CECS 277 – Project 1 -

Star Wars Interactive Scene –

Implement the class diagram that is on the next page using Classes, Abstract Classes, Inheritance, and Interfaces. Add in constructors, getters and setters wherever appropriate.

In your main class, create the following instances of your classes:

- 1 Jedi
- 1 Sith Lord
- 5 rebels
- 5 stormtroopers
- 2 astromech droids
- 1 protocol droid

Allow the user to name the Jedi (since this is the character the user is controlling). Give appropriate random names to all of the others (ex. a rebel might be named George, or Red 7, a droid might be named 2-1B, the Sith Lord Might be named Darth Vader). Create appropriately random sayings for each of the characters. Jedis and Sith Lords use lightsabers as weapons (with a defined color, you can let the user choose?), everyone else uses blasters, the droids use either their annoying banter, or astromech tools.

Allow the user to choose from at least two missions from a menu (ex. Hunt the Sith Lord, or Break into the compound). The good team characters now have to perform this task, the evil team's characters are always set to kill the rebels. Set up a situation in which the characters can accomplish this task by fighting and doing their missions/tasks. Randomly find out whether they were successful at their task.

When confronted with an opponent, the characters should fight. They should both attack each other and do a random amount of damage to the other. This damage should bring down the number of hp they have. They should also state their snappy retorts if the opponent missed them.

Present the user with choices throughout the scene (ex. attack with force, attack with lightsaber, have rebels attack stormtroopers, have droids open door).

The scene is over when the user has either successfully accomplished his mission, or when they have run out of hp.

I'm leaving this pretty open ended so that you have the freedom to modify things as you wish. You can add more classes and interfaces to the design if so desired. Feel free to give default values to hp and other variables, this frees up the user from being bogged down with too many choices and allows them to play the game.

Start small to get things started. Create the classes that you want and then get them working in the main. Fight a Jedi and a Sith Lord and end the game when someone dies. Then take some time to think about how you want your game to play out. Think about what the output would look like. Add in the rest of the classes and build up from there.

UML Class Diagram

«interface» Evil
- void doEvil()

Stormtrooper

SithLord
- String saberColor
- void fight(Entity)

Entity (abstract)
- String name
- String weapon
- String quip
- int hp
- boolean alive
- void snappyRetort()
- void fight(Entity)
- void setDead()

Person
- String mission
- void doMission()

«interface» HasForce
- void useForce(Entity)

Rebel

Jedi
- String saberColor
- void fight(Entity)

«interface» Good
- void doGood()

Astromech
- void doTask()

Droid (abstract)
- String task
- void doTask()

Protocol