Part 1: Planning and Design

Accessibility: the web accessibility design can be divided into three parts, including: visual, physical and cognitive.

- Visual: First, for people with color blindness, the website will use the color which is friendly to them. The body color and background color of the website will be black and gray. With small areas of orange to contrast with black and gray.

  "There should be enough contrasts in brightness and saturation between texts/objects and backgrounds." The figure below describes the colors which are color-friendly to color blindness. This illustrates that the website color matching needs to alternate between cold and warm colors and the website should also avoid combining colors with low saturation or low brightness. (Masataka Okabe, Kei Ito 2002.11.20).

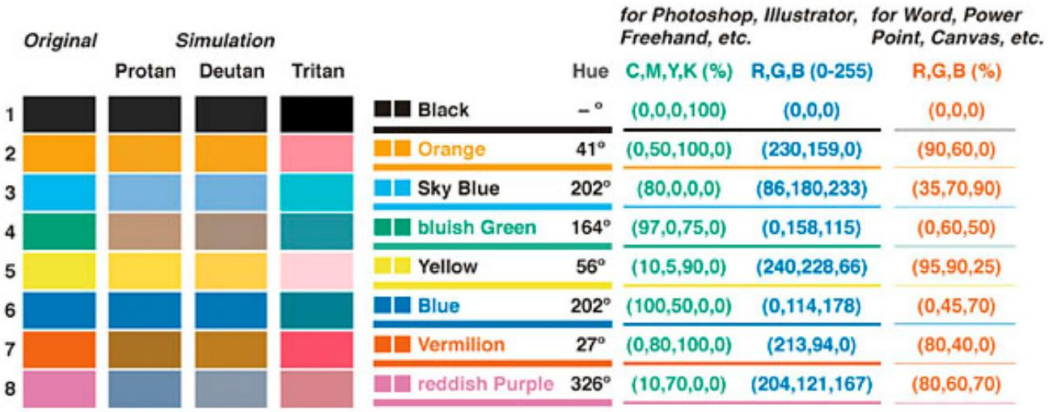


Figure1: Colorblind barrier-free color pallet by Masataka Okabe, Kei Ito, 2002.11.20.

Second, for senior citizens or people who are suffering from myopia, astigmatism, the website will be designed with large fonts and buttons, and all

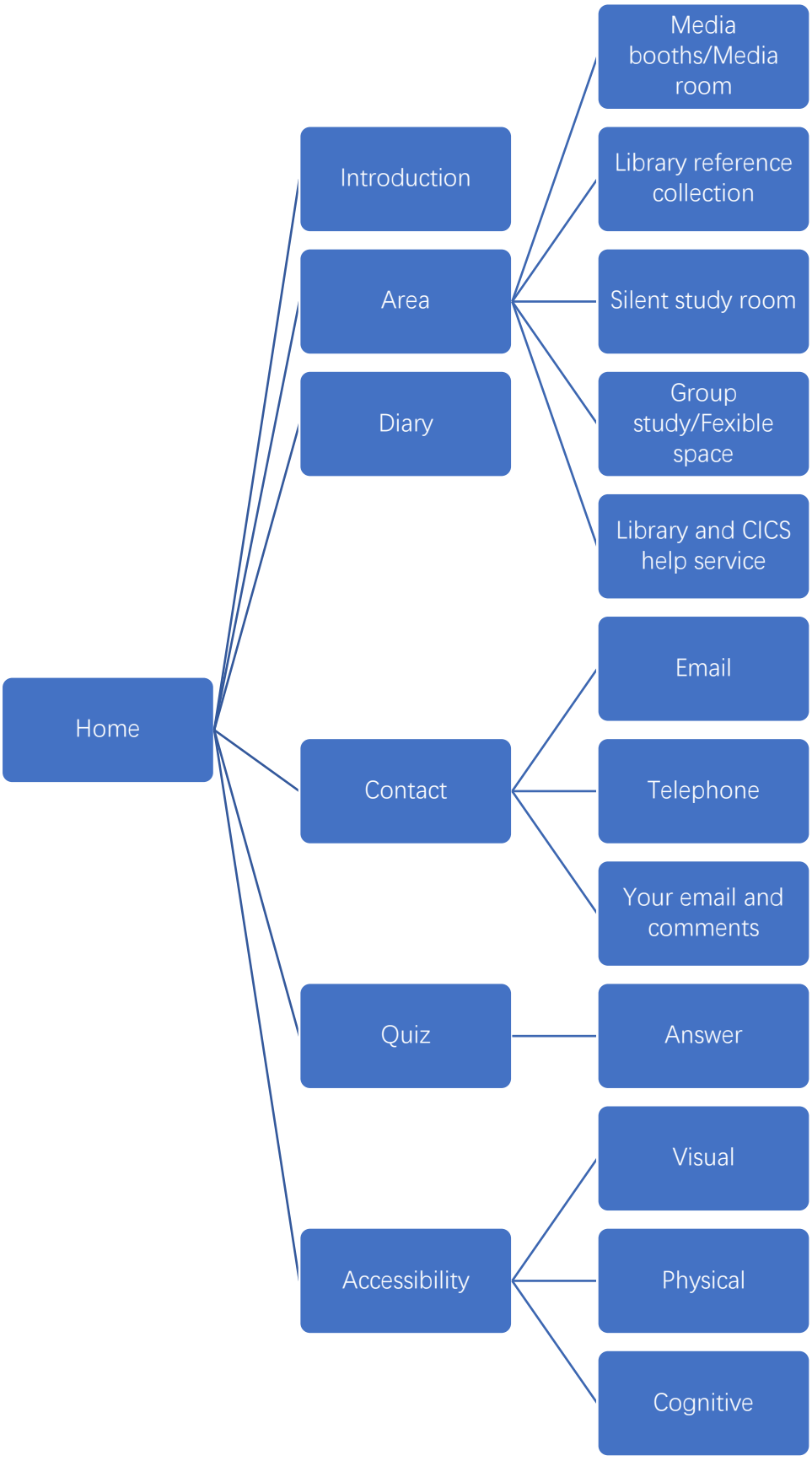
pictures will be annotated. Finally, for people who cannot watch a bright screen for long periods of time, the main color of the website will be dark.

- Physical：For some people with physical disabilities, they cannot use the mouse smoothly. Structurally, each module of the site has a direct distance to avoid people clicking incorrectly.

- Cognitive: For people who have trouble concentrating, memorizing, understanding, recognizing and speaking, the design of the website can be divided into two parts, Firstly, the website will have flexible and simple user screen: minimize the use of buttons, and reduce screen clutter. Secondly, in terms of the language and font, the website will use plain language, and the print and font will be large and simple. (Wehmeyer, M. 2010, p. 15-22).

Menu system: the website keeps the menu at the top, because it is intuitive and easier for users to find. In addition, there is a guidance menu which is located on the left of the website. When the user 'hovers' over the menu on the guidance, each module in the menu will be displayed. This will give users a better understanding of the structure of the site and save them time when browsing.

Site map:


Home
Introduction
Area
Diary
Contact
Quiz
Accessibility
Media booths/Media room
Library reference collection
Silent study room
Group study/Fexible space
Library and CICS help service
Email
Telephone
Your email and comments
Answer
Visual
Physical
Cognitive

Legal issues:

- Copyright: the pictures which called “The Diamond. jpg/ quiz. jpg” come from the University of Sheffield. Available from: https://www.sheffield.ac.uk/diamond/ https://www.sheffield.ac.uk/diamond/floor-plans

General ethos:

When the page is minimized, the fonts and images of the site can change depending on the size of the page. Guidance was designed on the right side of the site because the mobile pages would become smaller, making it difficult to view menus, and there will list all the sub-menu of each menu. This website is to "let all access to this web site users can feel comfortable" as the objective, so the theme of this website is simplicity, the reason why is that: firstly, for those people with cognitive impairment, simple font and concise layout can let them read more fluently, the function of complicated and optional to make them feel confused; Secondly, for color blindness, the website with different kinds of colors will be very difficult for them to read, sometimes they may not be able to see clearly. Because of this, this website only uses orange, black, gray, and white, which are friendly to color blindness.

Design mock-ups:

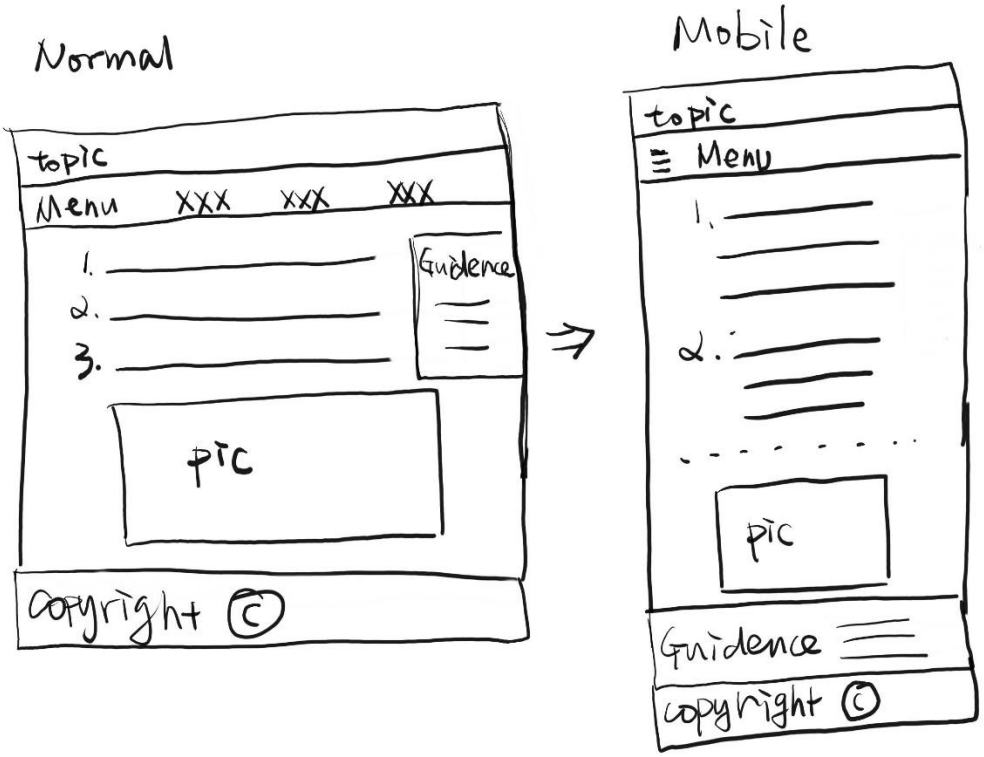


Figure2

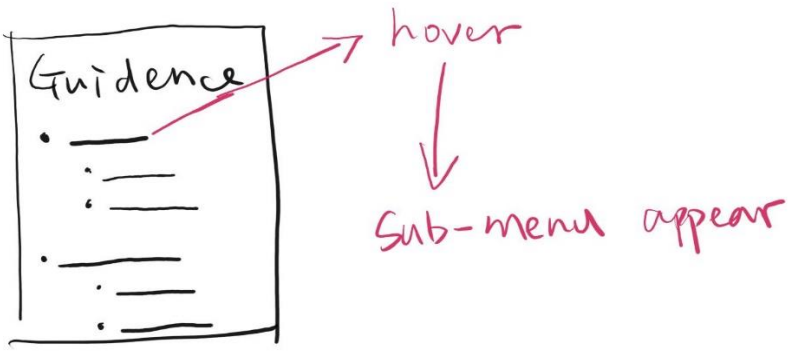


Figure3

Reference:

1. Masataka Okabe, Kei Ito, 2002.11.20. How to make figures and presentations that are friendly to color blind people. King's College London (UK) / National Institute of Genetics (Japan), University of Tokyo, Institute for Molecular and Cellular Biosciences (Japan), viewed 1 December 2019, <https://jfly.uni-koeln.de/html/color_blind/>.
2. Wehmeyer, M., 2010, Cognitive Accessibility, Coleman Institute for Cognitive Disabilities, viewed 1December, 2019.
3. An introduction to the Diamond's new study study spaces: silent and private study spaces, 5 December 2014, the University of Sheffield, view by December 3 2019,< https://www.sheffield.ac.uk/students/news/diamond-silent-study-spaces-1.424774>
4. Introduction to the Creative Media Room, the University of Sheffield, view by December 3, https://www.sheffield.ac.uk/polopoly_fs/1.91105!/file/CreativeMediaRoomUserGuide
5. Introducing study spaces in the Diamond: non-silent, group study and creative media spaces, 22 January 2015, the University of Sheffield, view by December 3 2019,< https://www.sheffield.ac.uk/students/news/diamond-study-spaces-2 - 1.434103>
6. Corporation Information and Computing Service, the University of Sheffield, view by December 3, < https://www.sheffield.ac.uk/cics/support>
7. Information and digital literacy workshops, the University of Sheffield, view by December 3,< https://www.sheffield.ac.uk/library/infoskillsworkshops/index>
8. Library service, the University of Sheffield, view by December 3,< https://www.sheffield.ac.uk/library/libsites/diamondservices>