**Relevant Implications – Recipe Cost Program**

**Health and Safety Implications**

I made sure that the program was not too hard for me so it would not overwhelm me or wear me out. I did this by making sure I wasn’t adding too many extra things to the program. I also made sure to take breaks between working to rest my eyes and hands from typing. Taking a break in between also helped me refresh my brain and taking time away from doing one thing, helped me figure out any problems I faced. If I didn't take breaks in between or take any of these things into consideration, I could have gotten tired, and it could have caused me health issues. I also made sure to sit on a table with a good chair so my back wouldn’t get tired. I made sure I was sitting in a room with good ventilation and lighting, so I was able to see the keyboard properly. The brightness of the computer is also adjustable, so I was able to make it brighter or less bright if I needed to.

**Accessibility**

I made sure to make my program easy and simple to understand. I made sure to put the list of ingredients on separate lines so that people with problems when it comes to reading things that are close together, would find the program easy to use. I also put spaces between each of the questions and different parts of the program for this same reason. The purpose of doing this was so that people with things like dyslexia could be able to still access the program and it would be easy for them to use.

**Functionality**

The purpose of this program was to create a program in order to determine the cost (per serving) of a recipe that a user would like to make. This program is designed for users who would like to determine the cost (per serving) of a recipe that they would like to make. This program was specifically being made for people who like to bake or professional bakers who can use the program in order to find out the cost and then sell their baked goods at a reasonable price. I needed to make sure this program was able to accept certain inputs and not break and the error messages I have added throughout the program, help to do this. If I had not done this, the program would not function well and users of the program would get very frustrated.

**Testing – Recipe Cost Program**

Testing for file

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| Opens data file | Opens and reads the file in |  |
| Information prints. |

Testing for welcome heading

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| Prints welcome | Print welcome and program does not break |  |
| Welcome header prints. |

Testing for name of the recipe

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| “”  OR  “pancakes” | Does not accept input from user and asks question again  Accepts input from user and continues to run |  |
| Does not accept input from user when nothing is input and asks question again then accepts when words are input. |

Testing for serving size

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| “”  “fsfs”  “5” | Does not accept input from user and asks question again  Does not accept input from user and asks question again  Accepts input from user and continues to run |  |
| Program breaks and does not work if input is nothing or if it is words. |
|  |
| Does not accept input from user when nothing input and asks question again then accepts when number is input and continues to run. |
| Error message to improve functionality. Taking a break in between fixing the program for health and safety. | | |

Testing if all ingredients print on separate lines

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| Prints ingredients on separate lines | All ingredients are printed on separate lines |  |
| All ingredients are printed on separate lines. |
| Ingredients printed on separate lines for accessibility. | | |

Testing for how many ingredients the user would need

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| “”  “ffdsf”  “5” | Does not accept input from user and asks question again  Does not accept input from user and asks question again  Accepts input from user and continues to run |  |
| Does not accept input from user when nothing is input or if words are input and asks question again then accepts and program continues to run when user inputs number. |
| Error message to improve functionality. Taking a break in between fixing the program for health and safety. | | |

Testing for searching for the ingredients and if the information prints

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| “”  “4”  “Standard Milk” | Does not accept input from user and asks question  Does not accept input from user and asks question again  Accepts input from user and continues again to run |  |
| Does not accept empty input, does not accept numbers, accepts and continues to run when an ingredient from the list is input. |

Testing for the input of the amount user needs

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| “”  “fdhkjsbf"  “2” | Does not accept input from user and asks question  Does not accept input from user and asks question again  Accepts input from user and continues again to run |  |
| Does not accept empty input, does not accept numbers, accepts and continues to run when an ingredient from the list is input. |
| Error message to improve functionality. Taking a break in between fixing the program for health and safety. | | |

Testing that asking for an ingredient loops depending on how many ingredients were needed

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| Loops asking for each ingredient depending on how many ingredients were needed | Loops asking for each ingredient depending on how many ingredients were needed |  |
| Loops asking for each ingredient depending on how many ingredients were needed and continues to run. |

Testing if the list of ingredients user requires prints

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| Users list of ingredients inputted in the loops, prints. | Users list of ingredients inputted in the loops, prints. |  |
| Users list of ingredients inputted in the loops, prints and program continues to run. |
| List of ingredients printed on separate lines for accessibility. | | |

Testing for if the ingredients are correct or not

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| “no” | Accepts input and continues to run |  |
| Accepts input and continues to run |
| “”  “fafhdsahf”  “yes” | Does not accept input and asks question again  Does not accept input and asks question again  Accepts input and continues to run |  |
| Does not accept input until yes or no is entered then continues to run |

Testing for entering an ingredient from the users list if it is incorrect

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| “”  “ffdfs”  “Butter” | Does not accept input and asks question again  Does not accept input and asks question again  Accepts input and continues to run |  |
| Does not accept input until an ingredient which is in the list of ingredients the user requires is input and then program continues to run. |

Testing for changing the ingredient after entering the ingredient to change

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| “”  “fdksa”  “Unsalted Butter” | Does not accept input and asks question again  Does not accept input and asks question again  Accepts input and continues to run |  |
| Does not accept input until an ingredient which is in the dictionary of ingredients is input and then program continues to run and asks much of the ingredient is needed then prints out a new list of ingredients which the cost per serving will be calculated with. |
| List of ingredients printed on separate lines for accessibility. | | |

Total cost and cost per serving prints

| Possible Input | Expected Outcome | Actual Outcome |
| --- | --- | --- |
| Prints the cost for making the recipe (name input by the user earlier) and prints cost per serving | Prints total cost and cost per serving and program stops. |  |
| Prints cost and cost per serving and program stops. |