Week-2 Summary

- Database development process: Conceptual Data Modelling, Database design (logical modelling), Database build (physical modelling)
- A conceptual model: Captures the functional and informational needs of a business and it is based on current needs but it may reflect future needs
- Purpose of entities: Because they are the things about which we store data.
- Purpose of attributes: It is important to learn about attributes because they provide more specific information about an entity.
- Purpose of unique Identifiers: It is important to learn about unique identifiers because they distinguish one instance of an entity from another.
- An attribute is a specific piece of information that helps to Describe /Quantify/Qualify/Classify/Specify an entity. An attribute has a single value.
- Volatile (values that constantly change) vs non-volatile (values that rarely change) attributes. If given a choice, select the nonvolatile attribute.
- An Entity Relationship Model: A list of all entities and attributes as well as all relationships between the entities that are of importance
- Entities are represented by softboxes. Entity names go in the softboxes. Entity names are always singular and written with all capital letters.
- Mandatory attributes are marked with an asterisk: "*" Optional attributes are marked with a circle: "o" Unique identifiers are marked with a hash sign: "#"
- Relationships: exist between entities, are bi-directional, are named at both ends
- Optionality: Relationships are either mandatory or optional. **May or must**
- Cardinality: It measures the quantity of something. In a relationship, it determines the degree to which one entity is related to another by answering the question, "How many?". **One (single tow) or many (crow's foot)**. *Many* means two or above