

Introduction to Digital Media 2

Carnegie Mellon University School of Architecture Spring 2011

Week 1: Handout

Goal

Reviewing Rhino basics - elementary functions/operations

Basics

General features of a program: Screen, menu bar, icons...

Views (Graphical Windows)

- rendering options wireframe, shaded, rendered, ghosted...
- right click names to reset/change the view
- double click names to a full-screen view/return to default 4 screen view Input method: menu, icons, and Command line entry (similar to AutoCAD)

Creating geometry

1-D (no volume) - Line and curve, poly line (and more shapes)

2-D (no thickness) - Surface from 1) points, 2) curves (= edges)

3-D - solid from surfaces and meshes

Coordinates (x, y, z of the mouse pointer shown at the bottom of the screen)

Editing

Select/move/copy – spend some time to demo

Rotate/mirror

- show the reference point/line by actually drawing them, then remove Trim/split
- trim is cutting out a piece of the selected side, split keeps all parts

 Offset/array

 offset (1 side appropriate exect distance) array (spulltiple applies passible to 2
- offset (1 side copy with exact distance), array (multiple copies possibly to 2 sides)
 Control point on/off
- for curves (left icon), for surfaces (right icon)

Group (ungroup) and join (explode)

- group produces a set of grouped object (multiple objects) for convenience
- join produces one single object from many

Snap and units

Grid snap

- demonstrate how to change grid spacing
- (usually off for modeling purpose)

Object snap

- snaps to adjacent object
- (usually turn on for modeling purpose)

Units

• type UNITS into command line prompt, show how to change it

Object (= element) type

Curves (include line, polyline)

Surface/mesh

Solid

• knowing types are important because different type objects sometime cannot be processed through Boolean operation

Miscellaneous

Help

Layer