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Assignment #5

Normalization Types

1. Normalization: The process for evaluating and correcting table structures to minimize data redundancies. It works through a series of stages called first normal form (1NF), second normal form (2NF), and third normal form (3NF)
2. First Normal Form: A table is in first normal form if it complies with the rules that make up a valid table. Some characteristics of a table in first normal form is table format, no repeating groups, and the public key is identified.
3. Second Normal Form: A table is in second normal form if it is already in first normal form, the values of all non-primary keys attributes are dependent on the full primary key, and is only used in tables with compound keys. Some characteristics of a table in second normal form is if there are no partial dependencies.
4. Third Normal Form: A table is in third normal form if it is already in second normal form, and if the values of all non-primary key attributes are not dependent on other non-primary key attributes. Some characteristics of a table in third normal form is if there are no transitive dependencies.
5. The following table is not in second normal form because the table does not have a single attribute primary key, and instead has two primary keys called "ID" and "Project".