

Term Distinctions: Primary Key- Minimal super key used to uniquely identify columns within a database.

Candidate Key- Minimal super key with a limited number of columns.

Super key- Field or set of fields that uniquely identify each column within a table.

In this instance I will be creating a table for a website that allows individuals to invest in the stock market. The table will be called "initial investments for first-time users". Within the table, the columns will be: Investor's name, number of shares purchased, and the date of purchase. These three columns are categorized as date data, number data, and text data. More often than not, two investors will not have the same name, making them unique identifiers, which will not allow them to be nullable. The number of shares purchased can easily be nullable as two investors may have the same mindset, when purchasing their initial shares. Lastly, the date of purchase can also be nullable as there are many transactions that occur on the same day, making the date of purchase not as unique of an identifier.

The first normal form rule goes off the premise of relations. Each attribute must be unique and easily identified apart from the others. This is important in any database or management system as there can be millions of records, but this data and information must be accurate to each individual's history and inputs as well as accessible when pulled.

What? Not Where?!: This relational rule involves attributes being unique and easily identifiable from one another. The location of this information/data is not relevant as it will be pulled, but in order for it to actually be pulled, it must be differentiated from the rest.

All rows must be unique: Within the database, the data/information relates to the first two relational rules as it must be set apart from the rest. These values cannot match others as they can cause confusion within and the information you need may not be pulled correctly.