

Introduction to Geomodeling with SketchUp and Google Earth

Modeling a City Guide PDF: http://www.google.com/intl/en/sketchup/3dwh/pdfs/modeling_a_city.pdf
Video Tutorials: <http://sketchup.google.com/intl/en/3dbuildviewer.html>

Keys to Success

- Maintain accuracy in scale and location
- Focus on the important and identifying details
- Show small, intricate details through photo textures
- Keep a low polygon count
- Make it beautiful

Tools

- SketchUp
- Google Earth
- 3D Warehouse
- Photoshop
- Picasa

Work Flow

Taking Pics

- Take an extensive amount of photos
 - Context
 - Detail
 - Corner shots for Match a Photo

Building a Model

- Getting Started
 - Importing Terrain from Google Earth into SketchUp
 - Adding color to your terrain
 - Google Earth Pro allows options in image resolution
 - Align axis
- Simple Modeling
 - Simplify curves
 - Face orientation
- Components
 - Editing inside components is Global, outside is Local
 - Mirroring components
- Grounding your model
 - Toggle terrain on
 - Building additional terrain
- Clean up
 - Delete non-visible faces and extra lines
 - Check for z-fighting
 - Purge!

Photo texturing

- Applying a texture
 - Crop in Picasa
 - Import as texture
 - Apply
- Positioning a texture
 - Fixed pins vs. Free pin
- Matching the best photo
 - Matching a photo
 - Tracing a matched photo

Uploading your model

- Hide edges
 - Styles menu
- Set up an engaging screenshot for the models thumbnail
- Share model
- Sign in
- Fill out the model's information
- Check the box indicating the model is real, current and georeferenced
- Upload!
 - Generally will take between 3 - 6 weeks to appear in Google Earth.

Tips & Tricks

- SketchUp
 - Curves
 - Projecting
 - [JF] Unfold
 - location: <http://sketchuptips.blogspot.com/2007/08/plugin-unfoldrb.html>
 - Smoothing curves
 - Hide and Unhide
 - Create groups within the model and hide parts you are not working on to speed performance
 - Hidden geometry
- Photoshop
 - Crop out perspective
 - Color correction
 - Quick mask + gradients
 - Edit out obstructions
 - Marquee - v + shift + alt
 - Clone
 - Patch
 - Advanced textures
 - Alpha transparencies
 - Tiled images
 - Adding to textures
 - Reflections
 - Shadows
 - Feathering selection
 - Saving for web use - s + ctrl + alt + shift