**“Encoded” – Visual novel Scripting Language Documentation**

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**Abstract**

Encoded is a command based scripting language purpose built for creating interactive visual novel experiences for PC/Unity. It is in essence an interpreter for Unity that streamlines the process of doing things like setting up scenes with sounds, backgrounds, animated 2D sprites, transitions, etc. Commands are interpreted from top to bottom, left to right. The parser detects unique terms separated by spaces. (‘ ‘) Commands cannot span multiple lines, all syntax and logic must be on the same line. Encoded makes use of a **Label** system, **Labels** mark points in the script to which you can go to at any time using the **Jump** command OR through use of the **Jump** command embedded within the **Choice** command. (See more in **Branching/Choices**)

**Interpreter**

The entirety of a script is parsed line-by-line before execution. This is done every time the game loads. Syntax errors will be thrown during this parsing. The parser will also print the parsed command line-by-line during this time. During execution, the interpreter executes parsed commands line-by-line in parallel with the progression of the game. For example, the command “jump myLabel” will be parsed by breaking it into its component parts, the command “jump” and the identifier “myLabel” and placed into a command list to execute. Whitelines are NOT placed into this list. Thus, the commands list indices will NOT correspond to the line your commands are written on in the script file.

**File type & language support**

Script files are saved in the .txt format with UTF-8 encoding, enabling use of characters for most languages. They are built into Unity text assets upon execution of the game. Languages that are known to be supported at this time are English, Chinese, and Japanese.

**Commenting**

You can comment a line of code in the script by using an octothorpe (e.g. #comment).

**Commands**

choices

define

hide

if

jump

label

lighting

play

return

scene

show

stop