Flowchart: Health Insurance Quote App

Start

End

Assign: BASE_PRICE = 20
WEEKS = 52.143
MONTH = 4.345
keep_going = 'y'
second_adult = 1.95
zero_four = .50
five_nine = .60
ten_thirteen = .70
fourteen_seventeen = .80

silver = 1.25 * BASE_PRICE
gold = 1.5 * BASE_PRICE

keep_going == 'y'

Display 'Have a great day.'

total_adult = 1
child = 0
child_premium_total = 0

no(false)

input number_of_adults (1-2),
number_of_children (0+),
children_ages,
tier_cover ('b'/'B' or 's'/'S' or 'g'/'G')

Prompt the user: 'Do you need
another quote? (Enter y for yes)'
and assign the input to
keep_going

yes(true)

tier_cover = basic_price if tier_cover == 'b'
or 'B' else (silver if tier_cover == 's' or 'S'
else gold))

number_of
_adults > 1
and total
adult < 2?

yes(true)

total_adult =
total_adult + 1

no(false)

display weekly_cover,
monthly_cover,
annual_cover

Is there another kid
in children_ages list?

no(false)

if number_of_children == 0:
weekly_cover = (total_adult if total_adult < 2 else
second_adult) * tier_cover
monthly_cover = weekly_cover * MONTH
annual_cover = weekly cover * WEEKS

else:
weekly_cover = (total_adult if total_adult < 2 else
second_adult) * tier_cover + child_premium_total
monthly_cover = weekly_cover * MONTH
annual_cover = weekly cover * WEEKS

yes(true)

child_premium_total = child_premium_total +
(zero_four if children_ages < 5 else (five_nine if
children_ages < 10 else (ten_thirteen if
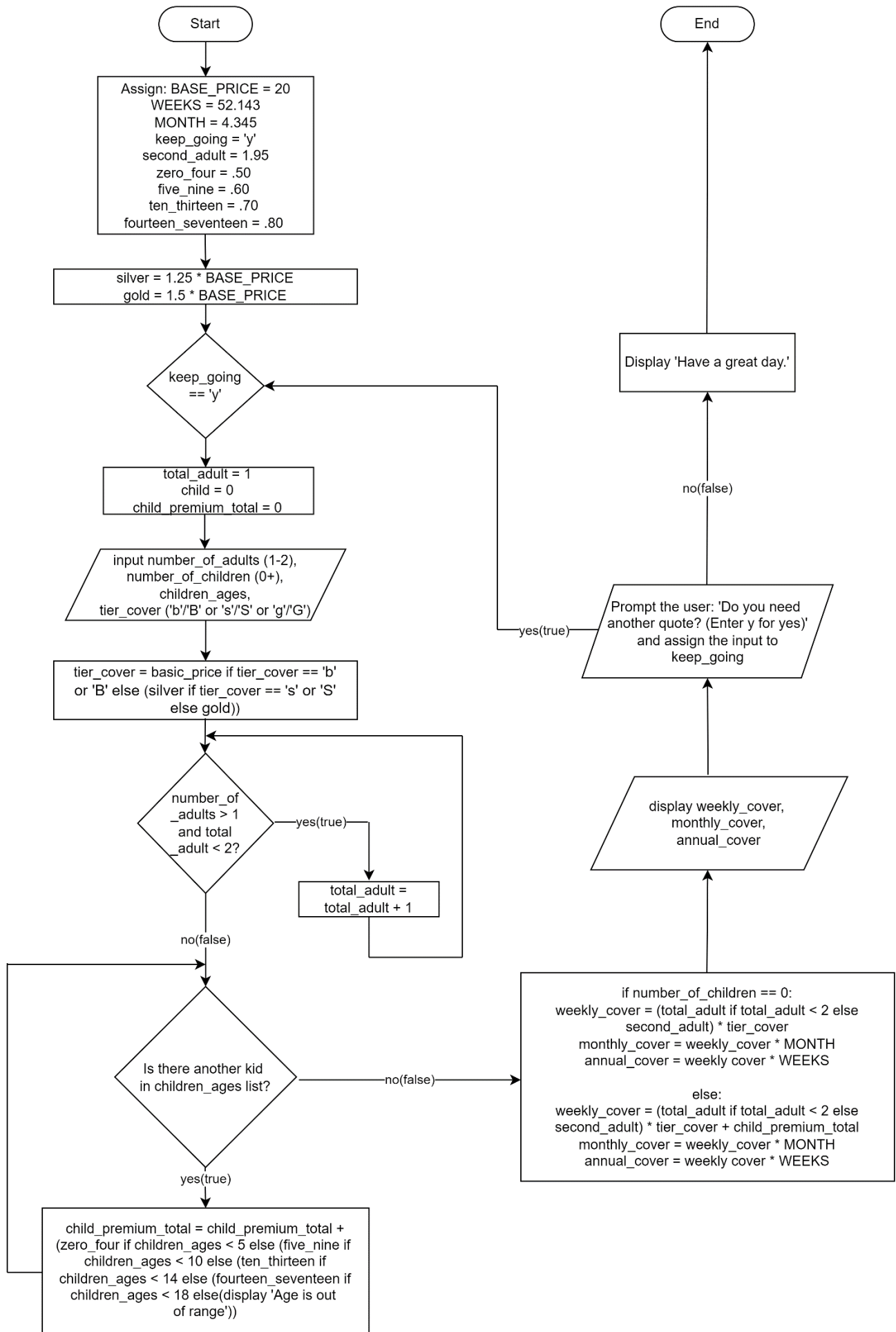children_ages < 14 else (fourteen_seventeen if
children_ages < 18 else(display 'Age is out
of range'))

Screenshots: Health Insurance Quote App

Screenshot #1: Data used were taken from the assessment instructions. Please note that the example below used *52.143* weeks per year as opposed to 52.14 weeks per year in the assessment sample code.

```
--------------------------------
Welcome to Medicare Health Fund
--------------------------------
Let us get you a quote

Enter the number of adults (1-2): 2
Enter the number of children (0+): 4
Enter the age of child 1: 12
Enter the age of child 2: 13
Enter the age of child 3: 2
Enter the age of child 4: 5
What tier of cover would you like? [B]asic/[S]ilver/[G]old: s

Thank you. Your premium is:
$  111.25 per week, OR
$  483.38 per month, OR
$  5800.91 per annum

Do you need another quote (y/n)? y

Enter the number of adults (1-2): 1
Enter the number of children (0+): 0
What tier of cover would you like? [B]asic/[S]ilver/[G]old: g

Thank you. Your premium is:
$  30.00 per week, OR
$  130.35 per month, OR
$  1564.29 per annum

Do you need another quote (y/n)? n

Have a great day.

Process finished with exit code 0
|
```

Screenshot #2: The screenshot shows different quotes for all tier covers based on 1 adult and 0 child.

```
--------------------------------
Welcome to Medicare Health Fund
--------------------------------
Let us get you a quote

Enter the number of adults (1-2): 1
Enter the number of children (0+): 0
What tier of cover would you like? [B]asic/[S]ilver/[G]old: b

Thank you. Your premium is:
$   20.00 per week, OR
$   86.90 per month, OR
$   1042.86 per annum

Do you need another quote (y/n)? y

Enter the number of adults (1-2): 1
Enter the number of children (0+): 0
What tier of cover would you like? [B]asic/[S]ilver/[G]old: s

Thank you. Your premium is:
$   25.00 per week, OR
$   108.62 per month, OR
$   1303.58 per annum

Do you need another quote (y/n)? y

Enter the number of adults (1-2): 1
Enter the number of children (0+): 0
What tier of cover would you like? [B]asic/[S]ilver/[G]old: g

Thank you. Your premium is:
$   30.00 per week, OR
$   130.35 per month, OR
$   1564.29 per annum

Do you need another quote (y/n)?
```

Screenshot #3: Quotes for different tier covers with 2 adults and multiple children.

```
--------------------------------
Welcome to Medicare Health Fund
--------------------------------
Let us get you a quote

Enter the number of adults (1-2): 2
Enter the number of children (0+): 2
Enter the age of child 1: 1
Enter the age of child 2: 13
What tier of cover would you like? [B]asic/[S]ilver/[G]old: b

Thank you. Your premium is:
$   63.00 per week, OR
$   273.73 per month, OR
$   3285.01 per annum

Do you need another quote (y/n)? y

Enter the number of adults (1-2): 2
Enter the number of children (0+): 2
Enter the age of child 1: 17
Enter the age of child 2: 5
What tier of cover would you like? [B]asic/[S]ilver/[G]old: s

Thank you. Your premium is:
$   83.75 per week, OR
$   363.89 per month, OR
$   4366.98 per annum

Do you need another quote (y/n)? y

Enter the number of adults (1-2): 2
Enter the number of children (0+): 1
Enter the age of child 1: 1
What tier of cover would you like? [B]asic/[S]ilver/[G]old: g

Thank you. Your premium is:
$   73.50 per week, OR
$   319.36 per month, OR
$   3832.51 per annum
```

Screenshot #4: The screenshot shows the functionality of the app including when the user ends the program.

```
-------------------------------
Welcome to Medicare Health Fund
-------------------------------
Let us get you a quote

Enter the number of adults (1-2): 1
Enter the number of children (0+): 1
Enter the age of child 1: 1
What tier of cover would you like? [B]asic/[S]ilver/[G]old: g

Thank you. Your premium is:
$   45.00 per week, OR
$  195.52 per month, OR
$ 2346.43 per annum

Do you need another quote (y/n)? y

Enter the number of adults (1-2): 2
Enter the number of children (0+): 1
Enter the age of child 1: 1
What tier of cover would you like? [B]asic/[S]ilver/[G]old: g

Thank you. Your premium is:
$   73.50 per week, OR
$  319.36 per month, OR
$ 3832.51 per annum

Do you need another quote (y/n)? n

Have a great day.

Process finished with exit code 0
|
```

Thank you.

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Assessment 1: Decisions and Loops

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