DATABASE DESIGN & IMPLEMENTATION

ICT Skills

Objectives

- Awareness of four different functions that the ALTER statement can perform on constraints.
- Awareness of where in the data dictionary information on constraints is held.

Managing Constraints

- The ALTER TABLE statement is used to make changes to constraints on existing tables.
- These changes can include adding or dropping constraints, enabling or disabling constraints, and adding a NOT NULL constraint to a column.

Managing Constraints

- Guidelines:
  - *You can add, drop, enable, or disable a constraint but you cannot modify its structure.*
  - *You can add a NOT NULL constraint to an existing column.*
  - *You can define a NOT NULL constraint only if the table is empty or if the column contains a value for every row.*

Managing Constraints

- Why enable or disable constraints?
  - *To enforce rules defined by integrity constraints the constraints should always be enabled.*
  - *In certain situations however it is desirable to temporarily disable the integrity constraints of a table for performance such as:*
    - When loading large amounts of data into a table.
    - When performing batch operations that make massive changes to a table.

Managing Constraints

- To find out about constraints you can query the data dictionary.
  - *USER_CONSTRAINTS (p, c, u)*
  - *USER_CONS_COLUMNS*
- You can disable a constraint, by default when constraints are defined they are enabled by Oracle server unless otherwise specified.
- When you enable a constraint it applies to all data in the table, all data must fit the constraint.
- You can only see the NOT NULL constraints when you view a table using DESCRIBE (not accesible in app express)
- You can see more detail on constraints in application express by clicking on the constraints tab when viewing a table in the object browser.