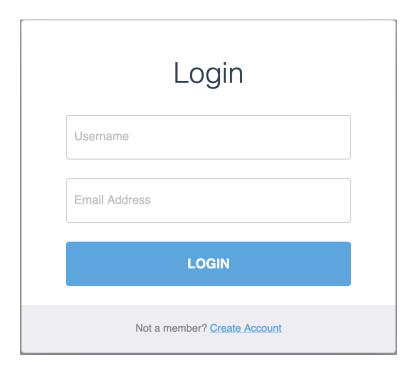
## Week 7 wa

Imagine your website has been designed and built and you are now in the deployment phase. In this assignment, continue to use your chosen e-commerce website and play the role of a customer. Walk the reader through an essay that is a minimum of **3 pages**, using APA citations where appropriate. Your essay must describe what you see when you log into your e-commerce website using as much detail as possible. Consider the following:

• What pages will you visit?

Our journey starts with index.html, a page which contains all links to other pages. As a customer I can go through all the pages clicking on the navigation bar and have a first impression. To make orders I have to create a new account page or if exists to use the existing.

This screen looks as bellow



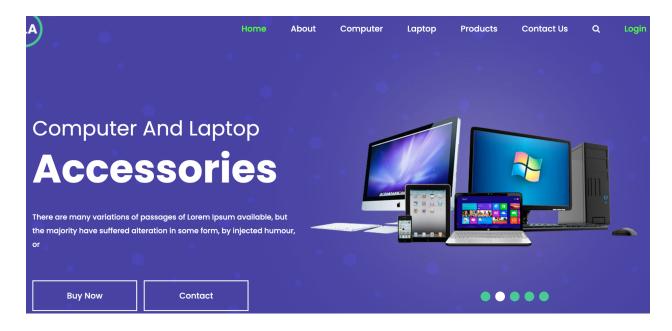
As a user I should insert my username, email address and login.

When an input entered into the text field, green V should appear. It means that input is ok, validated.



When the login process succeeded, a customer can enter the ecommerce web application.

Default page is a home page.



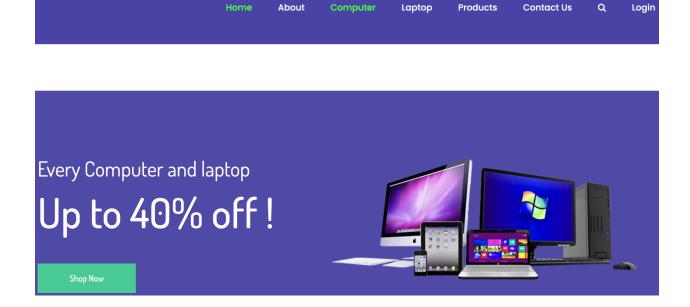
As a customer I can click on the Buy Now button and Contact, if something urgent or unclear happens. Clicking on the "Buy Now" button navigates me to the "Computer" or "Laptop" page. Each page contains relevant products either computers or laptops.

**Products** 

**Contact Us** 

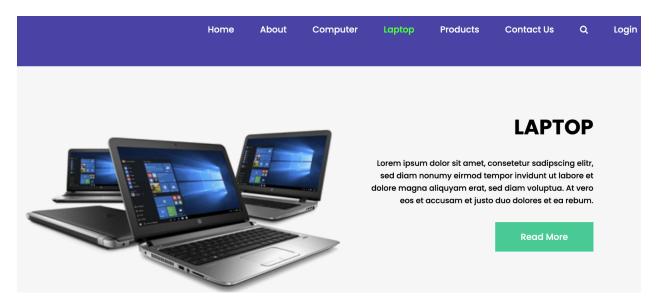
About

Computer page looks as follows



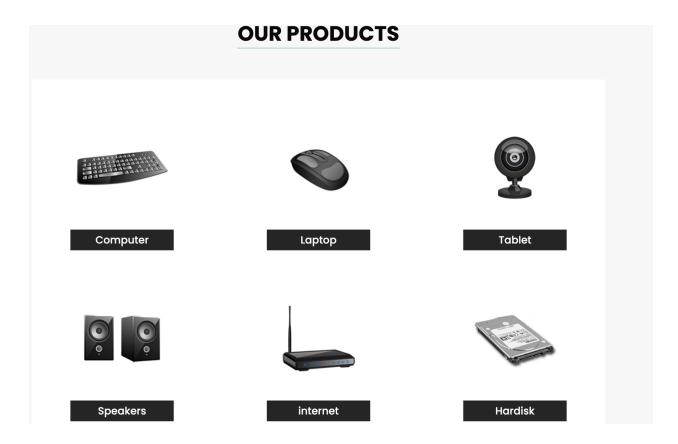
It contains current discounts of topiest models, sell hits. As a customer I can click Shop Now and make an order.

If a customer clicks on Laptop page, it navigates to it



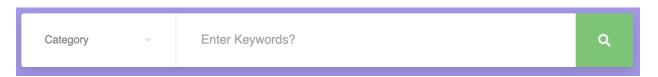
Laptop page allows drill down to be more specific and play with exact specification of the chosen laptop model, it may contain a screen size, resolution, operating system, a size of sdd, a size of ROM and even color of the case. When all ducks are in order, a customer can make an order, get a discount and pay.

A web application also allows you to buy accorities, parts for computers or laptops. It has a separate page.



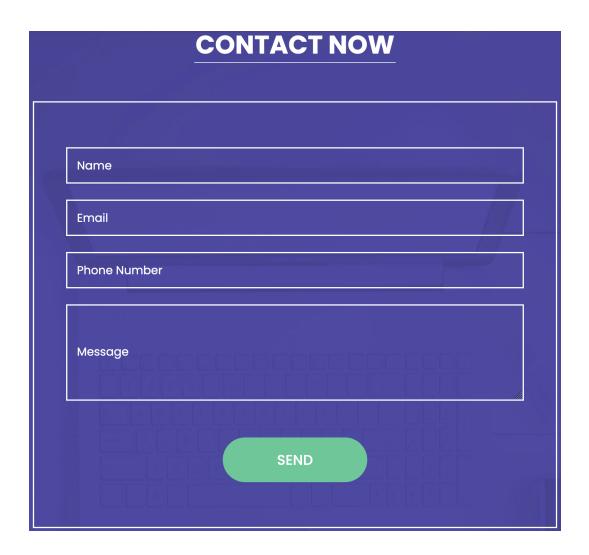
The process of purchasing looks the same, a customer choses a product and drills down to the exact model and color he wants to buy. Once he finds it, clicks on a product and makes the order.

A customer also can search desired products by using a search



He choses a category, like computer, products or laptops and inserts a search key. For example: Keyboard Microsoft. If such products exist, it shows its details, if not, a message/dialog shows "A product cannot be found".

If a customer has a question/suggestion or complaint it can fill an online form and send it. We take it very seriously.



• Explain the processes, from a software engineer's point of view, that occur in the software as you navigate to each page and perform actions as a customer buying something.

Index.html is a main page and is also a default page. It contains links to other pages: about, computer, laptop, search, products and contact us.

To start buying a customer has to enter the system. It has to enter username and password, then this information is encrypted and passed via REST API to authentication service which checks if user and passwords are correct and user is registered user. When 200 OK's are received, a user can continue to buy. He can choose three options: to buy a computer, laptop or accorities. When he clicks on the navigation bar, computer page, a web browser sends a request to the server, to get a list of computers, then, a javascript code on the html page renders such a list on the page and finally the user can see computer items to order. When a user finds a product he wants to buy, he clicks on the "add to basket" button. Such requests are sent to the server. The server

starts order logic, sending back and forth details like a product, price, color, address, payment methods and more. When everything is completed, a client sends confirmation, and this order is saved into the database.

• What is the plan for continual improvements as the site needs to scale in the future?

To be able to scale in the future we have to build our site as microservices. Each microservice should be responsible for one concern, it is called separation of concerns. Next, we have to choose a cloud provider, like amazon, google or microsoft. Using the cloud makes us define a granularity of scale, to define how to scale: up or down.

In addition, currently we do not have a replicated database. We also do not do backups. It is very bad, because if one day something goes broken or our system will be hacked, there is no way to recover.

Look and feel of our site also can be improved. Search page is very basic, difficult to work with. Images of the items are also too old. Need to be modernized.

• What issues or errors might occur as you navigate the site?

When a user tries from a computer page, or any other page which is not a home page, to navigate to the login page or search, it is not working. It remains on the same page.

When a user tries to search items, it sometimes cannot get a list of categories. If an item in the search field is written with mistakes, nothing is returned as a search result.

In the blog of seoquake, the authors mentioned a danger of using drop down menus, because users do not have time to navigate. Another interesting point they suggested is "Quantitative Attack: Too Many Menu Items/Suggestions/Other Links". It happens when too many items and its information are set on the same page. They also add problems with displaying and navigating on mobile devices

## References:

1. The main site navigation errors and how to avoid them - <a href="https://www.seoquake.com/blog/navigation-errors/">https://www.seoquake.com/blog/navigation-errors/</a>