

# LUAGUI

## General

We have an opening for a stand-alone project for an experienced C++ programmer. Project name: LUAGUI (LG)

The object is to bind a graphical layer on top of the scripting language LUA 5.1, using this small open source project showcase (ScriptStudio):

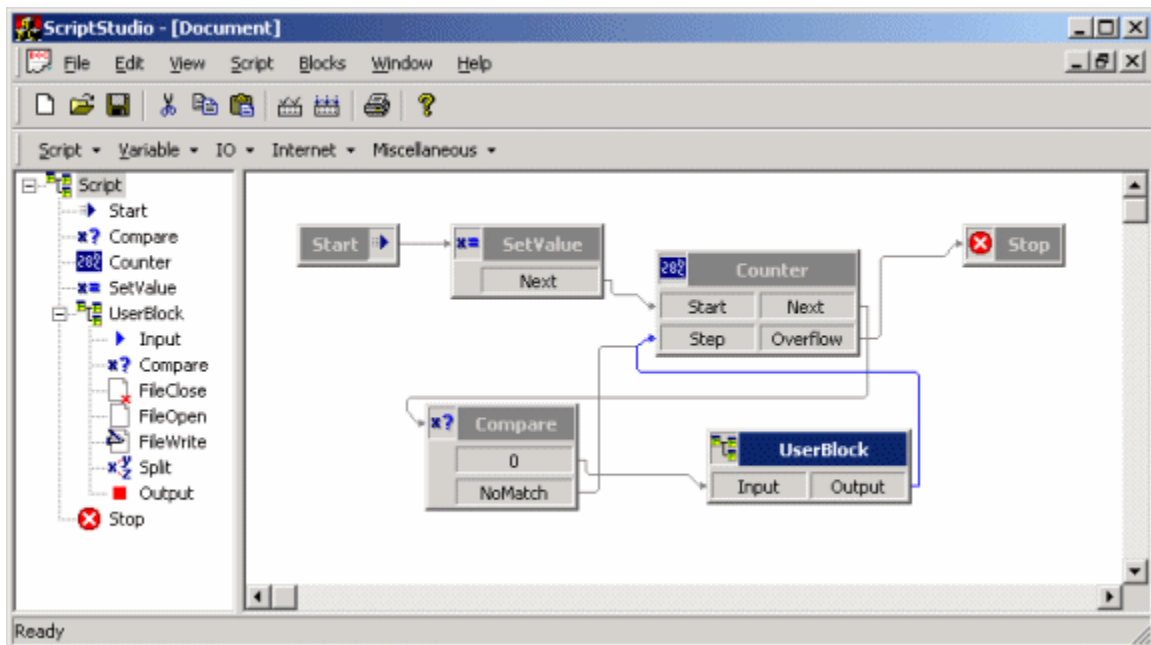
<http://www.viksoe.dk/code/scriptstudio.htm>

LUA:

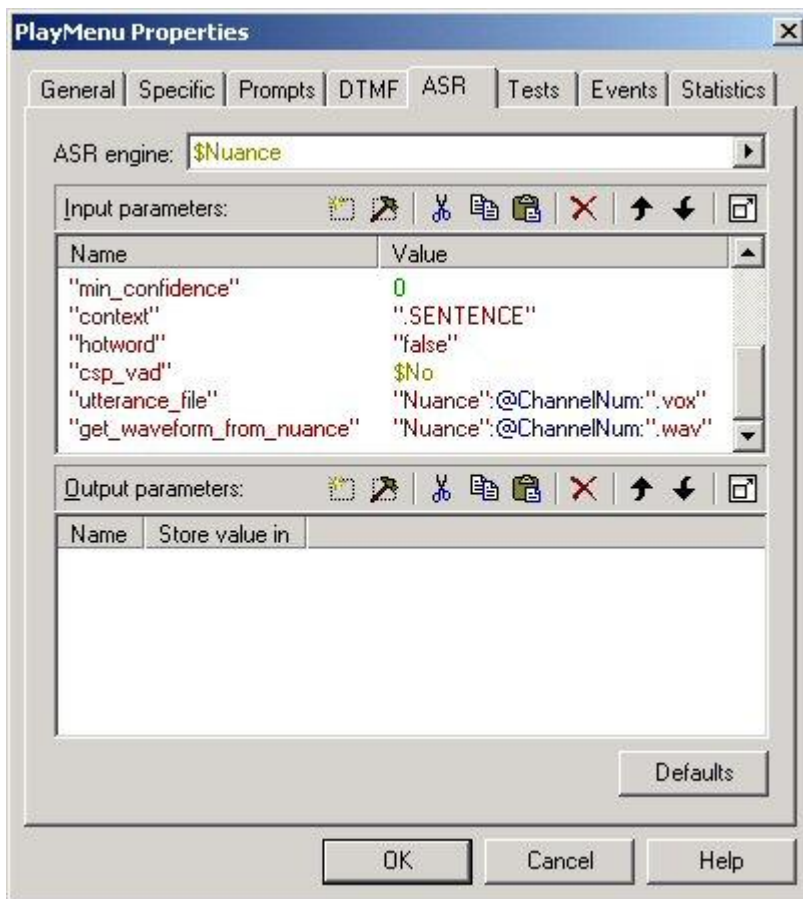
<http://www.lua.org>

This means scripts can be graphically written and compiled from the graphical environment and viceversa - this program can read a LUA script and present this graphically, like seen below.

And it can read a LUA script and present this graphically



A box as seen above can represent a LUA function that can have various parameters, this should be represented by right-click functionality, which will bring up a window like below. This will of course expose different functionality depending on the LUA function



## GUI

Should be a clone of Scriptstudio, with same functionality and look. Please download the demo and play around with this before accepting this project.

## User blocks

As seen in above screenshot a box is called "User Block" this contains blocks of code that opens by double-clicking.

A block should be able to be defined in the LUA script itself (by inserting control codes in the script)

## Environment

VC-2005

Note that example project is VC6, thus need conversion

## Main Goals

Design a LUA script from GUI >> Compiles with LUA 5.1

Read a lua script. Reads a LUA script and present this graphically.

Convert scriptstudio from VC6 till Visual-studio 2005

## Feedback

Variables in LUA should be presented in the proper GUI box

### **LUA supported functionality**

See the addendum. (LG.PDF) Colorcoded functions are those we expect the project to support. However the main goal is coming around LUA, so we can approve a subset of this, but in that case you must supply a suggestion of what functionality you will cover before project commences

### **Example scripts (Proof is in the pudding)**

You must provide the following scripts

1. Classic "Hello World"

2. As example above

3. Calculation example, black&Scholes formula.

[http://www.espenhaug.com/black\\_scholes.html](http://www.espenhaug.com/black_scholes.html) (resulting price seen in LG)

4. Basic Lua tables handling:

- creating empty table (local my\_table = {})
- table initialization (local my\_table = {x = 0, y = 0}) as well as the other way (local my\_table = {}; my\_table.x = 0; my\_table.y = 0)
- manipulating table values (my\_table["key"] = <some\_value>)
- manipulating tables as arrays (local my\_table = {"first\_value", "second\_value"})

5. Support for local and global variables.

### **API**

Since we do not expect you to cover every function in LUA, you must document how we ourselves can apply a new LUA function and expose this in "LUAGUI"

### **Working with us.**

We have good as well as bad experiences with freelance websites. During the project run you must supply a Friday report every Friday- failing to do so, will automatically lead to a sudden-death of the project.

We will use unfuddle.com for project management, (not the sourcepart, this you keep)

Emails will be answered within 24hours, we expect the same from you.

This project is not very time-sensitive, meaning this does not have to be ready within 10 days (bids with 5-10 days are not realistic.)