## Background and Objectives

Congratulations, you have been summoned by the higher beings and you're now Buffy, the vampire slayer.

In this exercise, you will build yourself a guide on how to slay a vampire, as told from a narrator's point of view.

This narrator should have the following behavior:

- 1. If you don't choose the right weapon, the narrator says "The vampire laughs at your ineffective weapon."
- 2. The only way to slay the vampire is to choose a "stake".

This behavior should be implemented in the <code>vampire\_weapon.rb</code> file. Once your <code>vampire\_reaction</code> method is working, you can implement the logic in the <code>interface.rb</code> file to run the program. The interface should ask a user to choose a weapon to slay a vampire and display the vampire's reaction.

Once that works, try and implement a loop structure that will keep asking a user to choose a new weapon until the vampire is destroyed. You might need a while or until loop to do this. Scroll down to find a link with more information about these looping structures. We'll cover them in detail in tomorrow's lecture.

Let's make a comparison between the real world and the code world on this exercise.

Real world	Code world
Confront the vampire	Running \$ ruby lib/interface.rb in the terminal
Choosing a weapon	Writing a string in the terminal and hitting Enter
Vampire reacts	Reading the vampire's reaction printed on the terminal with puts
Slaying the vampire	Typing "stake", hitting Enter. The program should exit.

The objectives of this challenge are:

- Understand the flow of a program and learn how to "read" through your code, line by line
- Learn about conditional statements
- Learn about coding structures that modify your program flow: if..elsif/else..end,

while/until..end ,.. They are control structures(we'll learn more about them tomorrow)

• Learn about boolean logic : AND (&&) / OR (||)

### **Specs**

#### Vampire weapon

In the <code>lib/vampire\_weapon.rb</code> file, you will find method definition of <code>vampire\_reaction</code> . You can see that it takes one argument, <code>your\_weapon</code> which is the weapon you use against the vampire. The method should return a <code>String</code>, the vampire's reaction will depend of which value is passed in <code>your\_weapon</code> .

#### Enhanced Vampire Weapon

Now let's implement an enhanced version of the vampire's reaction. This time, you can choose a weapon and the material it's made of.

Here are some cases to consider:

- The vampire will disintegrate if you strike it with a 'stake' made of 'wood'.
- The vampire will explode if you hit it with any weapon made of silver
- Anything else will be ineffective against the vampire.

To implement these methods correctly, you will need to use multiple conditions. In Ruby, you can combine two conditions to create a new condition. If you need two conditions to be true at the same time to be true, you use the && operator. Like so:

```
true && true #=> true
true && false #=> false
false && true #=> false
false && false #=> false
```

#### Interactive Program

- Write the code for the interface that makes you confront the vampire.
- constraint: This program should "loop". The vampire should react and wait another round until you choose an effective weapon to destroy it. Use a while..end or until..end structure for that purpose.
- For the enhanced version, use the interface\_enhanced.rb to implement your Programs. When the vampire explode, use the string 'The vampire has exploded!' and when he is disintegrated, use the string 'The vampire has been desintegrated!'.

# Key learning points

- What's the usual flow of a program?
- How do structures like if..else..end or while..end change this flow?
- How do these structures work?
- What's a conditional statement? Which values can it take? What's the difference between = and == ?
- Does a simple method call change the flow of your program?