

COSC2100

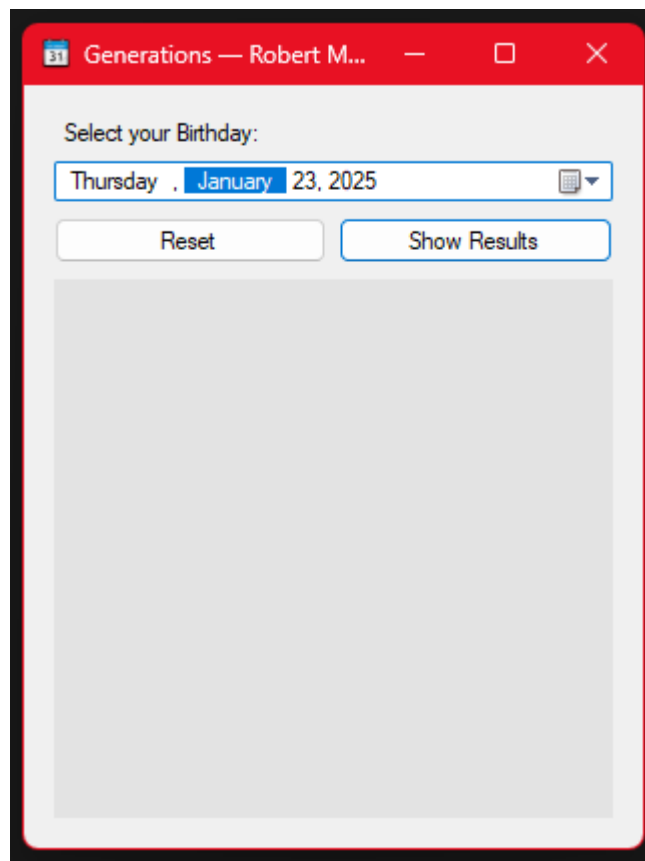
Robert Macklem

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January 23, 2025

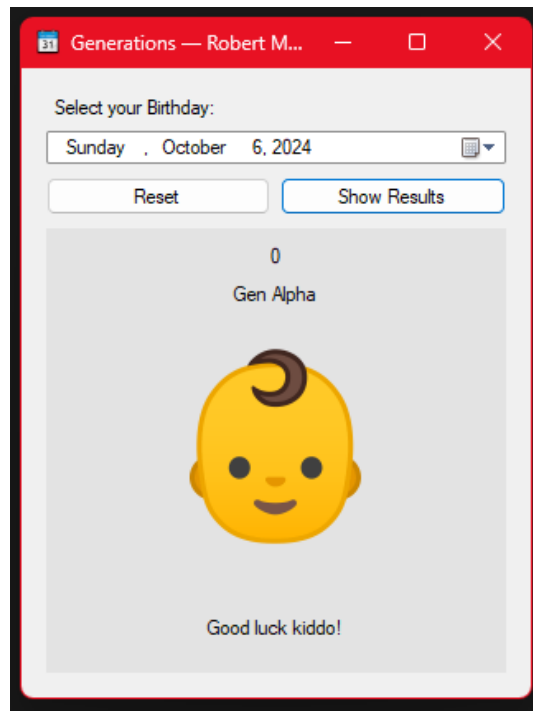
*ICE 2 Report*

Here is a screenshot of my running Windows Forms App, before any input has been provide by the user or any interaction has happened with the window:

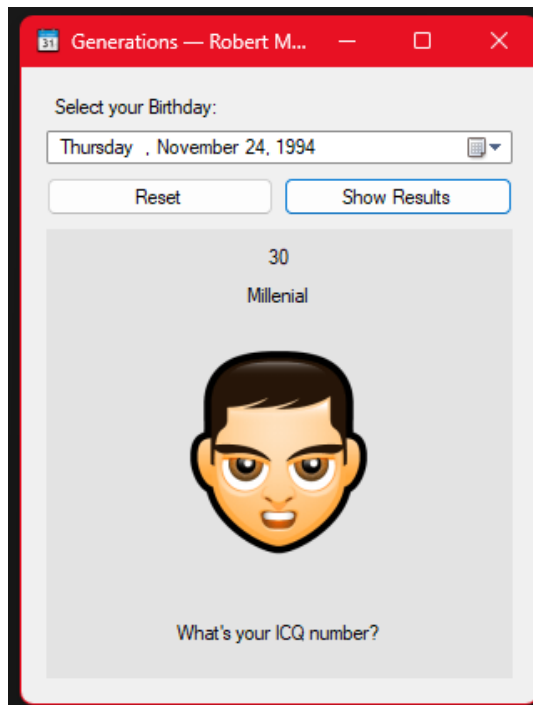


(cont.)

Here is a screenshot of the age result generated by clicking “Show Results”:



And here is a final screenshot for a different set of results, in a different generation:



### **Questions:**

**Question 1:** When can we **omit** the braces `{ }` after an **if-else** statement?

**Answer:** We can omit the braces after an if-else statement if the execution for the block is a single statement. i.e. 'if' or 'else' is followed by a single statement or line of code.

**Question 2:** What is the **difference** between using **if-else** and **switch-case**?

**Answer:** A **switch** case is used for multiple **discrete execution paths** based **one variable**. An **if-else** block can compare **multiple variables** and create more **complex/branching control paths**

**Question 3:** What is the **difference** between using a **while** and a **do-while**?

**Answer:** A **while** loop **will execute (and keep executing) only when** the condition is **True**. A **do-while** loop **always executes once** and continues executing while the condition is **True**.

**Question 4:** What is the **difference** between using a **for** and a **foreach**?

**Answer:** A **for** loop loops a **given number** of times as set by the programmer. A **foreach** loop loops over **elements of a collection**, dynamically adjusting the loop count based on collection size.