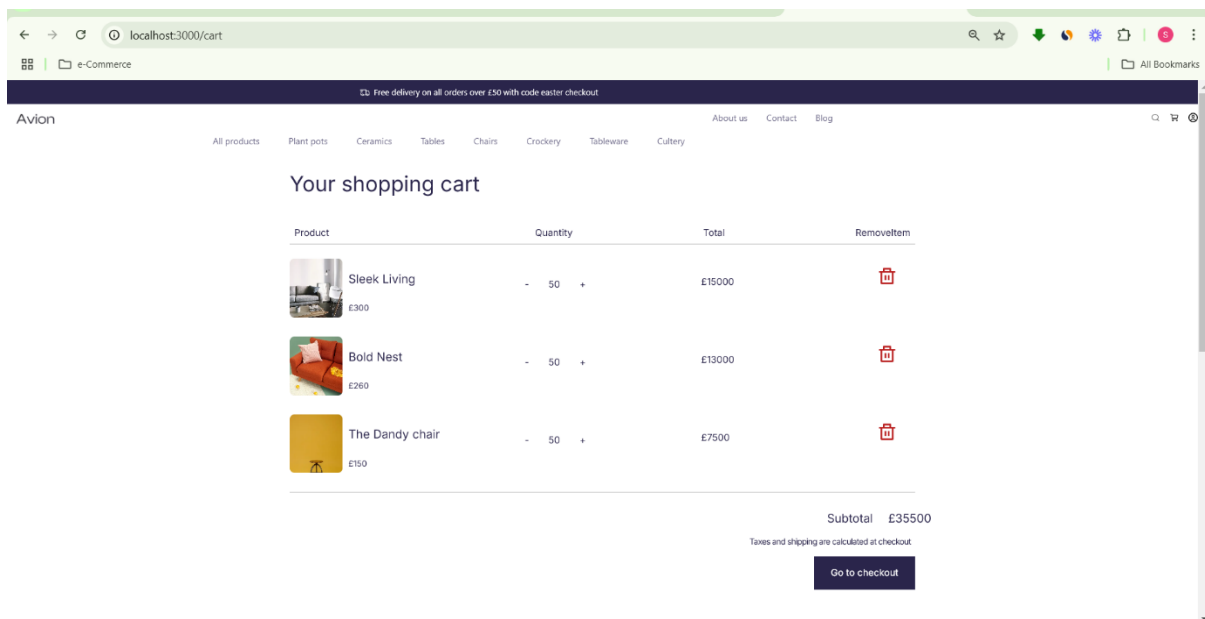


d. Cart Operations:

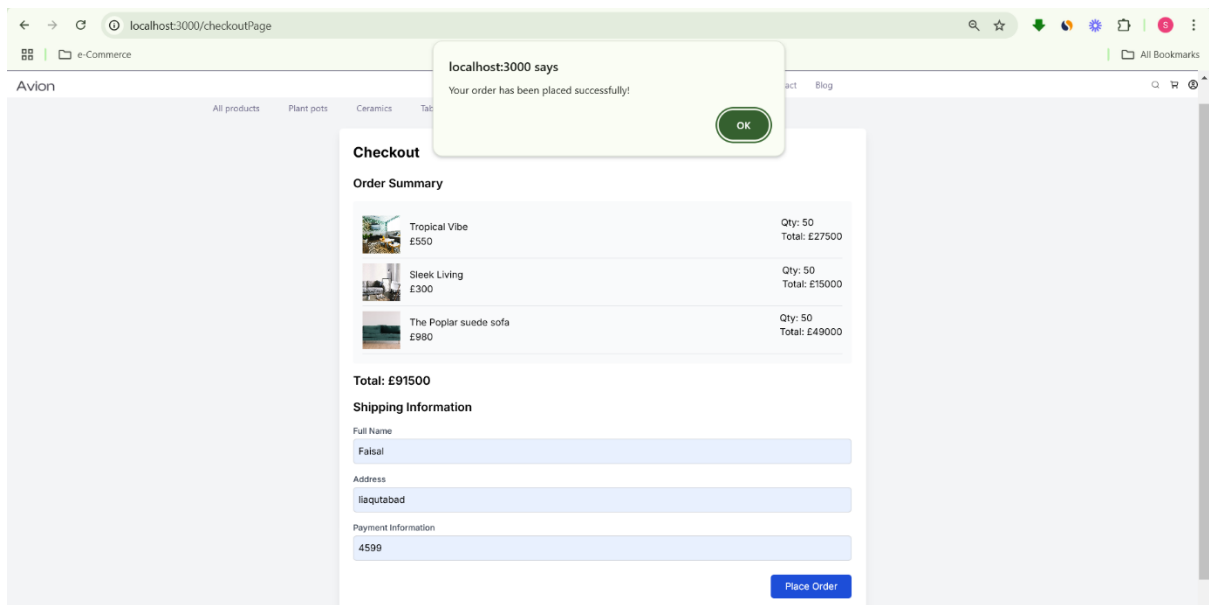
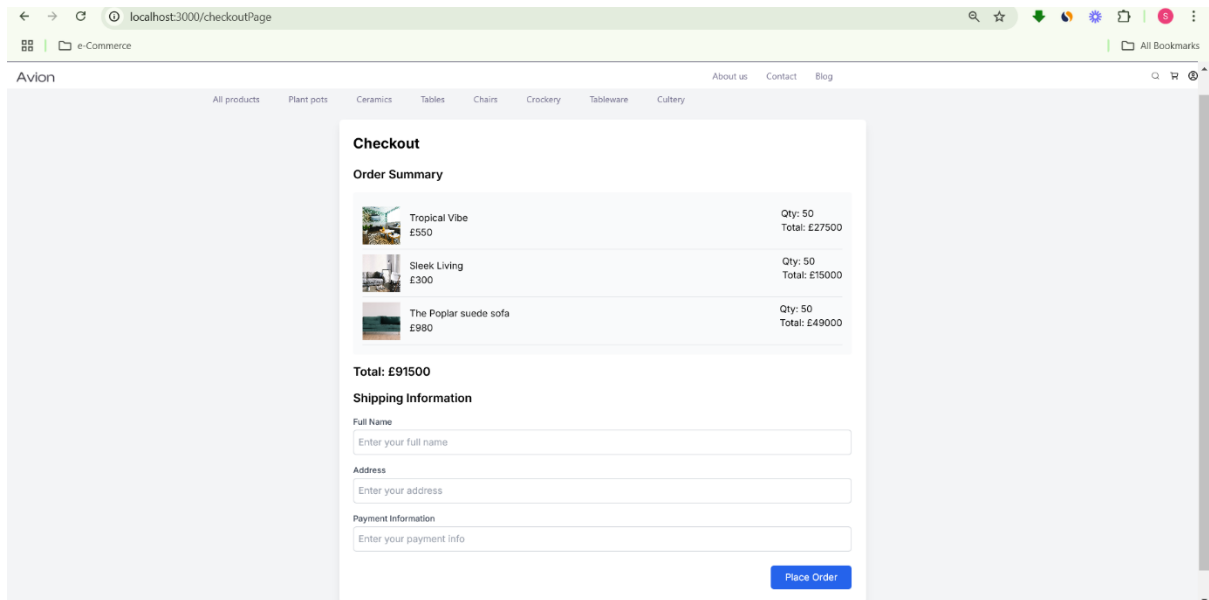
- i. **Add to Cart Functionality:** Below screenshot is showing how to we added products in the Cart.



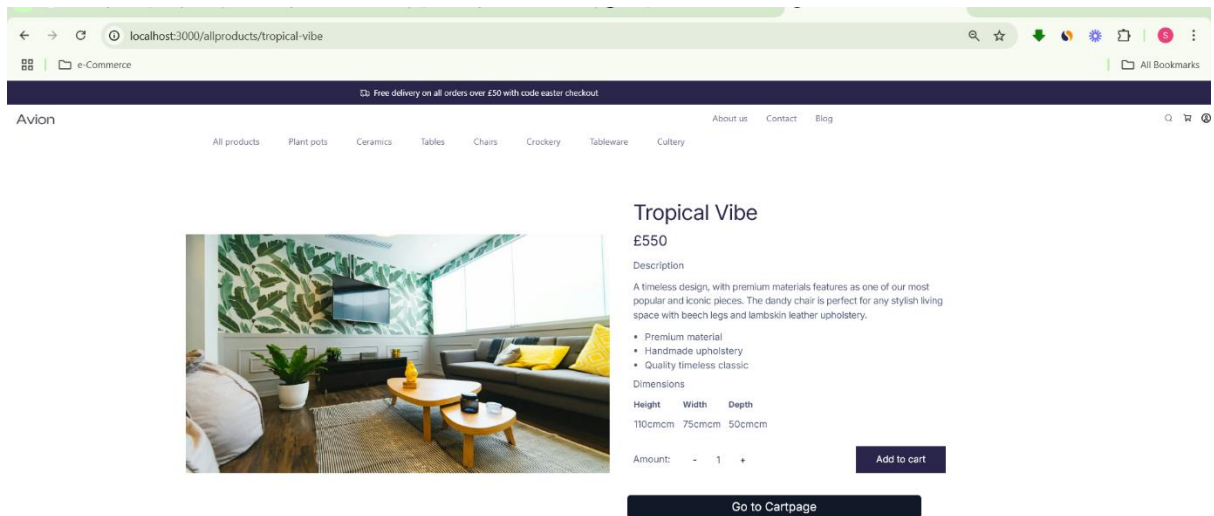
- ii. **Shopping Cart:** Below screenshot is showing the added products list in the Cart.



- iii. **Checkout Page:** Below screenshot is showing the how to we checkout added items in the cart for confirmation of order execution.

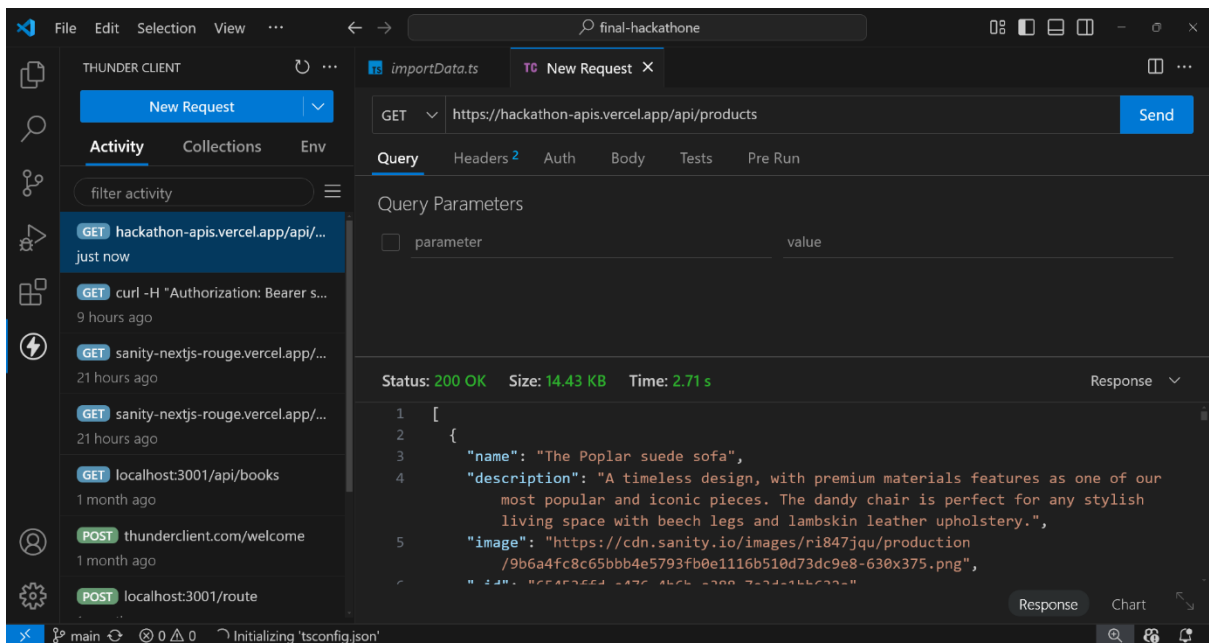
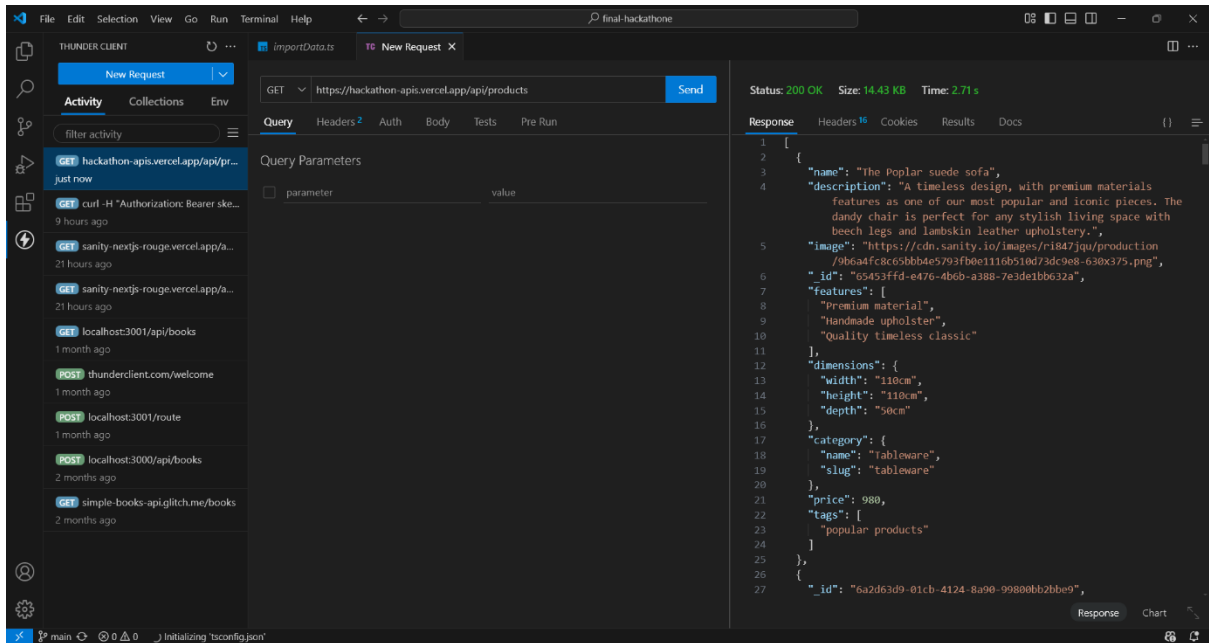


e. Dynamic routing:



➤ Testing Tools

- i. **Thunder Client:** we have tested API response on Thunder Client and below mentioned screenshots are showing that APIs are working fine.

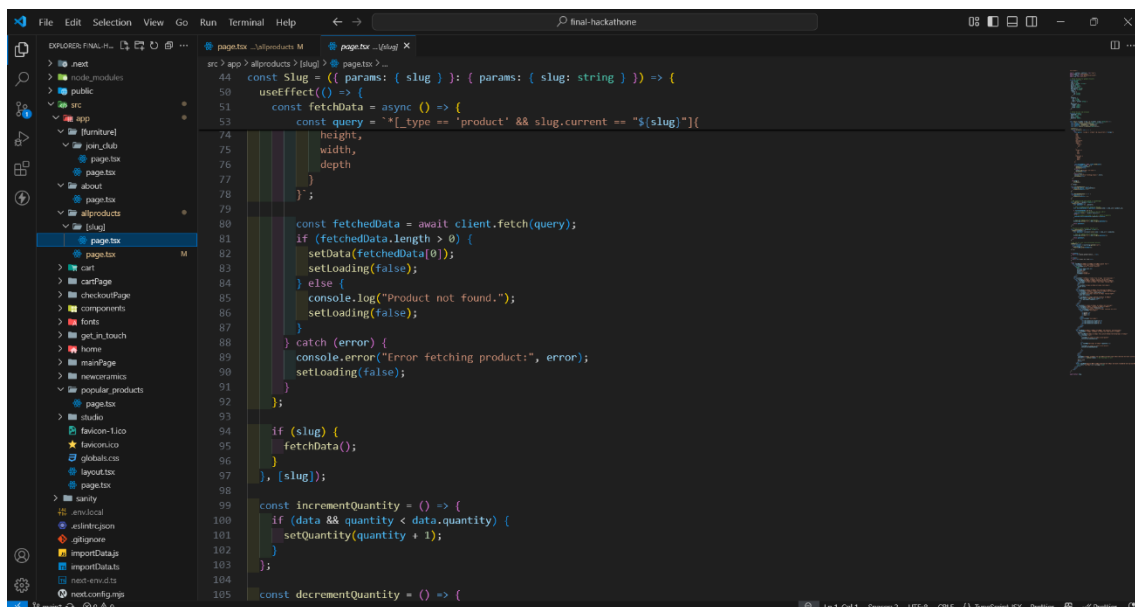


Step # 2: Error Handling

Test Case: TC007

- **Task Name:** Test API Error Handling
- **Feedback & Result:** Verified that **API Error Handling Functionality** is working fine.
- **Status:** Passed
- **Security:** Medium
- **Remarks:** Handled gracefully

i. Error Handling on Dynamic Routing pages

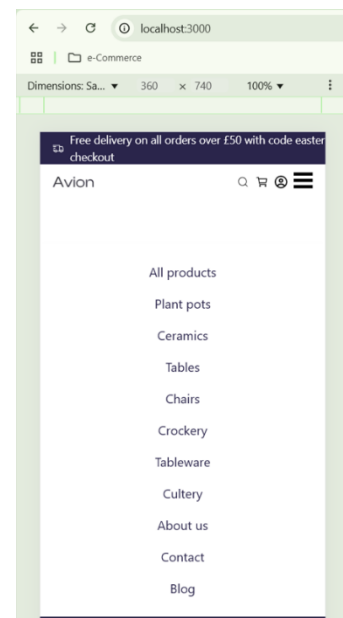
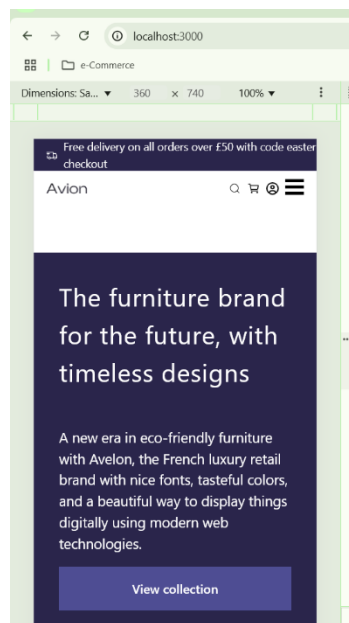


```
44  const Slug = ({ params: { slug } }) => { params: { slug: string } }) => {  
50    useEffect(() => {  
51      const fetchData = async () => {  
52        const query = `*_type == 'product' && slug.current == "${slug}"`  
53      }  
54      const { height, width, depth } =  
55      await client.fetch(query);  
56    }  
57    const fetchData = await client.fetch(query);  
58    if (fetchData.length > 0) {  
59      setData(fetchData[0]);  
60      setloading(false);  
61    } else {  
62      console.log("Product not found.");  
63      setloading(false);  
64    }  
65    } catch (error) {  
66      console.error("Error fetching product:", error);  
67      setloading(false);  
68    }  
69  };  
70  
71  if (slug) {  
72    fetchData();  
73  }, [slug];  
74  
75  const incrementQuantity = () => {  
76    if (data && quantity < data.quantity) {  
77      setQuantity(quantity + 1);  
78    }  
79  };  
80  
81  const decrementQuantity = () => {  
82    if (data && quantity > 1) {  
83      setQuantity(quantity - 1);  
84    }  
85  };  
86  
87  return (  
88    <div>  
89      <h3>Product Details</h3>  
90      <div>  
91        <div>Name: {data.name}</div>  
92        <div>Price: {data.price}</div>  
93        <div>Quantity: {quantity}</div>  
94        <div>Increase Quantity: {incrementQuantity}</div>  
95        <div>Decrease Quantity: {decrementQuantity}</div>  
96      </div>  
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```

Responsiveness Test

Test Case: TC008

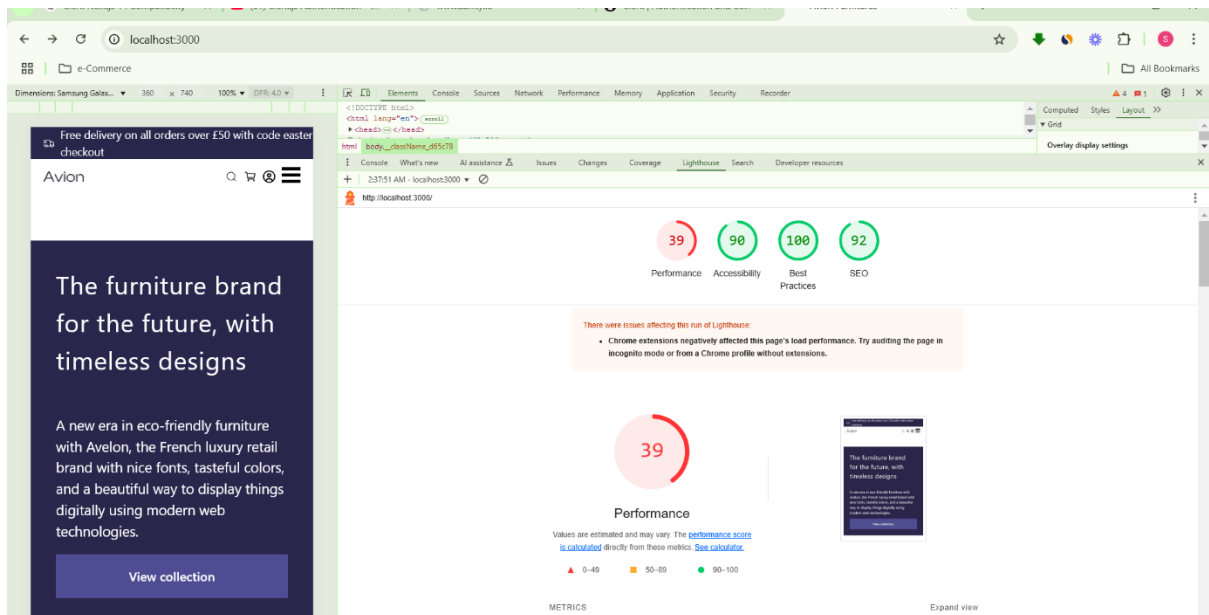
- **Task Name:** Test Responsiveness on small (Mobile) screen
- **Feedback & Result:** Verified that Responsiveness on Small (Mobile) screen Functionality is working fine.
- **Status:** Passed
- **Security:** Medium
- **Remarks:** Successful Test



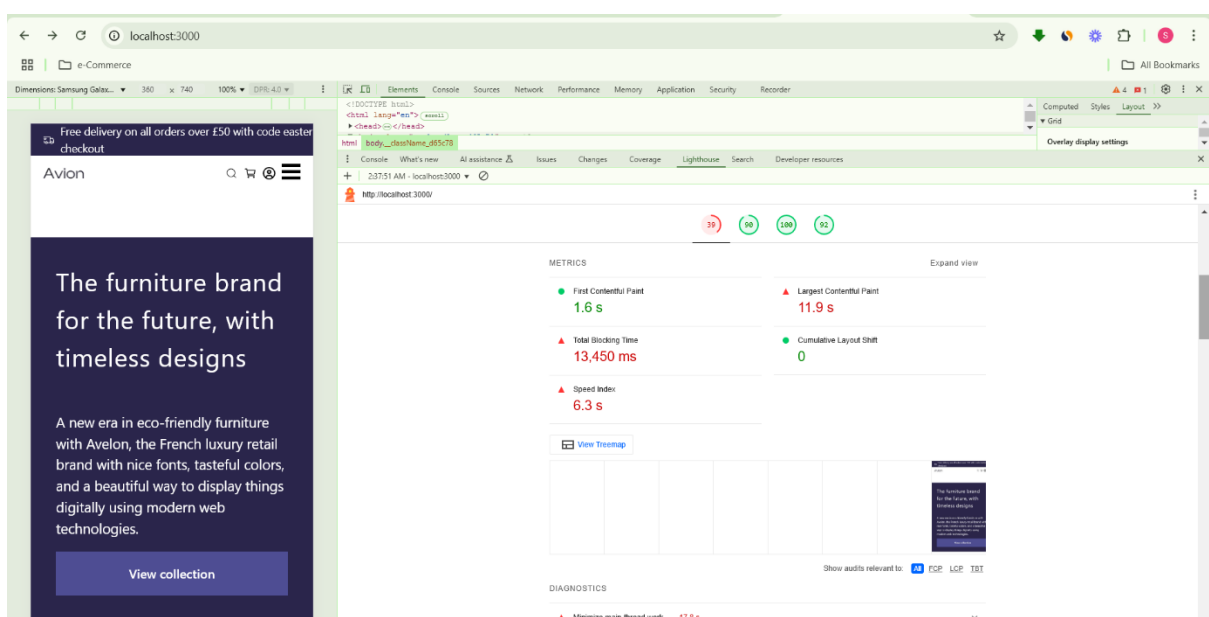
Step # 3: Performance Optimization

- i. **Lighthouse:** We have tested and analyzed our website performance optimization in lighthouse to identify the speed and performance issues of our website. Below are the screenshot showing the same.

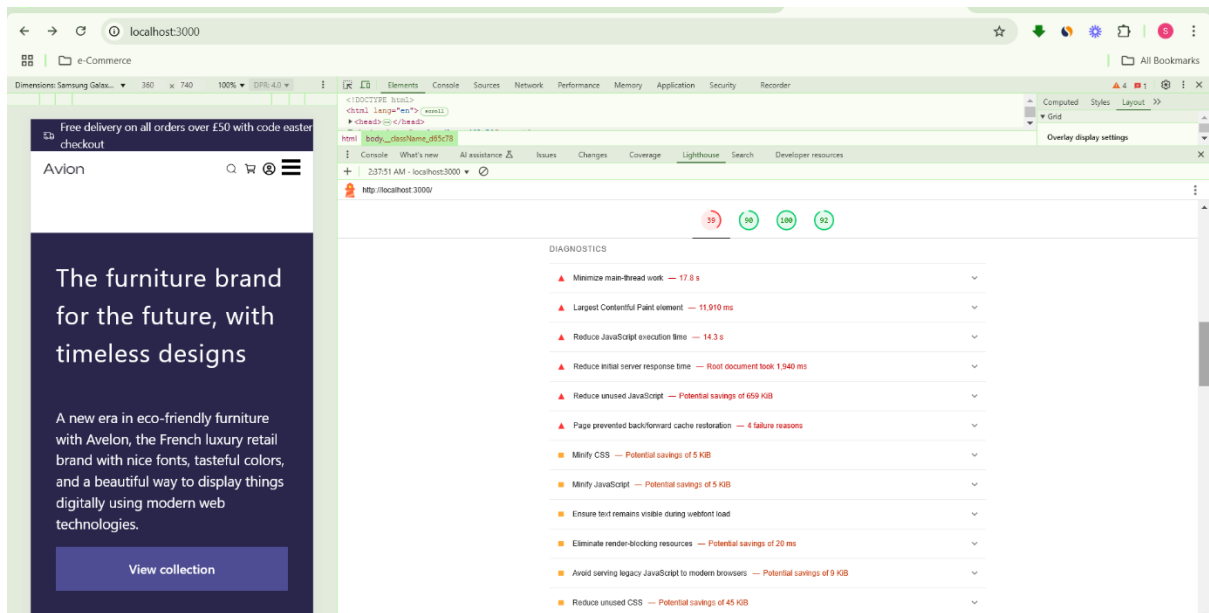
Screenshot # 1



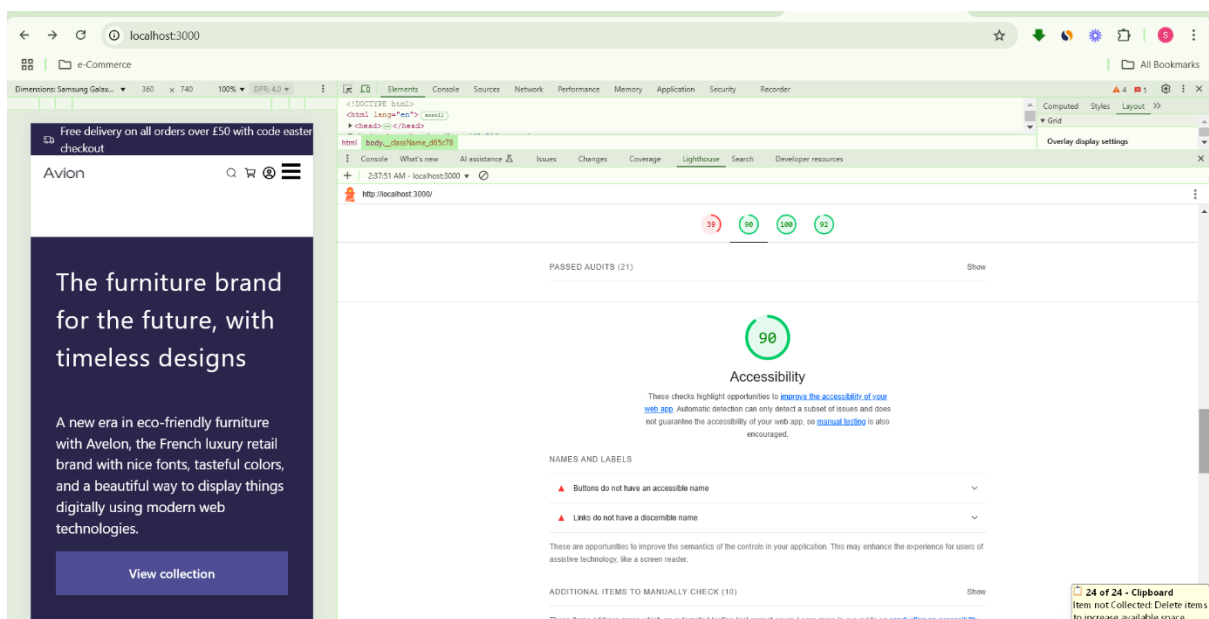
Screenshot # 2



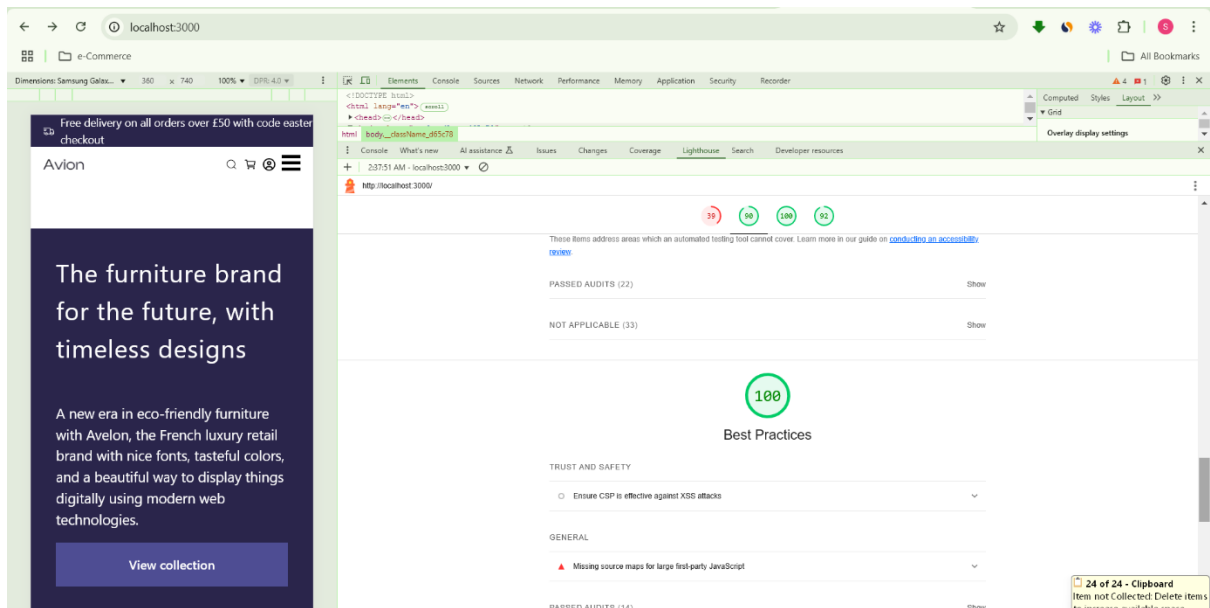
Screenshot # 3



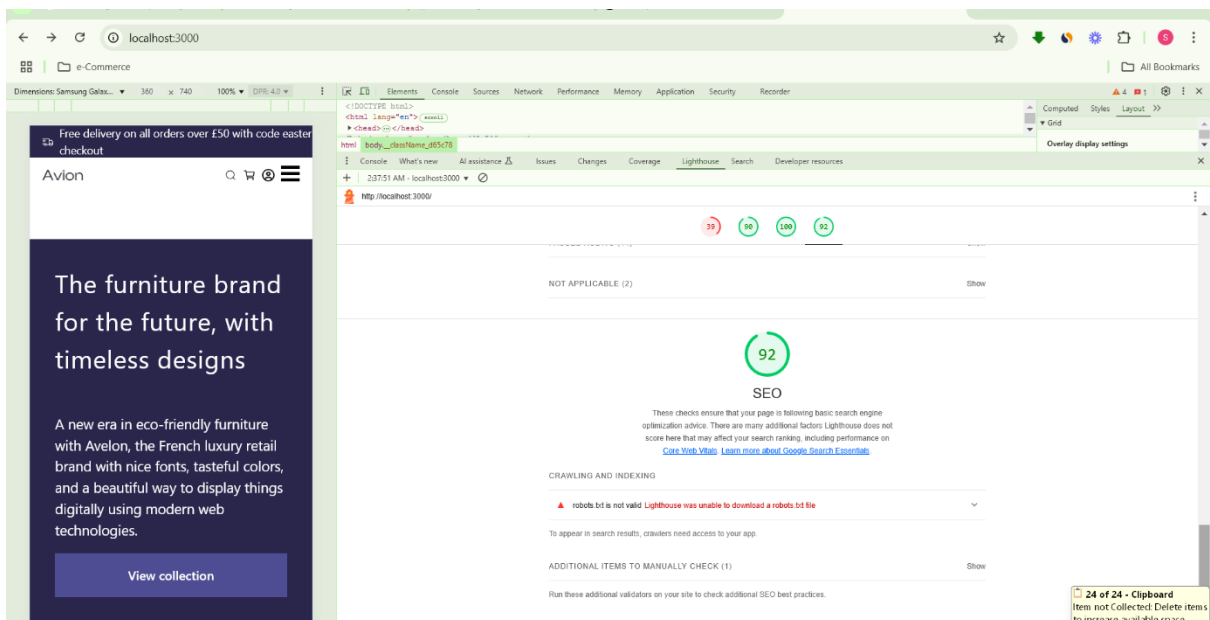
Screenshot # 4



Screenshot # 5

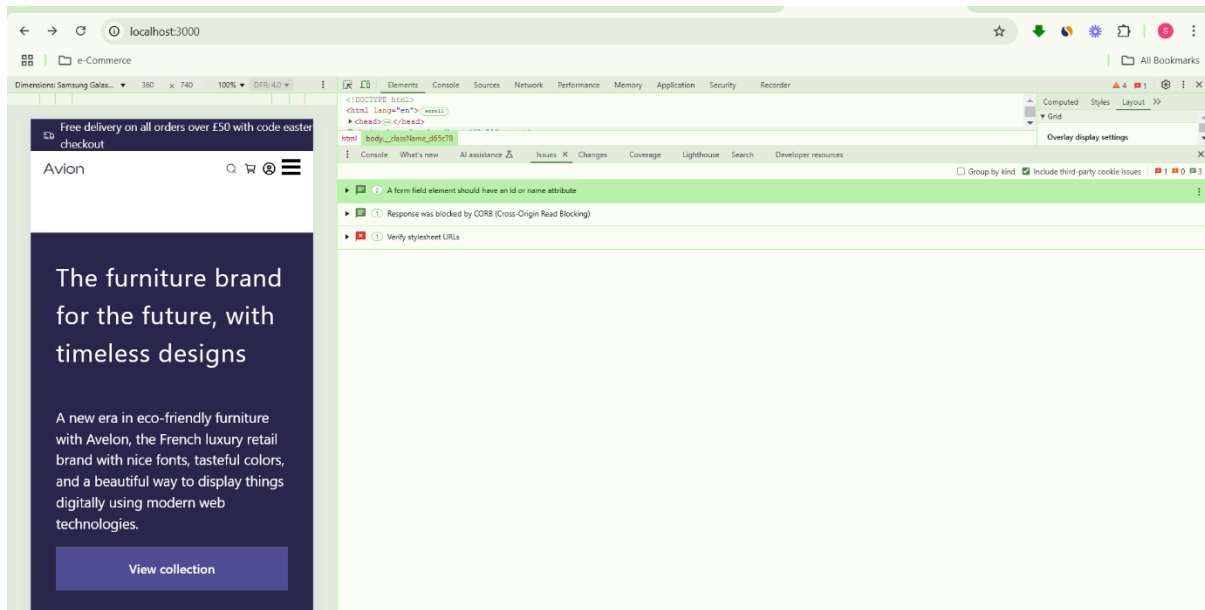


Screenshot # 6

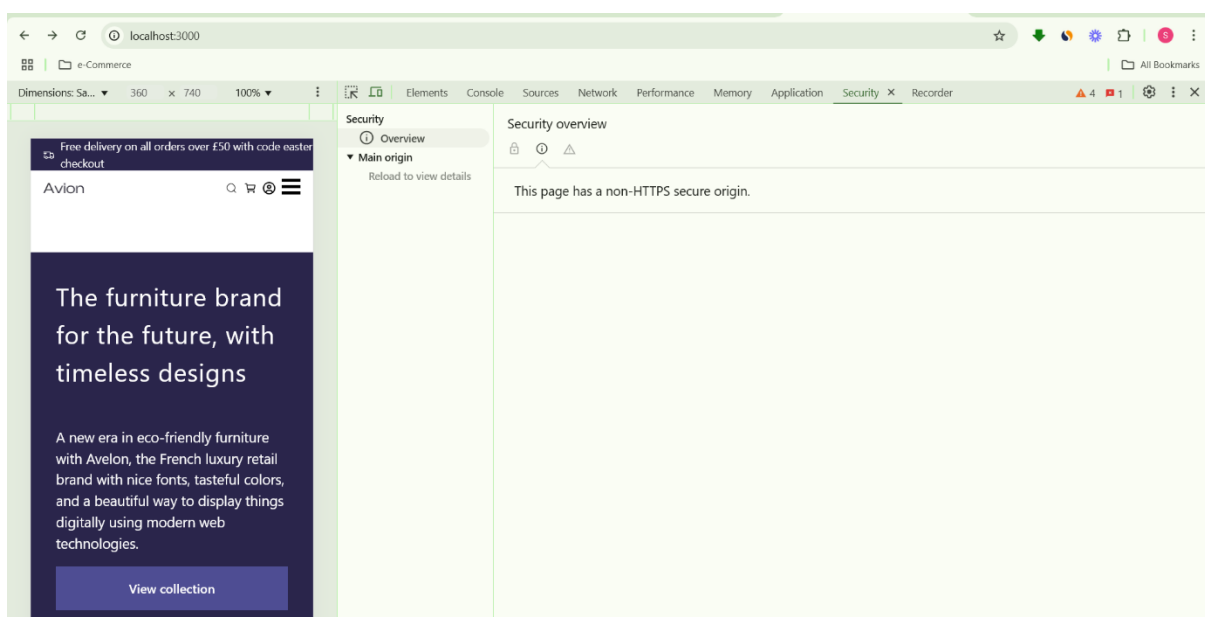


- ii. **Testing website performance on other tools:** We have tested and analyzed our website performance optimization on other tools as well. Below are the screenshots showing the same.

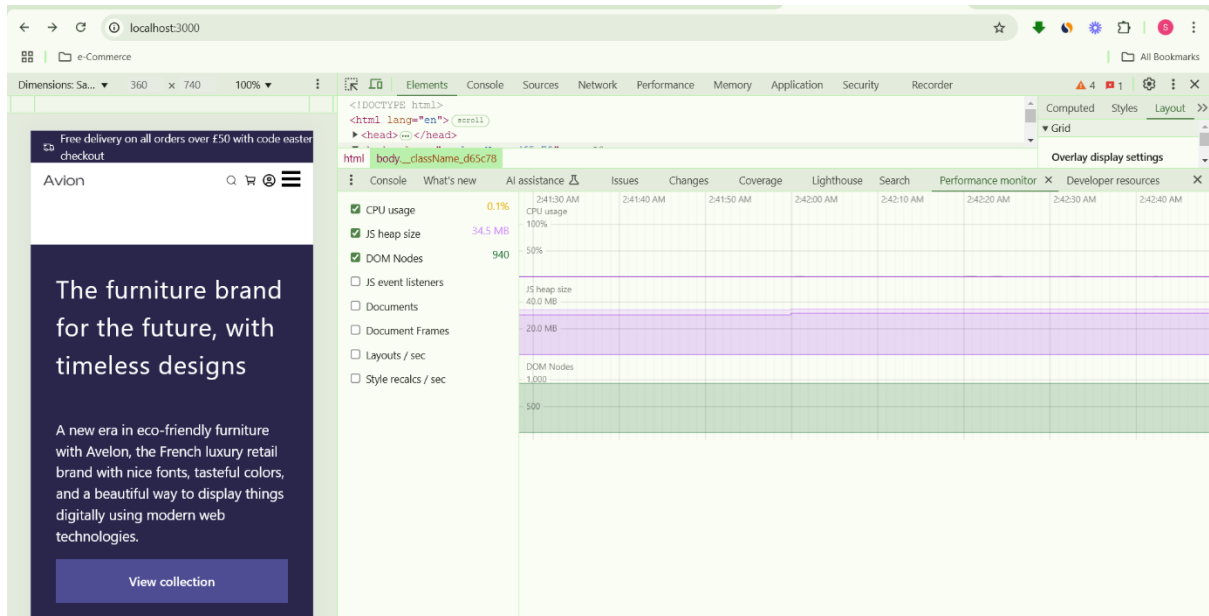
a. Check the website issue tool



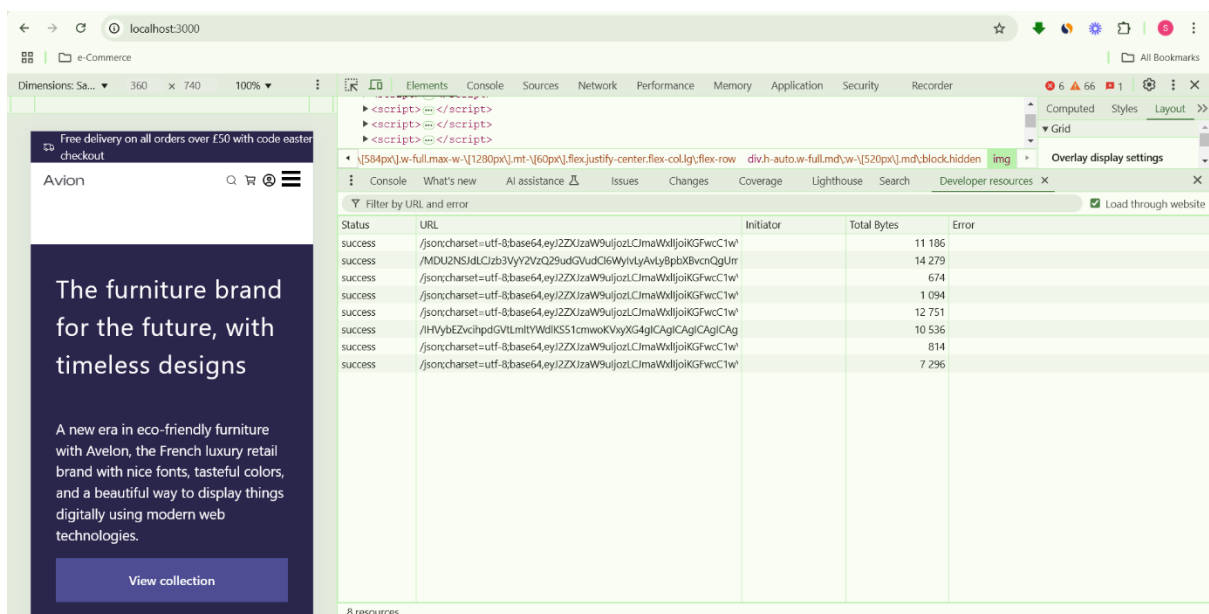
b. Check the website security



c. Check the website performance monitor tool



d. Check the website developer resources tool



Step # 4: Cross-Browser and Device Testing

Test Case: TC009

- **Task Name:** Test Website on Different Browsers (Chrome & Microsoft Edge)
- **Feedback & Result:** Verified that Website on Different Browsers (Chrome & Microsoft Edge) is working fine.
- **Status:** Passed
- **Security:** Low
- **Remarks:** Successful Test

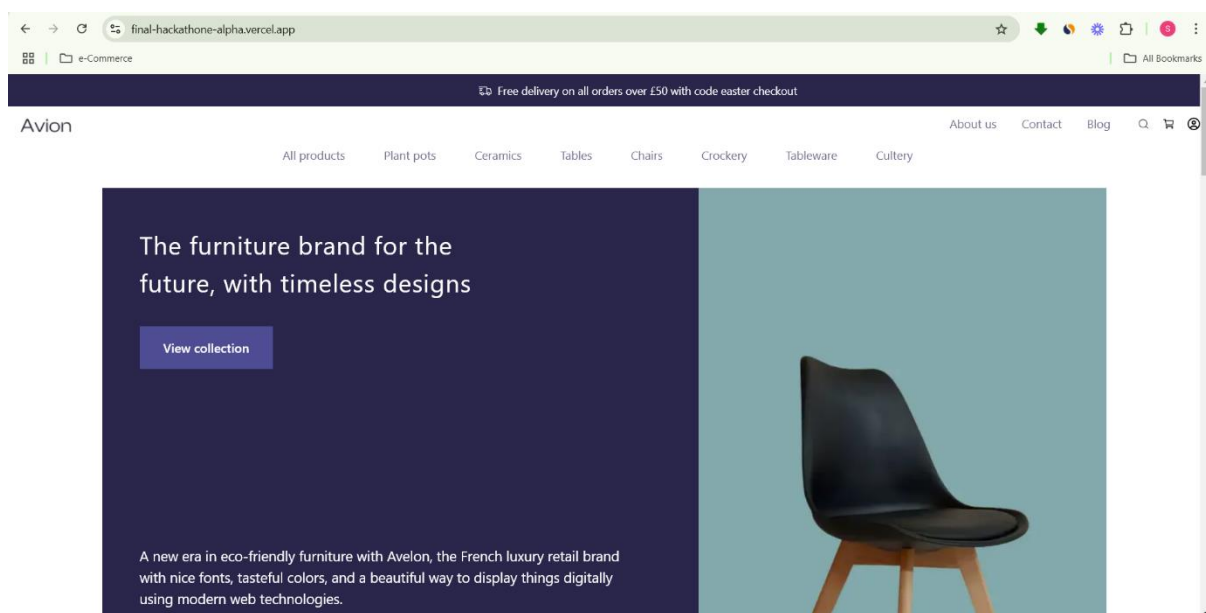
1. Browser Testing:

We have tested our website working on two different browsers

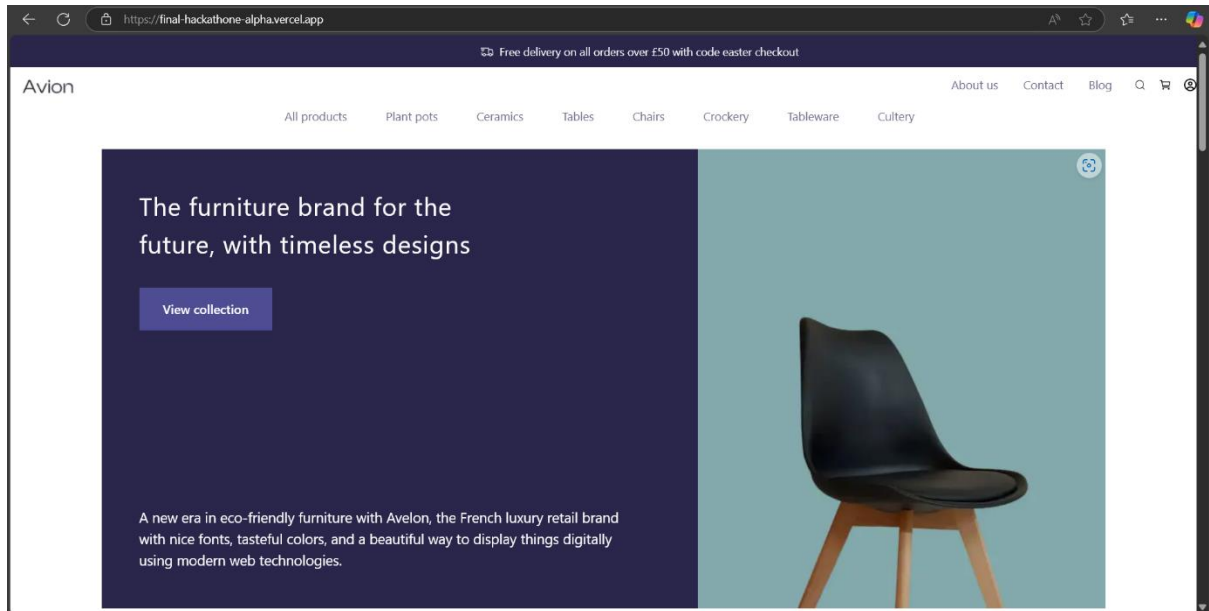
- i. Chrome
- ii. Microsoft Edge

Below are the screenshots of different browsers

Screenshot of Chrome Browser:



Screenshot of Microsoft Edge Browser:



Step # 5: Security Testing

Step # 6: User Acceptance Testing (UAT)

We have performed all the below listed tasks and observed that the all tasks are working fine without any issues.

- i. Browsing Main Page
- ii. Browsing products Listing Page
- iii. Filter & Search Products
- iv. Browsing Dynamic Routing Pages
- v. Check Out Operations
 - a. Add items to cart
 - b. Update items to cart
 - c. Delete items from cart
- vi. Checkout data calling to sanity
- vii. Mobile Responsiveness Testing
- viii. APIs Testing through Thunder Client
- ix. Website Browsing on Different Browsers

Step # 8: Testing Report (CSV Format):

Test Case ID	Test Case Description	Test Steps	Expected Result	Actual Result	Status	Severity Level	Assigned To	Remarks
TC001	Validate Home Page Login	Open Home Page >	Home Page displayed correctly	Home Page displayed correctly	Passed	Low	-	No issues found
TC002	Validate product listing page	Open product page > Verify products	Products displayed correctly	Products displayed correctly	Passed	Medium	-	No issues found
TC003	Filter & Search page	Open product page > Search and Filter Products	Searched Products displayed correctly	Searched Products displayed correctly	Passed	Low	-	Works as expected
TC004	Check cart functionality	Add product to cart > Verify cart contents	Cart updates with added product	Cart updates as expected	Passed	High	-	Works as expected
TC005	Dynamic Routing page	Open product page > Verify products	Products displayed correctly	Products displayed correctly	Passed	Low	-	No issues found
TC006	Comment Section	Comment Section	The Comment Section is working fine.	The Comment Section is working fine.	Passed	Medium	-	Successful Test
TC007	Test API error handling	Disconnect API > Refresh page	Show fallback UI with error message	Error message shown	Passed	Medium	-	Handled gracefully
TC008	Ensure responsiveness on mobile	Resize browser window > Check layout	Layout adjusts properly to screen size	Responsive layout working as intended	Passed	Medium	-	Successful Test
TC009	Test website on Different browsers	Test Website > Chrome & Microsoft Edge	Web Pages displayed Successfully	Web Pages displayed Successfully	Passed	Low	-	Successful Test

THE END