Problems encountered while writing the automation script and solutions found

Issue	Solution
• Cypress automatically destroys cookies and sessions before executing each test to prevent state from building up	• A proper workaround for this issue could not be found hence it was decided to include all tests under a single testcase as a temporary solution to bypass the issue
• While trying to access some DOM elements through Cypress it ends up giving "element not visible" error even though it is actually visible and accessible. This error is due to the DOM element loading has not been completed by the time Cypress starts executing test cases.	• cy.wait() command was used to make sure the DOM elements get enough time to load completely.

Note – A screen recording of the Cypress testing process was recorded and could be found below
https://1drv.ms/v/s!AtBRxxolZwxTqw_kl9cvT--2_WqT?e=YQdvJn

Task 1
What you need to test

- Considering the relaunch date, a time period of around 8 months are available for the whole process of modification and testing to be carried out. This is an adequate amount of time left for this process to be undergone based on the best practices used in development and testing.

- Before making any critical changes, several backup copies have to be taken of the original code and of any other important resources that could be made use of in case of an emergency.

- While making changes to the website, developers usually carryout testing by themselves but it is critically important to audit these changes by the testing team as well.

- All the modification, development and testing could be carried out on a separate staging server rather than directly carrying them out on the deployment environment to avoid any complications that could arise.

- Below are the main aspects of testing that should be carried out to make sure a proper flow of any web application. Successfully completing below test criteria will not make a website 100% bug free but it will give you confidence and a guarantee up to a certain level that it is ready to be deployed.

1. Usability testing
2. Functional testing
3. Compatibility testing
4. Database testing
5. Security testing
6. Performance testing

Task 2
Aspects to consider

- Security aspect – Security is critically important specially for ecommerce sites which involves in payment handling where sensitive details exchanged have to be made secure. Also, since private details of customers are stored in databases their privacy and confidentiality have to be protected.
- User satisfaction aspect – No matter how good the technology is which is used to build the site but failure in impressing the end users who visit the site will make the effort worthless. User friendliness is important because majority of the clients are not tech savvy.
- Performance aspect – Performance of a website too plays a major role in building up the client base to a website. Performance should be up to a level that clients does not feel any discomfort while going through the site.

Task 3
Making the site ready for production

- Before relaunching the site all essential tests have to be thoroughly carried out while considering the above aspects as well. Also keeping an eye on any last-minute bugs would be required as well.
- Make a checklist of all functionalities, procedures or any other tasks to be checked before deployment takes place.
- Execute this check list on the staging server for one last time to make sure that the product is ready for deployment.