Character Set(Alphabets ,Digits ,Special Symbols) in java

In Java, the **Character Set** includes the following categories of characters that the language recognizes and uses:

**1. Alphabets**

* **Uppercase Letters**: A, B, C, ..., Z
* **Lowercase Letters**: a, b, c, ..., z

**2. Digits**

* 0, 1, 2, 3, 4, 5, 6, 7, 8, 9

**3. Special Symbols**

Java recognizes a variety of special symbols that are used in various contexts like operators, punctuation, and other syntactic elements. Some of the commonly used special symbols include:

* **Punctuation and Operators**:
  + + (addition)
  + - (subtraction)
  + \* (multiplication)
  + / (division)
  + % (modulus)
  + = (assignment)
  + == (equality)
  + != (inequality)
  + > (greater than)
  + < (less than)
  + >= (greater than or equal to)
  + <= (less than or equal to)
  + && (logical AND)
  + || (logical OR)
  + ! (logical NOT)
  + ++ (increment)
  + -- (decrement)
* **Punctuation**:
  + . (dot)
  + , (comma)
  + ; (semicolon)
  + : (colon)
  + () (parentheses)
  + {} (curly braces)
  + [] (square brackets)
  + " (double quote)
  + ' (single quote)
* **Other Special Characters**:
  + @ (at symbol)
  + # (hash)
  + $ (dollar sign)
  + \_ (underscore)
  + \ (backslash)
  + | (vertical bar)
  + ^ (caret)
  + & (ampersand)
  + ~ (tilde)
  + ` (backtick)
  + < (less than)
  + > (greater than)

**4. Whitespace Characters**

* ‘ ‘ (space)
* ‘\t ‘(tab)
* ‘\n ‘(newline)
* ‘\r ‘(carriage return)
* ‘\f’ (form feed)

**Unicode Characters**

Java uses Unicode, a universal character set that includes characters from almost all the world's writing systems. This means Java can handle characters from various languages, mathematical symbols, and other special characters.