Apocalypse Survival - Food and Water Calculator

User story

The user is in need of resources to be able to survive the zombie apocalypse. They will need food and water, but they don’t know how much they will need for the time they are staying locked down, but with this app they will be able to enter their role in the group and how long they are staying locked down. There are roles that everyone will take up to help them survive. Every group should have a hunter, gatherer, and caregiver. There may also have children that will need different things based off their age. Based off who they are the app will tell them what amount of food and water they will need for their time in lockdown.

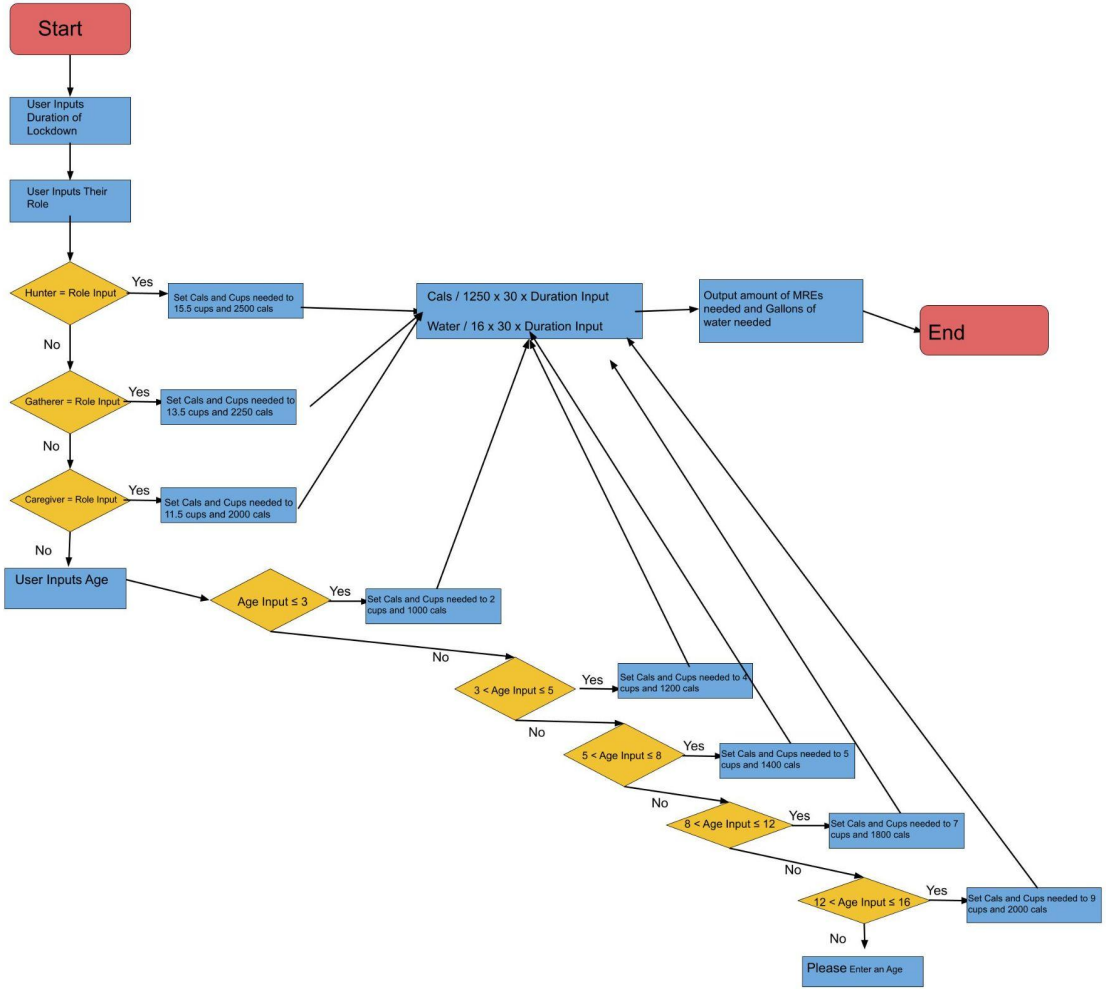
Initial backlog breakdown

From the user we need to get there name, duration of lockdown, and role. We will need their age only if they are a child.

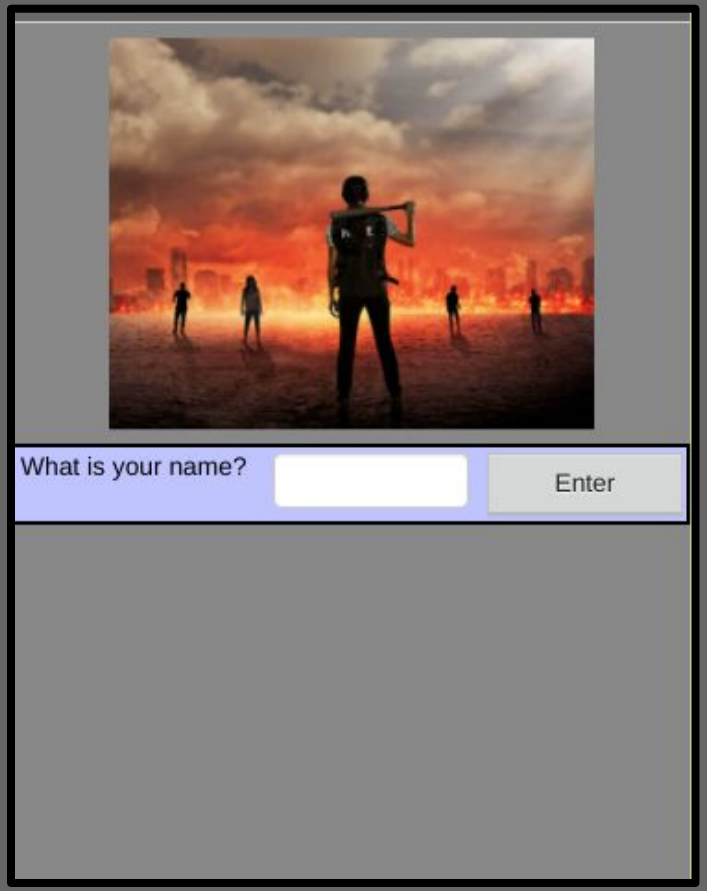
The app will output the amount of MREs and water the person will need based off the information that they entered.

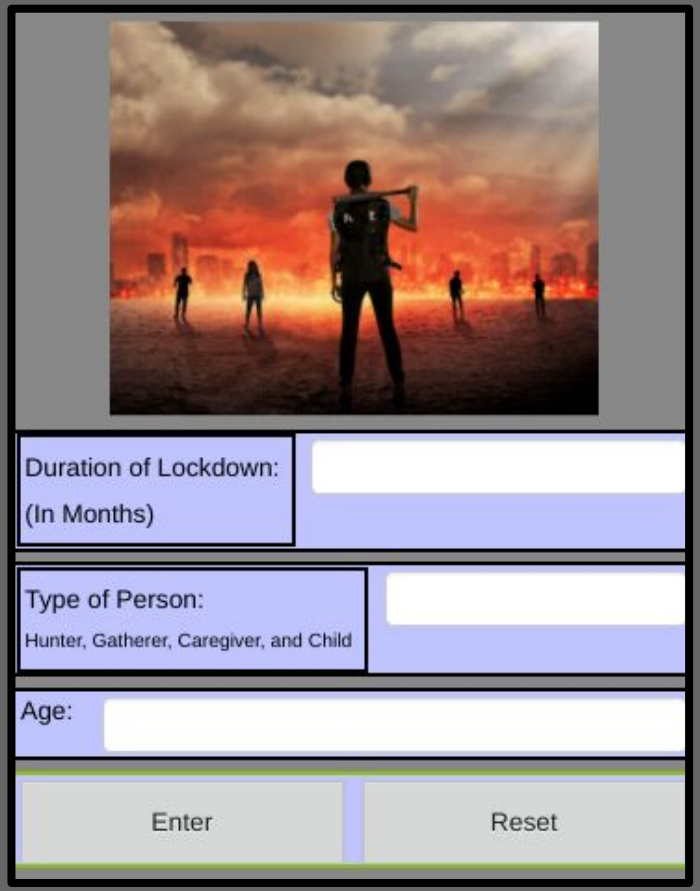
The app will get the output by taking average needs of these people and doing an equation for how long they will need supplies for.

FLOW CHART


Start
User Inputs Duration of Lockdown
User Inputs Their Role
Hunter = Role Input
Yes
Set Cals and Cups needed to 15.5 cups and 2500 cals
No
Gatherer = Role Input
Yes
Set Cals and Cups needed to 13.5 cups and 2250 cals
No
Caregiver = Role Input
Yes
Set Cals and Cups needed to 11.5 cups and 2000 cals
No
User Inputs Age
Age Input ≤ 3
Yes
Set Cals and Cups needed to 2 cups and 1000 cals
No
3 < Age Input ≤ 5
Yes
Set Cals and Cups needed to 4 cups and 1200 cals
No
5 < Age Input ≤ 8
Yes
Set Cals and Cups needed to 5 cups and 1400 cals
No
8 < Age Input ≤ 12
Yes
Set Cals and Cups needed to 7 cups and 1800 cals
No
12 < Age Input ≤ 16
Yes
Set Cals and Cups needed to 9 cups and 2000 cals
No
Please Enter an Age
Cals / 1250 x 30 x Duration Input
Water / 16 x 30 x Duration Input
Output amount of MREs needed and Gallons of water needed
End

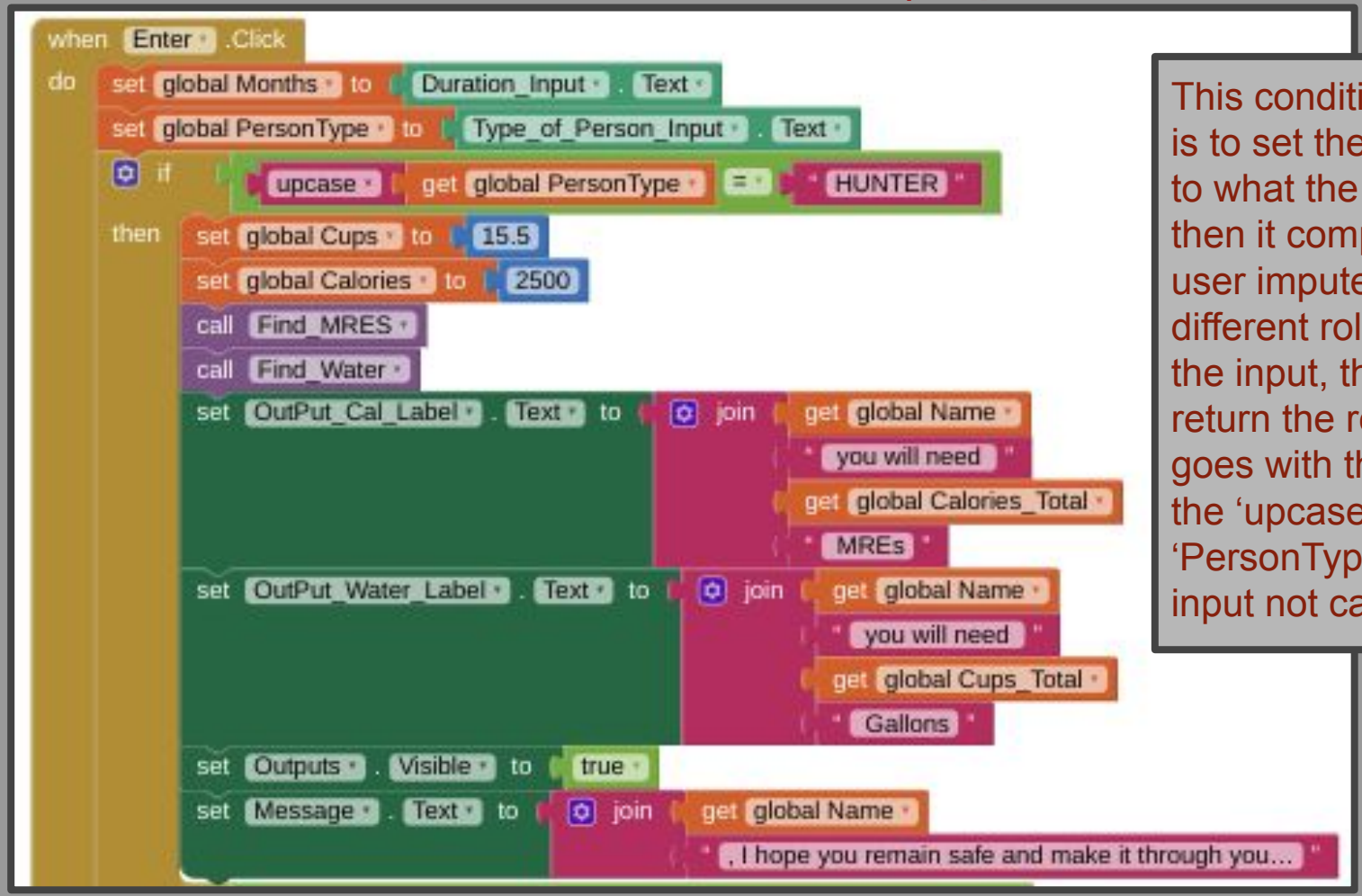
Graphical User Interface





The two images are from different points while going through the app. The first is the first thing that the user sees when they open the app and the second is after they enter their name.

Screenshots of blocks of code (explanation of what they do)

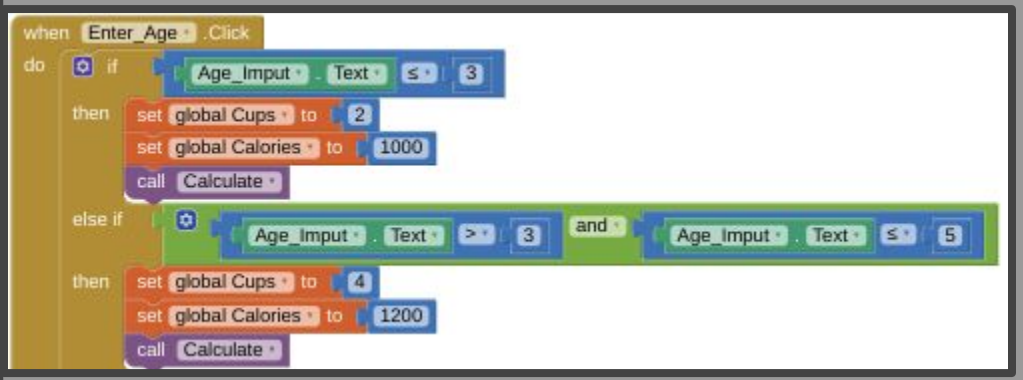


This conditional statement is to set the global variable to what the user enters, then it compares what the user imputed with all of the different roles. Based off the input, the code will return the response that goes with that role. To note, the ‘upcase’ before the ‘PersonType’ is to make the input not case sensitive.

Screenshots of blocks of code (explanation of what they do)

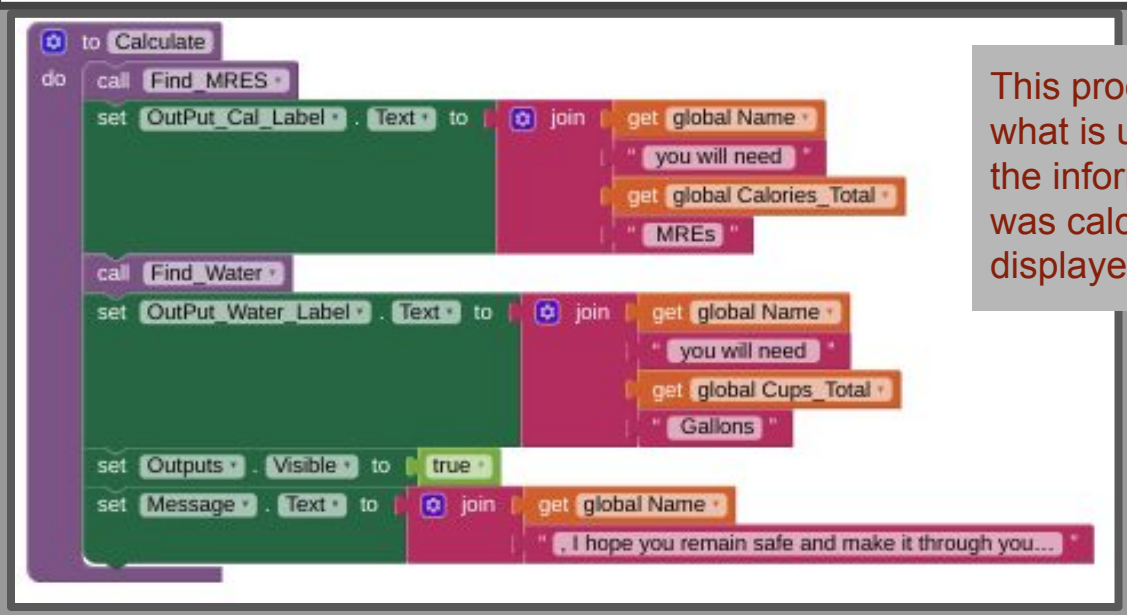
This part is from the pervious conditional statement. This block makes the age section visible for the user to enter their age because their role didn't fit the other three and would most likely be child. It also changes what buttons are visible.

This conditional statement compares the users entered age with different ages and based off the age the user enters the amount of calories and cups of water they need will be put into global variable.



Screenshots of blocks of code (explanation of what they do)

These procedures are what calculate how much food and water the user will need based of the role they entered and the duration of their lockdown.



This procedure is what is used to make the information that was calculated be displayed.

Issues that came up for you.
What did you struggle with?
What did you want to create but wasn’t able to?

Some issues that I had were when I tried to change what buttons did what and moving them around, I had to do this because at times the user would have to click to buttons to get their result, but from moving their functions, I was able to make that not happen. I wanted to add more things to give different advice based off the information the user enters and make their region something they would be able to enter.