OCC Task 3B

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Contents

Assets and Content

I think, for the most part, the assets I have used in the application are suitable and contribute to the design well. I aimed to make the design of the application as simplistic as possible so that it is easily navigable and creates for a good user experience. A good example of how my assets reflect this design is the various number of icons I used as design features. I used universally known icons that are easy to understand e.g., a house as a home icon, a cog as a settings icon etc. I think these assets are very effective as I added on-click events to the icons so that they redirect the user to the designated page or section of the application. Furthermore, these assets are also very effective with the design of the application as each asset directly contrasts with the black and white color scheme – allowing for them to be easily distinguished by the user to see. Examples of this is where some of the icons are placed on my application – I placed a white settings icon on a black background.

Important assets which I have used, such as the logo for the application, I think are also suitable and reflect the application and its premise. The logo I created for the application is a sun and it has a mixture of the application's color scheme – black and white. I think the design of this asset is suitable because the colors black and white have a clear contrast meaning it can easily be seen by the user. It also considers the device themes of the user as the logo can be distinguished regardless of whether the user is using light or dark mode. In terms of effectiveness, I think the logo and its design is effective to an extent as the user can get an instant impression that the application is a weather app – based off the fact that the logo is a sun. However, the design of the logo is not entirely effective as the application is related to health and the weather; I think that the design does not reflect the health aspect of the application. As well as the logo, I also used assets such as images which I also think are suitable and effective within the application, although they are used decoratively. This is because I selected images that correspond with an environmental condition or the weather. A good example of where an image was used effectively within my application is where I used an image of a power plant giving off emissions to correspond with an air quality widget.

In terms of the content, I used within the application, I think that it is mostly suitable and effective despite it being limited. Most of the text that I included in the application was general and implemented with the aim of giving advice to and directing the user. A good example of where said content is used within my application is where I put the text 'enter your location' above a text box used as an input field to prompt the user. I think that the quantity of content I used was effective as I think it reflects the simplistic design of my application. Furthermore, I think that the way I have formatted my content is effective as there is a clear visual hierarchy in the design of my pages e.g., headings are significantly bigger than subtext. However, I don't think the content I included within the application is entirely suitable and effective as some of the content reflects features that are not included within the application. An example of this is where I included a weather warning widget on my home page despite my app not displaying or reflecting content related to weather warnings. This was a feature that I intended to add to the

application but could not find a way of implementing it within the timeframe, so I simply should have had the content removed.

I also included information pulled from various APIs which I think needed expanding to reflect the app and its premise. Although, I included information such as weather type, temperature, air quality index and carbon monoxide content, I think that the amount of information that the app provides is too limited. This is because similar applications provide a more plentiful amount of information related to the weather and environmental conditions. Moreover, I don't think the information is a good reflection of the premise of the application as there is no data provided related to health conditions e.g., pollen count for asthma and no weather forecasting with the means of informing health decisions.

SOURCES AND INFORMATION

Sources for assets

I considered legal implications when choosing the assets to use in my application as they are non-copyright. The design for the application logo was original and I took the images for the icons I used lawfully. I used icons from a website called Font Awesome, which provided a completely free plan, and I took screenshots of them to create them into images instead of scripts.

Sources for information and data

In terms of the information and data I gathered for the application, I considered the legal implications as I used free API keys. I used the free plan on the Open Weather website which provided me with the Current Weather, Geocoding and Air Pollution APIs. The information that I pulled from these APIs for use in my application is valid and reliable. This is because the data provided is real-time and the model that Open Weather uses provides mostly accurate results. This method of providing weather data also shows how I considered ethical implications. This is because the API only collects the user's location on a one-off basis, and it is not stored anywhere. This means that the application does not need to track the location of the user continuously, whilst the app is in use, which can be seen as unethical.

The Digital Solution

FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

I think that the digital solution I have developed does not meet all the functional and non-functional requirements for the solution. This is because the solution does not meet all the functional requirements required as although my application does provide weather forecasts,

air quality data, takes the location of the user, it does not meet the functional requirements related to health matters and providing a personalized user experience as a means of giving health advice. As well as this, although my application does feature the accessibility option of changing text size, it does not work effectively as it changes the size of the common controls (text boxes and buttons) included in the app, in addition to the size of the text.

On the other hand, I think the solution does meet most of the non-functional requirements required as my application does run smoothly, it is secure as it encrypts the user's account details by hashing them and the application does follow the relevant GDPR, and copyright laws associated with it.

KEY PERFORMANCE INDICATORS

I do not know if my digital solution meets the key performance indicators I outlined because the KPIs I made were intended to measure the success of the application after it is released. For example, I used the number of concurrent users and user retention as KPIs. However, I make use of other KPIs such as bug rate, crashing frequency etc. to evaluate my prototype before it is deployed and how it could be developed further.

USER ACCEPTANCE CRITERIA

I think my digital solution does meet the user acceptance criteria I planned for it. This is because it is user-interactable and allows the user to input data.

HOW THE SOLUTION COULD BE DEVELOPED FURTHER

I think my solution could be developed further in many ways. One way I think that it could be developed further is by using weather forecasting in the application as a means of informing health decisions. This was a high priority functional requirement that I did not include in my application, and it is also a feature which Health Advice Group expected to be implemented within the application. To do this, I should have pulled additional data from the Open Weather APIs such as the pollen count, based on the user's location, and used selection to decide whether any warnings or advice needs to be given based on the conditions of the environment and the user. Another way I think that my solution could have been developed further is the functionality of the backend database. This is because my database does not work in a standalone application (e.g. .exe) which limits the accessibility of my application, as well as its functionality. To do this, I could provide a SQL script for generating a SQL server and give it instructions for generating the database from the script, as I made my database in SQL. My solution does not function as intended without the database as the user cannot log in/sign up to the app, so creating a SQL script would fix this issue. A final way that I think that my solution could have been developed further is by adding functional accessibility features. This was a high priority requirement that Health Advice Group would have expected to have been implemented within the application, due to the project's scope. An example of an accessibility feature I could

have added to the application is a colorblind mode to make the application accessible to people who are colorblind.