

Design 1

- Dropdown with different possible relations for the picture and have the user choose the correct relation.
- when they press submit with a chosen relation writing will pop up to notify them of the correctness of their choice.
- They will then press a button which will show them the next family member's picture
- Alternatively, they can also skip the picture and proceed to the next family member.
- When all the pictures are shown a summary screen will be shown where they can see the results of their choices and view the choices that they got incorrect.
- If they press the try again button on the summary screen the application will reset itself

Design 2

- Maybe try something that is the opposite of design 1 where there will be a question presented to choose the picture that shows the relative title displayed.
- After picture is chosen you would press submit will be clicked and you will be notified if the picture that was chosen was correct in relation to the given prompt with a text display
- Alternatively, skip can be pressed, and you can move onto the next prompt with a new set of pictures to choose from.
- After all the prompts have been shown a summary screen will appear and you will be shown how many questions you correctly answer and reminded of the questions that were answered incorrectly.
- If try again is pressed on the summary screen the application will be reset.

Design 3

- Create a matching game where you have a word bank of relation titles and need to move those titles onto the corresponding pictures.
- When the user is satisfied with their matches they can press submit and see the matches that they had got correct and will remain underneath the pictures. The ones that were incorrect will return to the word bank
- If they have got all answers correct, they can press next to go to the next matching game
- The user may press skip at any time to proceed to another matching game where they will have a word bank of names and the process will be the same
- Once they select next or skip, they will be sent to a summary screen where they can view the results of their game and the matches that they were not able to complete
- They may press try again where the application will be reset.

Final Decision

The design that I will try to implement is design number 1. This is because of the UI design principles that I feel are most important to this project are learnability and accessibility and I think design 1 satisfies these better. I think that learnability is satisfied with this application because there is not much to the UI, just a picture, a question and a dropdown so I am able to add instructions to the page without it seeming cluttered which would be very helpful for an elderly person. The buttons and controls can be created to be intuitive and I can have descriptive titles for my buttons so that they know where to click. This will also be good for retention as someone can come back to this application after a while and still know what to do as the buttons will be clearly labelled. Also accessibility is satisfied with this design because of the simplistic design I am able to also increase the font size and picture size for someone who has poor vision as many elderly people do not like small text or photos as they find it hard to view. I can utilize a dropdown so that an elderly person who might have trouble using a keyboard with deteriorated motor skills will be able to answer the question without having to type. With this design I also cater to small screens because with the question being beside the picture it will be simple to move the question underneath the picture when the screen is resized to something smaller and not have to compromise any of the accessibility goals that I wanted to implement. This design will also solve the interactivity because to start the quiz will need one DOM manipulation to be able to view the question for the picture. I will need another DOM manipulation to view the result of your answer to the question. I will also need another to move onto the next picture in the list. The interface is also interactive since the user can select an answer to the question from a dropdown list and view the correctness of their answer.

Design 1 I feel is superior to design 2 because it meets the goal of accessibility and learnability better. This design does not meet the design goal of learnability better than the first design because with the answers being pictures it is not as intuitive as having a dropdown where I am able to explain the user where to click and if I were to put instructions on the page it will appear more cluttered than the first design. I also think that design 2 is worse for accessibility because the pictures will have to be smaller and the user may not be able to clearly view the person in the photo.

Design 1 I feel is better than design 3 because it also satisfies the goals of learnability and accessibility more accurately. This design does not meet learnability because the way to match the words to the picture is not intuitive because you can put the word above, on, below, or to the side of the picture and to provide instructions it will clutter the page as it will be full of 9 words and 9 pictures with no room for more text. However, we could create an intro page where it provides these instructions, but it is not guaranteed that an elderly person will remember and retain the instructions. This design is worse for accessibility because if the page has 9 words and 9 pictures visible it will be quite hard for someone to make out the people portrayed in the photos and also the text would have to be small to fit everything on the one page.

