Shadowrun Database

Draft Comments:
The project outline clearly states the theme along with a brief description. The reader can easily understand the entity relationships and how they will be applied to a database. There are sufficient number of entities and the relationship types that meet the project requirements and make sense. All entities represent a person, place, or thing and can stand alone as an object. All data types are mentioned for each attribute and apply appropriately. The Faction entity may need a foreign key to link to the Character entity. How will you represent Characters being led by other Characters in a table? Each faction will have 1 leader, but I don't see an attribute that identifies a a leader. Well done!

Wesley Schiller, Jul 6 at 5:33pm

Actions Based on Feedback:
The following has been applied to the draft based on the feedback I received:
-Character:
- o Leader: This is a bool value represented by integers with 1 representing a leader and 0 representing a fighter(follower). It cannot be null and there is no default.
-Faction:
- o Character ID: This is a foreign key. It will be an array of integers that represent the ID of each character that belongs to the current faction. It can be null and there is a default.

Upgrades to the Draft Version:
I have decided not to make any of my own changes to the draft because I feel it is sufficient as it is. I may need to update it in the future if I run into any problems while creating the project I will post the revisions in this section.

Project Outline
I will be making a database that represents the Shadowrun universe which was my favorite Xbox 360 game growing up. In this universe there are four races you can choose from. Each race has unique attributes and characteristics. There are different planets/stages they battle on and there are different lineages that they fight for. They battle for a staff that holds a lot of power. And they are able to purchase technology and magical abilities to help in their fight.

Database Outline
The entities in my database are:

- Character – Character is an important entity because it forms the basis of the fighters in the universe and can help shift a battle entirely. It has the following attributes:
  - ID: A number that is automatically assigned to each character when they are created in the database. It is an auto-incrementing number and is the primary key.
  - Name: Each character has a name that is composed of no more than 25 characters. It cannot be null and there is no default.
  - Race: The race of each character is very important because they each have different attributes and advantages. There are only four different races and the race of a character is a string of maximum of 5 characters: elf, human, troll, dwarf. It cannot be null and there is no default.
  - Special Ability: Each race has a unique special ability. It is a string of maximum of 100 characters. It cannot be null and there is a default for each race.
  - Essence: Each race gets a certain amount of essence which regenerates and is used up when magic is used and locked up when technology is active. It is a number from 5 to 10. There is no default and it cannot be NULL.
  - Leader: This is a bool value with 1 representing a leader and 0 representing a fighter(follower). It cannot be null and there is no default.

- Faction – There are lineages in the Shadowrun universe that each have a different thing they are fighting for. Each lineage has the following attributes:
  - Color: Each team has a different color to represent their uniforms in battle. The colors are: blue, red, green, orange. It is a string composed of a maximum of six characters. It cannot be null and it has no default.
  - ID: A number that is automatically assigned to each Faction when they are created in the database. It is an auto-incrementing number and is the primary key.
  - Name: Each faction has a name. It is composed of a maximum of 20 characters. There are four different factions and they are: RNA Global, The Lineage, The ORK, and The Ziggurat. It cannot be null and there is no default.
  - Goal: Each faction has a goal based on what faction they belong to. It is a string composed of a maximum of 100 characters. It cannot be NULL. There is a default for each different Lineage.
  - CharacterID: This is a foreign key. It will be an array of integers that represent the ID of each character

that belongs to the current faction. It can be null and there is a default.
- Weapons – There are different weapons in the Shadowrun universe used to battle. They have the following attributes:
  - ID: A number that is automatically assigned to each weapon when they are created in the database. It is an auto-incrementing number and is the primary key.
  - Name: Each weapon has a name. It is a string composed of a maximum of 25 characters. It cannot be null. The default is "pistol".
  - Damage: Each weapon does different damage. It is a number from 1 to 100. The default is "10" and it cannot be NULL.
  - Range: Each weapon has a different range. There are five different ranges: close, short, medium, long, very long. It is a string composed of a maximum of 25 characters. The default is medium and it cannot be NULL.
- Magic and Technology – There are different technologies and magical abilities in the Shadowrun universe. They have the following attributes:
  - ID: A number that is automatically assigned to each magic and technology when they are created in the database. It is an auto-incrementing number and is the primary key.
  - Name: Each magic or technology has a name. It is a string composed of a maximum of 25 characters. There is no default and it cannot be NULL.
  - Essence usage: Technology locks up essence while magic uses essence when it is activated. This is a number from 1 to 5. There is no default and it cannot be NULL.
  - Effect: Each magic or technology has a different effect in the Shadowrun universe. It is a string composed of a maximum of 100 characters. There is no defaults and it cannot be null.

The relationships in my database are:
- **Characters belong to a Faction –** A character can only belong to one Faction but a lineage can be comprised of many characters. So, the Character and Faction entities are in a *one-to-many relationship.*
- **Characters have weapons –** Characters can have many weapons. So, the Planet and Character entities are a *many-to-many relationship.*
- **Characters have magic and technology –** Characters can have many different magic powers and technologies and magic and technology can belong to many different characters. So, the Character and Magic and Technology entities are in a *many-to-many relationship.*

- **Characters are led by another character** – For each faction there is one character that leads many other characters. This is a *one-to-many relationship* since a Character leads many other characters but there can only be one leader.