Amrit Dahal

ITC220: Database Design for Programmers

Seattle Central College

Summer 2018

July 12, 2018

1. State the three reasons why keys are important.
2. Keys ensure that each record in a table is precisely identified.
3. Keys help establish and enforce various types of integrity.
4. Keys serve to establish table relationships.
5. What are the four main types of keys?
6. Candidate key
7. Primary key
8. foreign key
9. Non-key
10. What is the purpose of a candidate key?

It uniquely identifies a single instance of the table’s subject.

1. State four items of the Elements of a Candidate Key.
2. It cannot be a multipart field.
3. It must contain unique values.
4. It cannot contain null values.
5. Its value must uniquely and exclusively identify each record in the table.
6. True or False: A candidate key can be composed of more than one field.

True. This is called composite candidate key.

1. Can a table have more than one candidate key?

Yes.

1. What is an artificial candidate key?

A key that is created by entering a new field in the table that conforms to all the elements of candidate key, solely for that purpose.

1. What is the most important key you assign to a table?

The primary key.

1. Why is this key important?

The primary key field identifies exclusively the table throughout the database, helps establish relationships with other tables, and uniquely identifies a given record within a table and exclusively represents that record throughout the entire database.

1. How do you establish a primary key?

Select the most simple and explanatory candidate key to serve as primary key. It is largely an arbitrary choice.

1. State four items of the Elements of a Primary Key.
   1. It cannot be a multipart field.
   2. It must contain unique values.
   3. It cannot contain null values.
   4. Its value must uniquely and exclusively identify each record in the table.

1. What must you do before you finalize your selection of a primary key?

You must make certain the primary key exclusively identifies the values of each field in a table.

1. What is an alternate key?

The remaining candidate keys, after selecting and finalizing the primary key can be designated alternate keys.

1. What do you ensure by establishing a table-level integrity?
   1. There are no duplicate records in a table,
   2. The primary key exclusively identifies each record in a table,
   3. Every primary key value is unique, and
   4. Primary key values are not null.
2. Why should you review the initial table structures?
   1. Ensure appropriate subjects are represented in the database,
   2. Make certain table names and descriptions are suitable and meaningful to everyone,
   3. Make sure field names are suitable and meaningful to everyone,
   4. Verify all appropriate fields are assigned to each table.