Diamond Clarity is the assessment of small imperfections on the surface and within the stone. Basically, it references the internal and external "scratches" of a diamond.

- Surface Flaws are called blemishes
- Internal defects are known as inclusions (aka: "internal characteristics")
- Internal Characteristics are what give a natural diamond its character.

### Potential Null Hypothesis Claims:

- Its also important to note that diamonds with the fewest and smallest inclusions (or "scratches") receive the highest clarity grades and are more expensive.
  - o For example, a potential hypothesis test: H0: B1 > 100; Ha: B1 < 100
  - Where B1 could be the price or the number of inclusions (or "scratches") on a diamond
- Diamond shape and size affect clarity.
- Clarity is less important than a diamond's cut or color.

Below are the 11 Clarity grades summarized by me. Also, if you wanted to create another categorical variable, you can include "Naked Eye Visible" and "Naked Eye Not Visible" – in reading the categories below, you can potentially split up the data this way for data visualizations:

Naked Eye Visible	Naked Eye Not Visible
I1	SI1
12	VS1
13	VS2
S12	VVS1
	VVS2
	IF
	FL

#### **Diamond Clarity Spans 6 Categories With a Total of 11 Clarity Grades:**

Included Diamonds (I):

- I1, I2, I3
- Naked Eye Visible: Has obvious inclusions (or "scratches") that are likely to be visible and will impact the beauty of the ring

# Slightly Included Diamonds (SI):

- SI1, SI2
- Inclusions (or "scratches") are noticeable at 10x magnification.
- Naked Eye Not Visible: If "eye clean" (meaning no imperfections visible to the unaided eye) SI Diamonds are often the best value.
- Naked Eye Visible: SI2 inclusions may be detectable to a keen unaided eye, especially when viewed from the side

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## Very Slightly Included Diamonds (VS):

- VS1, VS2
- Naked Eye Not Visible: Minor inclusions ranging from difficult (VS1) to somewhat easy (VS2) to see at 10x magnification.
- Great value; Blue Nile's most popular diamond clarity.

## Very, Very Slightly Included Diamonds (VVS):

- VVS1, VVS2
- Naked Eye Not Visible: VVS diamonds have mini inclusions ("or scratches") that are difficult even for the trained eye to see under 10x magnification.
- Naked Eye Not Visible: VVS clarity is rare and results in an "eye clean" (meaning no imperfections visible to the unaided eye) appearance.
- Characteristics are miniscule and difficult to see under 10x magnification, even to the trained eye.

#### Internally Flawless Diamonds (IF):

- Some small surface blemishes may be visible under a microscope on IF diamonds
- IF diamonds have no inclusions within the stone, only surface characteristics
- Naked Eye Not Visible: Visually "eye clean" (meaning no imperfections visible to the unaided eye)

#### Flawless Diamonds (FL):

- No internal or external characteristics
- Less than 1% of all diamonds are FL clarity
- A flawless diamond is incredibly rare because its nearly impossible to find a diamond 100% free of inclusions (or "scratches").