COP1000 P-2

Learning Outcomes Measured

COP1000	CLO-1	Develop simple and complex algorithms using stepwise refinement.
COP1000	CLO-3	Develop algorithms using functions and procedures with and without arguments.
COP1000	CLO-10	Perform testing on applications including topdown and bottomup testing.
COP1000	CLO-11	Describe debugging strategies.

This project is language neutral and outcomes may be measured using any of the programming languages commonly utilized in COP1000.

For this project, you will develop an algorithm, flowchart and modular program based on the following:

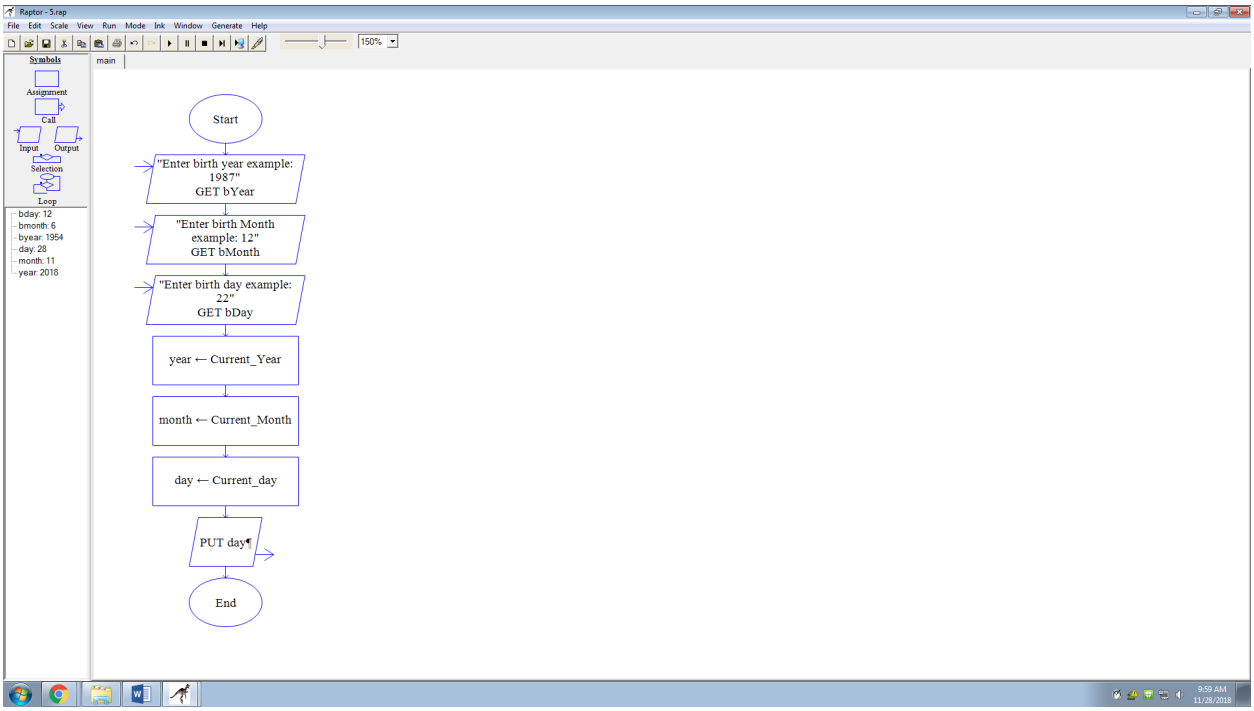
The user will be prompted for their *name* and *age*, use the ***DATE*** module or class associated with your programming language to acquire the current date and calculate how many years it is until the user is eligible for retirement. (age 65) ***The program will display one of three alternate outputs based on how long it will be until the user retires***. You will determine the range of years and text associated with each of the three alternatives.

Example: “Congratulations *George*, it will only be 5 years until you are eligible to retire in 2022. “

You will submit 3 files for evaluation:

1. A Flowchart created using Flowchart application *(Flowgarithm, Raptor or Visio*).
2. Programming Code written in python using Repl.It. (always include comments in code)
3. A word document containing your algorithm and explaining what steps you took to test and debug your code. What issues did you identify and correct while working on the project.

The date function in raptor is very basic here is a screenshot that can help with getting current date using each part of the date individually (there is no comprehensive date function in raptor like exists in other languages. A video is posted in lecture videos to help you with the python coding if needed but keep in mind it is not like the exercise videos as it does not give you all of the code needed.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File Edit Scale View Run Mode Ink Window Generate Help
150%
Symbols
Assignment
Call
Input
Output
Selection
Loop
bday: 12
bmonth: 6
byear: 1954
day: 28
month: 11
year: 2018
main
Start
"Enter birth year example: 1987" GET bYear
"Enter birth Month example: 12" GET bMonth
"Enter birth day example: 22" GET bDay
year ← Current_Year
month ← Current_Month
day ← Current_day
PUT day¶
End
9:59 AM
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