Database description

We are going to develop a database system that will keep track of the information about the different existing facilities in an army as well as for the Offence Facility which is a brand new facility on the army grounds. Our database will have well designed tables which can uniquely identify each record using primary and foreign keys. The current database includes tables with data about Personnel, Facilities (Main data), Learning and Research Facility, and Storage Facility. The Supply Facility table has relationships with three sub-facility tables namely Vehicle, Weapons and Supplies.

Data in the current database table objects:

Personnel: Personnel Id [Primary Key], Full Name, Home Address (In case the family of a particular personnel needs to be reached), Contact Number (Needed for any personnel that is on leave), Email (Particularly used for notifications and communication with other army forces outside of the said army).

Facilities: Block Id (Ground block Id) [Primary Key], Facility Name, Type.

Learning and Research Facility: Department Id [Primary Key], Department Name (i.e. The different departments like drone control learning and/or biochemical weapons research, etc.), Personnel Id (Foreign Key), Block Id [Foreign Key].

Storage Facility: Section Id (To identify a particular storage section in a specific block) [Primary Key], Storage Level (Floor level), Block Id [Foreign Key].

Weapons: Weapon Id [Primary Key], Weapon Name, Quantity, Category (e.g. handheld, explosives, etc.), Size, Weight, Section Id [Foreign Key].

Vehicles: Vehicle Id [Primary Key], Vehicle Name, Category (Land or Air), Weight, Size, Quantity, Section Id [Foreign Key].

Supplies: Supply Id [Primary Key], Supply Name, Category (e.g. Food, Medical, etc.), Quantity, Section Id [Foreign Key]

Data required for new table objects to be added into the database:

Housing Facility: Section Id (Section when personnel stay depending on Rank) [Primary Key], Section Level (Floor level), Personnel Id [Foreign Key], Block Id [Foreign Key].

Medical Facility: Status Id [Primary Key], Status Report (Health status report for a particular date for a single personnel staff), Visit Date (All visit dates records per single personnel staff), Personnel Id [Foreign Key].

Offence Facility: Offender Id [Primary Key], Full Name, Age, Offence Type, Capture Date, Release Date.

NOTE: The Housing Facilities and Medical Facility previously kept information on paper documents. The Offence Facility is new to the army grounds.

Disadvantages of the current system:

- Time consuming.
- Documentation could easily be lost and hard to find.
- The database system is outdated.
- Documentation is hard to update, track and manage.
- Updating records is a lot of hard work.
- There is no sensible way of finding records.
- The details of the prisoners are not recorded as of yet and the only information available is on paper documents.

Advantages of the database being developed:

- The system will improve the function of the current system drastically by making it much more efficient.
- Access to data will be very fast and easy for all facilities.
- Managing records wont be time consuming like the current system.
- The details of the prisoners will be tracked by the army.
- Productivity is increased because records will not be duplicated.
- The use of paper based records to database based is better overall.