

# Report for Final Project (London Business Times)

## Introduction

The website I have built is for a regional financial news magazine named the London Business Times. The financial magazine has a focus on the UK economy and financial market and a minor focus on European markets. The London Business Times is a subscription-based website where only subscribers can have full access to all articles. Non-subscribers can only see some of the titles, images and some summaries of articles. Apart from digital copy, the London Business Times also offers hard copy, which is a subscription option.

The structure of the website is based on a tree structure, where the index.html is the root of the directory. However, even though index.html is the main root, all pages are able to access any other page conveniently since the menu is available on all pages. This design is similar to many modern websites today.

## State 3 things that have inspired you when creating your website.

1. I have an economics and finance background in terms of my education and work experience. Due to this, I tend to read a lot of financial news on a daily basis. Furthermore, writing about financial stories has always been my interest. While this project is not about financial writing, it gives me the opportunity to build a platform where news and stories are published. Hence, it is only natural for me to choose to build London Business Times, a regional financial magazine website.
2. I have visited many local financial news/magazine websites. The impression I get from these local magazine websites is that they are mostly very static and lack visual effects and interactivity. Many of their designs are not that different from that of the website of Berkshire Hathaway (<https://www.berkshirehathaway.com/>). These websites do not include those by major financial news organisations like Bloomberg, but are more like local or neighbourhood type magazines with a focus on local businesses and personal finance. This project thus gives me the opportunity to re-imagine these websites and how I would personally design and build one on my own.
3. Besides visiting the more static type of financial magazine websites, I have also seen some of the best website designs with interesting interactivity. These include the Economist and the Financial Times. These websites have inspired me to create the type of interaction that gives readers an interesting user experience.

## State 3 ways in which your site is accessible

1. My website, the London Business Times, does not display many different colours. There are only two main colours being used as the theme, namely blue and red. This is helpful for readers who are colour blind or visually impaired and would face significant difficulties if the user experience requires accurate recognition of different colours. My website is mostly white plus very few simple colours and does not rely on one's ability to see different colours.

2. The website uses big images to communicate the overall meaning of a story. This is helpful for people with dyslexia as they are able to know what an article is about by having a good view of a relevant picture beforehand. The "this week's quicktake" section on the index.html page is basically a video of summary about what has recently happened in the local financial sector. This allows a dyslexic person to watch the video containing the news summary and be aware of the news without having to read every single article. Please note that, the "This week's quicktake" sector currently contains a placeholder video as it is not practical to have a special video produced for this project. If this website is operated in practice, this section would contain the necessary quicktake video.
3. The carousel images with summary texts on the index.html page show the latest news in a short and summarised form. The use of carousel is helpful for busy professionals who only have time to scheme through recent financial news in a local area. By just reading short summaries on the carousel, a reader knows the most important news to start their day.

## **State 3 ways in which you have considered usability in your site.**

1. The website is responsive and suits not just browsers with big windows, but also smaller mobile screens. This is achieved by using media queries in the relevant CSS files. The display of items change as the width of the screen shrinks, so that readers can still read the important items of the website.
2. The login.html page uses javascript to keep what is shown to the user to a minimum. In fact, the login.html page contains two forms, one is a login form, and the other is a create account form. The latter is hidden by javascript for users who only want to log in. Users who are unable to log in because they do not yet have a account can just press on the "create account now" text to hide the login form and reveal the create account form. This keeps the visuals to a minimum, making the website much more user friendly as what is not needed is hidden away. In another example, the Image Carousel contains five images and five news summaries. Hence, there is, in fact, more content on the index.html than it appears, due to techniques used to "hide away" images and texts when they are not being actively read. The two forms on the login.html page also use javascript to inform users of any typing errors in the typing fields on the forms. Upon clicking submit, the javascript code uses for-loops to check every field on the form that is in use. If any field is found to be empty, the appropriate error message would appear. Otherwise, it would just output the standard error message. This is applicable on both the login and create account forms. By providing these error messages, users would know what went wrong in their submission.
3. On the stories.html page, there is a search bar that allows users to search for the title or content of the long list of articles that are available on that page. This allows users to be able to filter all relevant articles by just searching for a keyword. The search results are then dynamically displaced on the search, while those articles that are not relevant will then be automatically hidden away (This is an interactive component implemented using javascript that works. Please give the search bar a try). This saves readers time, thereby enhancing user experience.

## **State 3 things you had to learn/find out by yourself when creating your site, and describe how you did that (i.e. what searches you did, any new tools/techniques you learned, any**

## **changes/adaptations you made to a particular resource to make it work with your site).**

1. A lot of what I had designed for my website involve good understanding of the display:flex property. To become more familiar with using it, I practised using flexbox on <https://flexboxfroggy.com/> , which provides a handful of quality exercises to help students position items properly. I completed all exercises and used the techniques I had learned to position many of the items on my website. It proved successful and the website now looks as I intended it to do.
2. Making an image carousel (like the one I have coded for index.html) for a webpage is a challenging task. I was not sure how this can be done, hence I had to search for a tutorial on youtube.com. I learned to code a carousel from this youtube tutorial (<https://www.youtube.com/watch?v=KcdBOoK3Pfw&t=6s>). This had helped me to understand the usage of javascript in web development coupled with techniques used to manipulate the DOM elements. Importantly, I learned to use transform translateX in CSS to move items across. While I took the carousel code from this tutorial, I also enhanced and adapted the code so that it not only moves images across the screen, but also a series of articles and titles along with the relevant images. It now looks the way I intended it to do.
3. Most of the interactive components on my website require good understanding of using javascript to manipulate the DOM elements. By writing the javascript code, I became more familiar with using querySelector and how to change the CSS elements by using the .style.property suffix. I also incorporated the coding technique I had learned from my Introduction to Programming modules, such as for-loops, empty strings, how to use boolean properties to get the desired outcome, to implement the interactive components of the website.

## **What aspect(s) of your work do you think worked well and why?**

I discovered I could use javascript to perform very useful functionality. When building the stories.html page, I wanted to create functionality that only allows readers who are logged in to their accounts (and have subscribed to the magazine or website) to view all titles of the articles. Viewers who are not subscribers are only allowed to view about half of the available titles and images of the articles. If the non-subscriber user proceeds to scroll down further than they are allowed to, the webpage would trigger a prompt to show a message to remind the reader that they would need to log in to read further and then provide a button to link the reader to the login page. When the prompt message appears, the user would not be allowed to scroll at all. To remove this prompt page and be able to scroll on the page again, the user would need to click on the cross button to close the prompt message. However, once the message is closed, the user would be taken up to the top of the page again, thereby preventing them from reading the lower half of the stories.html page.

I implemented the code for this functionality in scroll.js. To summarise, I used the .getBoundingClientRect().top and window.innerHeight properties to measure exactly where the reader is scrolling. I also used the documentElement.scrollTop property to fetch the reader back to the top of the page.

The functionality was implemented successfully and the visual effects were smooth and it is in my opinion that this had gone very well.

The other aspects that had worked well were the codes in login.js, menu.js, searchFilter.js and carousel.js. Implementing searchFilter.js in particular requires good understanding of coding techniques such as for-loops and the manipulation of arrays. The searchFilter function is implemented on the stories.html page to allow readers to filter all relevant articles based on the keyword being searched. All the interactive components had worked as I envisioned.

## **What aspect(s) of your work could be improved, and how might you do things differently another time?**

The one aspect of the project that could be improved was better time management. There were certain areas, such as the footer CSS elements and the look and feel of the subscription.html page, where I spent more time than I was supposed to. This had forced me to cut back one interactive component on my webpage. I initially had planned to incorporate a "weekly quiz" component on the index.html page where readers can answer multiple choice questions about the current week's financial news. This is a fun and interactive component which I thought could have improved user experience even further. However, due to a lack of time, this is now not possible.

In the future, I plan to make use of a Gantt chart to properly plan for every task in a project. This would ensure that I would only spend the right amount of time on each task to ensure that my plan can be carried out more effectively.

## **What resources were used when creating your work?**

1. Image Carousel (carousel.js) on index.html: Dev Ed, How To Create An Image Slider In HTML, CSS & Javascript, 2018 [Online]. Available: <https://www.youtube.com/watch?v=KcdBOoK3Pfw&t=10s> [Accessed on 10 September 2021]
2. All images except for the social media icons are taken from <https://www.pexels.com/>, which provides free stock photos and videos. Pexels has given permission for its content to be used: <https://help.pexels.com/hc/en-us/articles/360042295174-What-is-the-license-of-the-photos-and-videos-on-Pexels->
3. The video in the "This week's quicktake" section on the index.html page is provided by <https://www.pexels.com/>. Pexels has give permission for its content to be used: <https://help.pexels.com/hc/en-us/articles/360042295174-What-is-the-license-of-the-photos-and-videos-on-Pexels->
4. The four social media icons in the footer are taken from <https://www.iconfinder.com/iconsets/social-media-rounded-corners> which provides these icons for free. These are the free version.
5. Texts are used from cityam.com and they can be found in the following articles:  
<https://www.cityam.com/rolls-royce-and-babcock-sell-stakes-in-raf-refuelling-business/>  
<https://www.cityam.com/flight-to-cities-to-boost-london-businesses-profitability/>  
<https://www.cityam.com/cbi-warns-of-rising-taxes-and-stagnant-business-investment-under-boris-johnson/>  
<https://www.cityam.com/itm-power-results-fy-2021/>  
<https://www.cityam.com/rishi-sunak-hopes-insurers-could-help-fund-social-care-costs/>

<https://www.cityam.com/streamline-travel-rules-heathrow-urges-as-passenger-slump-goes-on/>

<https://www.cityam.com/ukraine-set-to-become-next-country-to-make-bitcoin-legal-tender/>

<https://www.cityam.com/startup-funding-in-europe-on-track-for-record-year/>

<https://www.cityam.com/uk-economy-grew-by-2-3-per-cent-in-april-as-high-street-and-hospitality-reopened/>

<https://www.cityam.com/exclusive-uk-fintech-firms-raise-5-7bn-in-record-breaking-year/>

**Clarification on the article on the freedition.html page. This article is written by myself, therefore no reference is required for this.**

6. The website logo is designed by myself but is inspired by the logo of the London Underground:

<https://tfl.gov.uk/modes/tube/>