

## UML Documentation Classes

Within the UML diagram, it consists of 5 main classes that will influence the gameplay of the Star Wars assignment, “Force”, “Ben Kenobi”, “Character”, “Droids” and “Lightsabres”. These classes are chosen due to the reasons below.

### Class: Force

In this game’s objective, it revolves around character position and advantageous manoeuvre, relying on the “Force” as the main source of power and advantage gain. Therefore, the Force class is affiliated with all the other classes, which indicate whether they are force sensitive (can use the force) or not. The main force attribute is public as all objects are associated with the force and a non-force user can suddenly become a force user. The attributes weakForce and strongForce will be set private as they indicate a specific character’s power.

### Class: Ben Kenobi

Although there is probably one instance of this class, it is important to know that Ben will play a bigger role in the game. The code provided in the documents, prove to be able to move and interact with other objects. Ben also adds Force to a character, such as Luke.

### Class: Character

This class allows enemies, heroes and Tuskans to be created. All characters having attributes such as health, currentForce and droidPartsCollected, cause them to interact with the objects in the game. The Behaviour is listed as a private attribute, due to the reasons that a character is unlikely to switch sides in much of the game. However, if necessary, a set method will be needed to change the behaviour of a character.

### Class: Droids

Droids act as a pet-like object in this game, which follows its owner when necessary, loses health when it enters Badlands, as well as immobilises when health reaches zero. Two main attributes are needed for this class to function, droid parts and health.

### Class: Lightsabres

This Lightsabre class contains only one attribute, "Weapon" as only characters that are force sensitive will be able to use the lightsabre as a weapon. As there will be many lightsabres, using a class for this weapon will create instances efficiently and effectively.

Of all the classes, only the characters and Ben Kenobi are inherited with the Force class, because again, the Force dictates what a character can and cannot do. The Characters are associated with the Lightsabres due to the ability to pick them up and with the droids, as each droid requires an owner.