Using the 0 Bit Pattern for NULL Has Several Benefits

Define NULL as pointer that points to nothing.

Benefits (assuming initialization to NULL)

1. Compare with NULL to **check for invalid pointers**.
2. Use all 0 bit pattern (so a **pointer is true if valid, false if not valid**).
3. **Dereferencing NULL** on most systems* **crashes the program**.

*Not true on many microcontrollers, however.

Pitfall: Mental Overload of Nullification

Keep in mind
- NUL is an ASCII character.
- NULL is a pointer (to nothing).
- "null" is an English word.
- 0 is a number.

They are all associated with 0 and bit patterns containing only 0s.

But they're not the same.*

Don't confuse them.

*In some languages, "NULL" is written "null." Go figure.

