DC1IAP\_Wright\_Harison\_Report\_1

Word count: 1869

Harison Wright

2022

Introduction

### HLSP Description:

The requirements of the HLSP are as follows:

* For users to input their daily routines into the app. For example, details about their eating habits, exercise, work, alcohol consumption and sleep patterns. Also, the user can opt into collection of some of this data such as step count, sleep data and resting heart rate from a third-party solution such as Apple Health or Fitbit.
* Based on a user’s profile / data the HLSP will suggest relevant resources to attempt to positively impact someone’s health. For example, if the user is overweight it might suggest articles about healthy eating or exercise.
* The HLSP will have set parameters for each of the metrics it collects. These will be based off parameters set based off reliable sources. For example, for alcohol consumption the NHS recommends that adults should not drink more than 14 units per week so if a user inputs that they drink more than that the then HLSP will start to recommend relevant resources around alcohol consumption.
* The HLSP will also run ads for local events or establishments that are related around fitness. This is how HLSP will monetise this web app. For example, it could suggest a free day pass to a local gym or a free yoga session to the user based on the target demographic of the ad. The app will then make money from the referral if the user decides to sign up to the local establishment through the ad creating a win, win, win for the user, Healthy life, and the local establishment.
* As the user builds their profile or it changes over time the HLSP should suggest articles more relevant to their lifestyle choices.
* The articles suggested must be from a reliable source
* The HLSP must not provide any medical advice on how to treat medical conditions of any kind, which includes mental health.
* The HLSP will also have the capability should a user login to send a weekly newsletter containing articles relevant to the user and a local establishments promotion.
* The HLSP will also implement 2FA to as the data on held on the site is very personal so this should help make sure that only they can login to it.
* The HLSP will also support 3rd party login support to allow users to sign up and login easily which will hopefully entice more users to sign up. For example: Login with google

### User Scenarios

Tom is a 20-year-old male who likes to play football and go to the gym. He is a university student. He is also light for his height and age. He is also a heavy drinker. He uses an apple watch and want the HLSP to suggest articles to him about how he can improve his fitness to perform better in his football games. The HLSP should try to suggest relevant articles about how reducing his drinking habits and healthy eating would help him to achieve his goals. It could also consider his metrics and data from his apple watch if for example he wasn’t getting enough sleep or enough quality sleep perhaps due to his heavy drinking to suggest articles around sleep.

Dan is a 27-year-old male software engineer that works from home. He works Monday-Friday and plays sport on Tuesday nights. On weekends he is usually active. Based on the data collected from his Fitbit on working days of the week where he does not play sport his average step count is around 2700 steps, and he often does not leave the house. The HLSP should consider this data and then suggest relevant articles about the importance of trying to get out the house everyday as a young professional. It could also suggest articles about how to find time to be more active as a busy professional who works from home.

Margery is a 67-year-old female who has recently recovered from lung cancer. She is currently unable to walk much further than the end of her street. Before she had lung cancer, she liked to walk around the local reservoir a few times a week. She would like to work on her physical health so she can return to doing this again. The HLSP should try to suggest articles about improving stamina that are specifically aimed at the elderly with very limited mobility. It should under no circumstances provide any medical advice.

Software Product Implementation

## 1.1. Unit 1. HTML5

### Structure / Content of the HLSP:

Example

What is the recommended HTML page structure/content for the HLSP? (Content refers to media, images, links to the webpage, etc.). Note: Justify the chosen HSLP structure and explain the purpose and value of each content element, making clear connections with the HLSP. You may find it useful to include user scenarios2 and related approaches.

#### Navbar and Footer:

There are consistent on every page to keep with the sites theme. I also chose a dark theme as this is what I prefer, and it make the colour that is used on the page stand out more. It contains the sites logo as well as navigation for the user.

#### Index.html

Index.html is the landing page for the website. This is the first page someone will see and therefore it contains the company logo, a summary of what the website is for / about and a button so they can register as a new user for the site. The button is coloured bright blue which stands out from the rest of the sites dark theme to draw attention and entice the user to click.

#### Login.html

Login.html is the page a user sees after clicking either the login or register button. Margery is a 67-year-old and therefore, might not be the best with technology so as a result it is important, she can find everything easily. As a result, I have made it so that both the login and register forms are on the same page, so it is simple for the user to navigate. Hopefully, new users will find it easy to sign up and therefore more they are more lightly to return to the site. There is also an option to register for the newsletter which is selected by default to try and entice users to sign up to the newsletter. It also has a 2FA box so users can securely login to their accounts. It also contains the sign up and login with google buttons for the user’s convenience.

#### Home.html

This is the users home page that they visit once they have had a successful login. Here it recommends a top 3 pick of articles or ads for the user as well as 5 articles from 3 categories highlighted to be a benefit / interest to the user. I may also add a banner using JS to ask the user if they would like articles emailed to them via the newsletter if they are not already opted in.

#### Profile.html

Here is the page that a user can update /set their health info. They will be redirected to this page after a signup. They can also amend their login user info and subscribe / subscribe to the newsletter from this page. They can also setup / edit 2FA on this page using the modal after clicking the 2FA button.

#### Connections.html

Is a page where users can sync their Apple Health or Fitbit info to the site. This will then update parameters such as average step count, average sleep, and resting heart rate automatically for the user. This will be useful for user Tom and Dan as they both have fitness trackers that use either Apple Heath or Fitbit.

I have used this tool to ensure my html is correct: [The W3C Markup Validation Service](https://validator.w3.org/)

## 1.2Unit 2. CSS

Report element. Consider answering the following questions:

• What features of a well-designed web page have you applied to the HLSP?

Grid layout, On the home page I used a F based layout placing the most important / relevant content in this shape. I used visual hierarchies with colour and pop out boxes to draw attention to the content.

• In what parts of the HLSP have you applied CSS?

I have applied CSS using bootstrap to every page. I also applied CSS directly to ensure the footer remains at the bottom of the page even if the page is shorter than the vh.

• How did CSS support the HTML structure and the HSLP elements’ positions?

Helps set out the page so its clear for the user and aesthetic.

• Have you applied style rules to the HLSP?

Yes, using bootstrap, I have applied many rules such as columns extending / getting smaller depending on screen size, centring text / content, putting the login /register forms into their respective boxes etc.

• What tools have you used to verify that your CSS is correct?

This tool: [The W3C CSS Validation Service](https://jigsaw.w3.org/css-validator/)

• Which platform(s) does your web implementation support?

It should work on most platforms, but it specifically designed to work on both desktop and mobile. For example, as the screen size gets smaller the navbar also puts the navigation into a drop-down list to help usability for the mobile user while keeping a good experience for the desktop user.

• How do you provide support for different screen widths?

As I am using the font-end framework bootstrap I am easily able to code my website to be compatible with many different screen widths using a grid layout. The layout changes as the screen size gets bigger / smaller.

• What front-end framework(s) (e.g., bootstrap) are you using, if any?

I am using bootstrap 5.

Conclusion

On reflection my implementation so far is going quite well. My UI looks good thanks to the implementation / customisation done with bootstrap. However, I have struggled to add in a sign in with apple / sign up with apple button on the same page due to the way apple’s JS is written. Perhaps I can have a look at a method to write my own JS for this button / adapt the apple JS to render both buttons at the same time in my next submission however, if not perhaps I will just get rid of the apple button as I have the google button already. I also will have to use JavaScript / Node.JS to implement some of my ideas properly. For example, the create / edit 2FA modal will have to display to the user differently depending on weather 2FA has been setup or not. And also if I wish to have a banner that only appears if a user has not opted into the newsletter than the JS will need to determine if the user is signed up to the newsletter or not.

References

Display the sign in with google button;|; authentication ;|; google developers (no date) Google. Google. Available at: https://developers.google.com/identity/gsi/web/guides/display-button#html (Accessed: October 27, 2022).

Mark Otto, J.T. (no date) Bootstrap Documentation, · Bootstrap v5.2. Available at: https://getbootstrap.com/docs/5.2/getting-started/introduction/ (Accessed: October 27, 2022).

This page requires JavaScript. (No date) Apple Developer Documentation. Available at: https://developer.apple.com/documentation/sign\_in\_with\_apple/displaying\_sign\_in\_with\_apple\_buttons\_on\_the\_web (Accessed: October 27, 2022).

Appendices

Sites used for research / inspiration on how to layout my site:

[BBC - Home](https://www.bbc.co.uk/) – Layout of news articles

[Health: Trusted and Empathetic Health and Wellness Information](https://www.health.com/) – Layout of articles + newsletter

<https://twitter.com/> - sign in / sign up page

[https://www.facebook.com](https://www.facebook.com/) - sign in / sign up page