

COSC2100

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ICE 7 Report

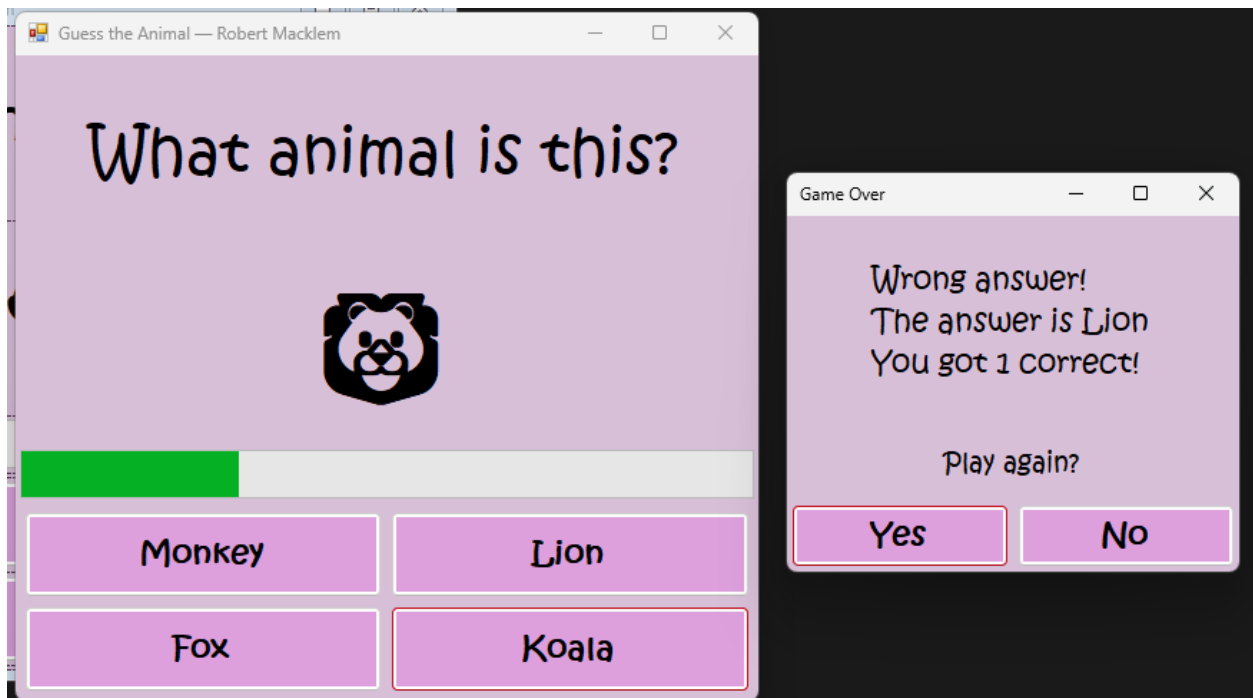
Here is a screenshot of my running Windows Forms App as soon as it launches:



After choosing the right answer:



After choosing the wrong answer:



Question 1: What is a **key-value pair** in a dictionary

Answer: A key value pair is a matched set of two pieces of data that are associated with each other. The *key* in a dictionary uniquely identifies some associated data, which is the *value* paired with it.

Question 2: Explain why **keys** in a dictionary **must be unique**.

Answer: Keys uniquely identify a value. If there are two identical keys, then they create an *ambiguous reference* to two different values.

Question 2: What are the **advantages** of using dictionaries over **arrays/lists** when it comes to **searching for elements**?

Answer: The advantage is being able to look up data based on property values. Any property of a class could be any type, and any type can be a key to look up data in the map. Also faster.

Question 2: Based on the dictionary below, provide a **1-LINE** code example **printing the colour of a banana**?

Answer: `Console.WriteLine(fruitColours["Banana"]);`