

Lab 9 – Regular Expressions

Assigned 11/3/09

Points: 20

Purpose

The purpose of the lab is to augment the game by providing more flexible user interactions implemented using regular expressions.

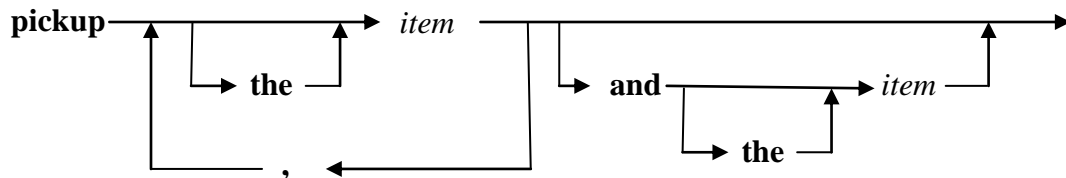
Lab Description

In this lab:

- Enable the user to pickup more than one item at a time
- Support more flexible handling of item and location names

Pickup

Allow the user to pickup more than one item at a time using the grammar:



Possible commands include:

```
Command> Pickup dagger
Command> Pickup the dagger
Command> Pickup the dagger and the rock
Command> Pickup the dagger, vile, cloak and rock
Command> Pickup the dagger, vile, the cloak and rock
```

Use regular expressions to parse the command line. The keywords (the and) will be ignored. The comma will need to be removed from the end of an item name.

Item and Location Names

To promote flexibility in handling item and location names use regular expressions such that an item or location can be referred to using a number of variations. For example, the location, RedBatCaveCove can be stored or referenced using any of these variations:

Red Bat Cave Cove
Red Bat_CaveCove
RedBat_Cave_Cove
RedBat CaveCove

When the user enters an item or a location is used in an element of an XML file convert the item or name to a “standard” form where the white space and underscore are removed. You will probably also want to convert everything to lower or uppercase.

Demonstrate a working version of your program to me and turn in a copy of the *relevant portions* of your application.