Source: https://www.w3schools.com/mysql/mysql_datatypes.asp

https://stackoverflow.com/questions/25300821/difference-between-varchar-and-text-in-mysql

A. What are ten different data types MySQL provides?
    1. ENUM
    2. SET
    3. VARCHAR
    4. TINYTEXT
    5. LONGTEXT
    6. BOOLEAN
    7. INTEGER
    8. FLOAT
    9. DECIMAL
    10. DATE

B. How is each data type you described used, and what makes it unique?
    1. ENUM – This can be used to create a list of options. When creating the table, you create the list of options. Then when setting the data, any of the options from the list can be selected. It also enforces the list by clearing any value entered that doesn't match the list
    2. SET – This is similar to the Enum. It allow you to create a list of options. Unlike the Enum, you can select multiple options from within one entry with a set. This would be good for a check box system where multiple checkboxes can be selected.
    3. VARCHAR – This allows you to input variable length strings. It is a general purpose variable string datatype. By setting the max value, the amount of memory used to store the data adjusts based on what is put into it. This datatype allows you to index it, while other variable string datatypes don't. One downside is it is stored by value, not reference, so it can cause you to reach your column limit quicker with larger max limits. This is good for general text input.
    4. TINYTEXT – This also you to store a small string. This is good for when you have data that will not be long, such as a name. It is stored by reference, so it allays takes the same amount of memory away from the column count, but it can not be indexed, making it slower to get data in a large table.
    5. LONGTEXT – This allows you to store a very large string. A down side is that is can temporarily take 4gb of ram whenever you access it. You can use this whenever data doesn't fit in other string datatypes.
    6. BOOLEAN – This stores a true or false. This is useful for storing the result of a checkbox.
    7. INTEGER – This is used to store whole numbers. This is useful if the data will never be a fraction since it won't have rounder errors.
    8. FLOAT – This is used to store a decimal number. It will carry rounding errors, which can be useful for totaling since it will be more accurate and not drop decimal places as multiple rows are added together.
    9. DECIMAL– This stores the decimal with exactly. It will not carry rounding errors with it to future calculations. This is useful for money since you don't want half a penny to carry from one transaction to the next.

10. DATE – This stores a date. This is useful for storing when a transaction occurred.