Topic 1 Activity 1

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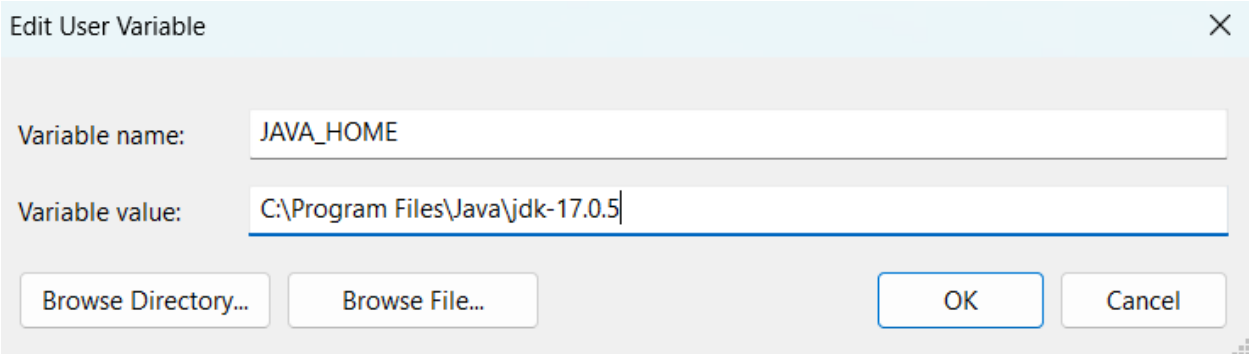
GitHub: https://github.com/jmdalton0/cst239-act1

PART 1: TOOLS INSTALLATION AND VALIDATION

I am using VS Code, so I didn't get an Eclipse About box. However, here is the path variable to my instance of java on my machine.



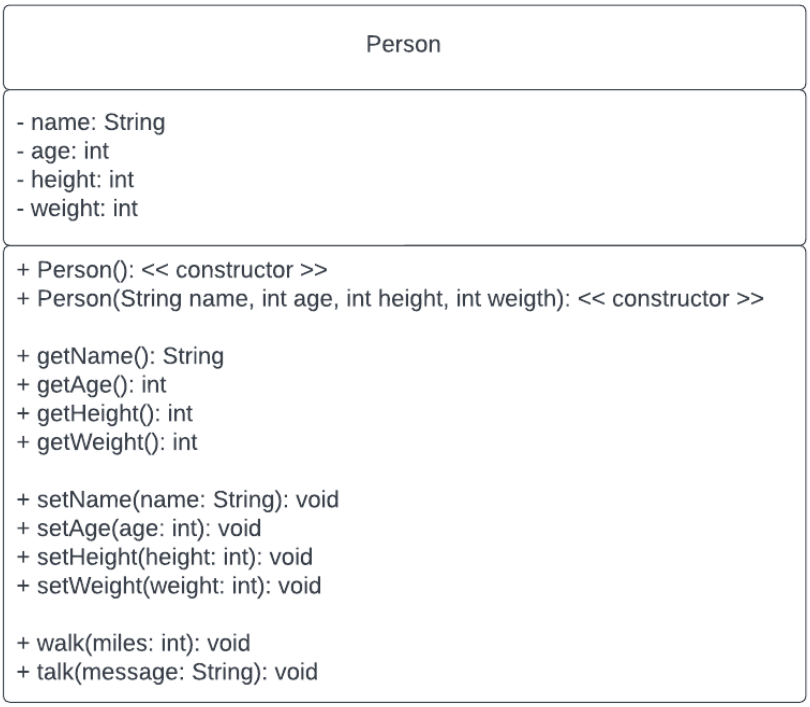
Hello World output

```
c:\Users\jmdal\Projects\CST239\topic1-1> c: && cd c:\Users\jmdal\Proje
cts\CST239\topic1-1 && cmd /C ""C:\Program Files\Java\jdk-17.0.5\bin\j
ava.exe" -XX:+ShowCodeDetailsInExceptionMessages -cp C:\Users\jmdal\Ap
pData\Roaming\Code\User\workspaceStorage\6cba043e1130498178f45ac3a0515
cf1\redhat.java\jdt_ws\topic1-1_7ad8f58e\bin app.HelloWorld "


Hello, my name is Jesse

c:\Users\jmdal\Projects\CST239\topic1-1>
```

PART 2: DESIGNING, CODING, AND DOCUMENTING A PERSON CLASS

In the main method, a new Person object is initialized with the values passed into the constructor. Then, the public methods walk() and talk() are called. These methods print their output to the screen and the program ends.

Person UML

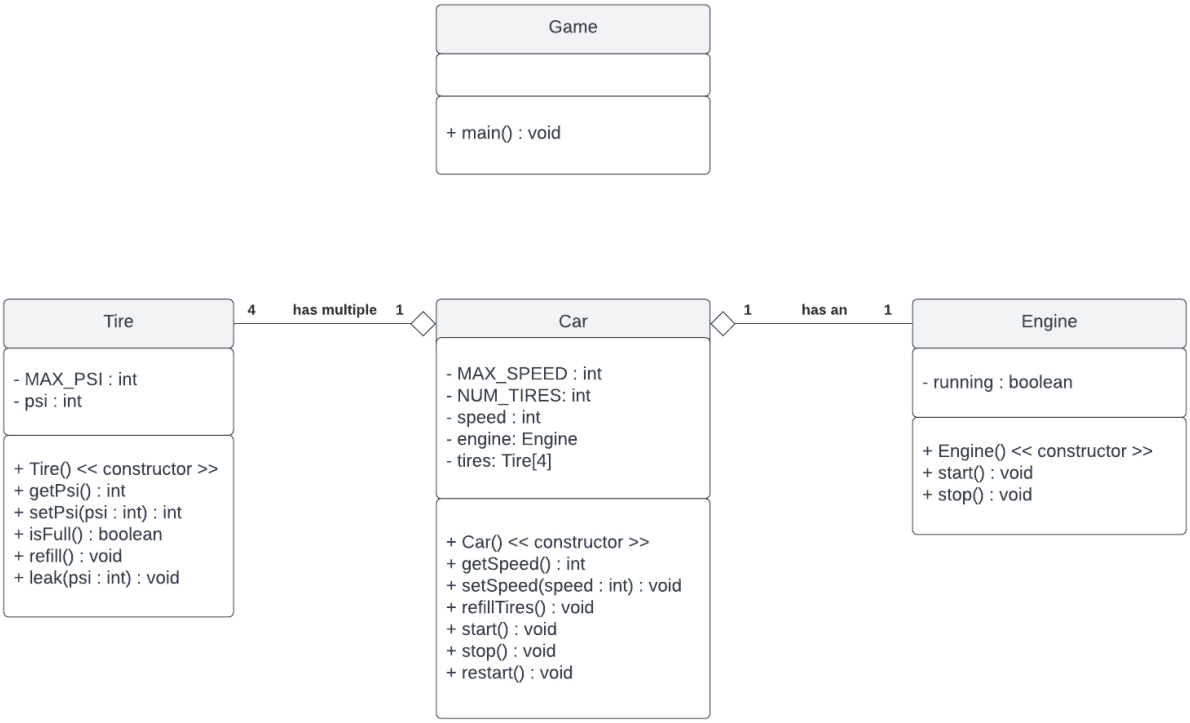


Person Output

```
Microsoft Windows [Version 10.0.22621.1105]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jmdal\Projects\CST239\topic1> cmd /C ""C:\Program Files\Java\
jdk-17.0.5\bin\java.exe" -XX:+ShowCodeDetailsInExceptionMessages -cp C
:\Users\jmdal\AppData\Roaming\Code\User\workspaceStorage\6d040135647fe
fa5b66b09cd230d8b00\redhat.java\jdt_ws\topic1_ad47e26a\bin app.Person
"
Jesse walked 5 miles.
Jesse said "Hello."
```

PART 3: RACE CAR

Racecar Game UML

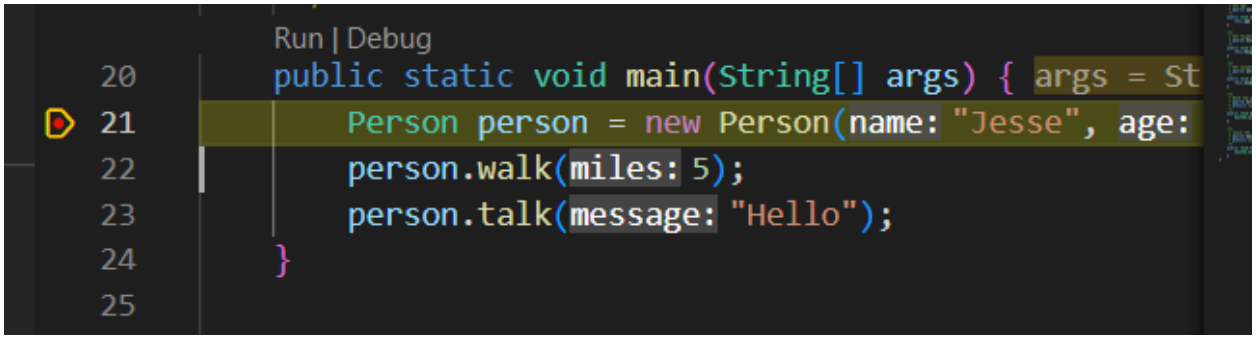


Racecar Game Output

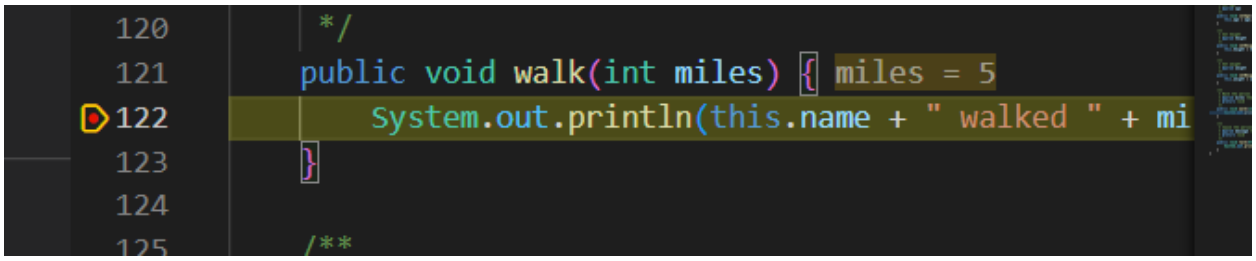
```
WELCOME TO THE RACE GAME

Ready for race 1?
Starting engine...
Engine started!
Current speed is 0
Increasing speed to 80mpg
Current speed is 60
FINISH... the race is over

Ready for race 2?
Restarting engine...
Engine started!
Current speed is 0
Increasing speed to 45mpg
Current speed is 45
FINISH... the race is over

Stopping car...
Car stopped
Thank you for playing
```

PART 4: DEBUGGING

Breakpoint in main()

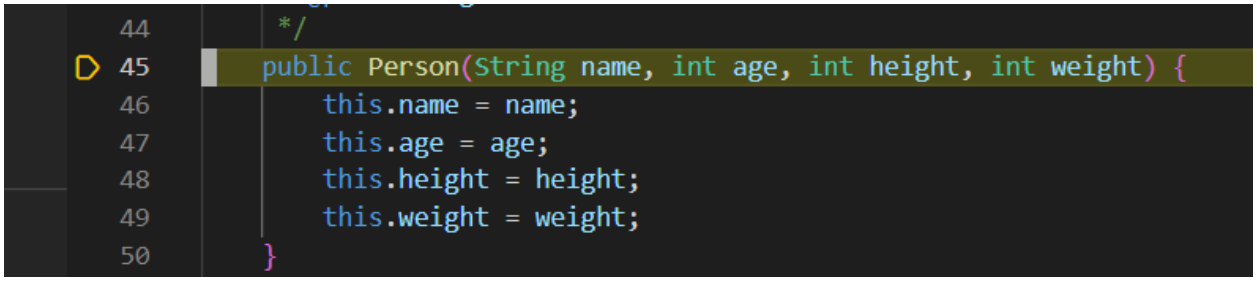


Breakpoint in walk



Variables at breakpoint

Stepped into constructor from main (no breakpoint)



Stack Trace at breakpoint