

# Computational Design Solutions Pt.1

# RHINOSCRIPTING

# LECTURE 2

## 'Coding to keep sanity

- PseudCode
- Commenting procedures
- Debugging procedures

### PSEUDOCODE:

Creating algorithms in natural language

### COMMENTING:

Using pseudocode for understanding the intentions of the code. What are you trying to accomplish in the code?

### DEBUGGING:

\Print statements and printing variables:

- for checking the value of variables
- for verifying location where ERROR occurs in code
- for verifying if function is executing

example:

```
Rhino.Print "I am here..."  
Rhino.Print "Inside 'some function'..."
```

## 'Using resources

<http://www.rhino3d.com/support.htm>

This page has links to the Rhino News Group. There is a whole community of people working in Rhino who are helping each other figure stuff out.

<http://www2.rhino3d.com/resources/>

Software and plugins for Rhino.

<http://reconstructivism.net/>

Fantastic resource for Rhinoscripts and Advice. We will be using David Rutten's tutorial as reference material. Rutten is also a great contributor to the Rhino Newsgroup.

<http://msdn.microsoft.com/library/>

General VBScript Reference. Sometimes the question you have has nothing to do with Rhino...

<http://dritsas.net/scripting/>

Stelios is not only an incredible programmer, but generous with his work. The design scripting library is a great selection of functions you will use over and over. Thank him.

<http://www.jedit.org/>

JEdit is a free text editor with syntax highlighting.

<http://www.hyperionics.com/>

<http://www.hyperionics.com/hc/index.asp>

Capture software for Rhino. You'll need this for your final presentations.

<http://www.flos-freeware.ch/notepad2.html>

A free text editor with syntax highlighting.

## 'Surfaces and 3D operations

- Creating surfaces

`Rhino.AddEdgeSrf(...)`

`Rhino.AddLoftSrf(...)`

- Extrude

`Rhino.ExtrudeCurve(...)`

`Rhino.ExtrudeSurface(...)`

- Offset

QUESTION: What happens if you can not find a Rhino method you need?

Difference between methods and command calls

- Unrolling surfaces

`Rhino.Command "UnrollSrf"`

## **'Review exercise**

Review exercise and continue working on results

## **'Groups**

Students should group themselves in teams of three for final project