

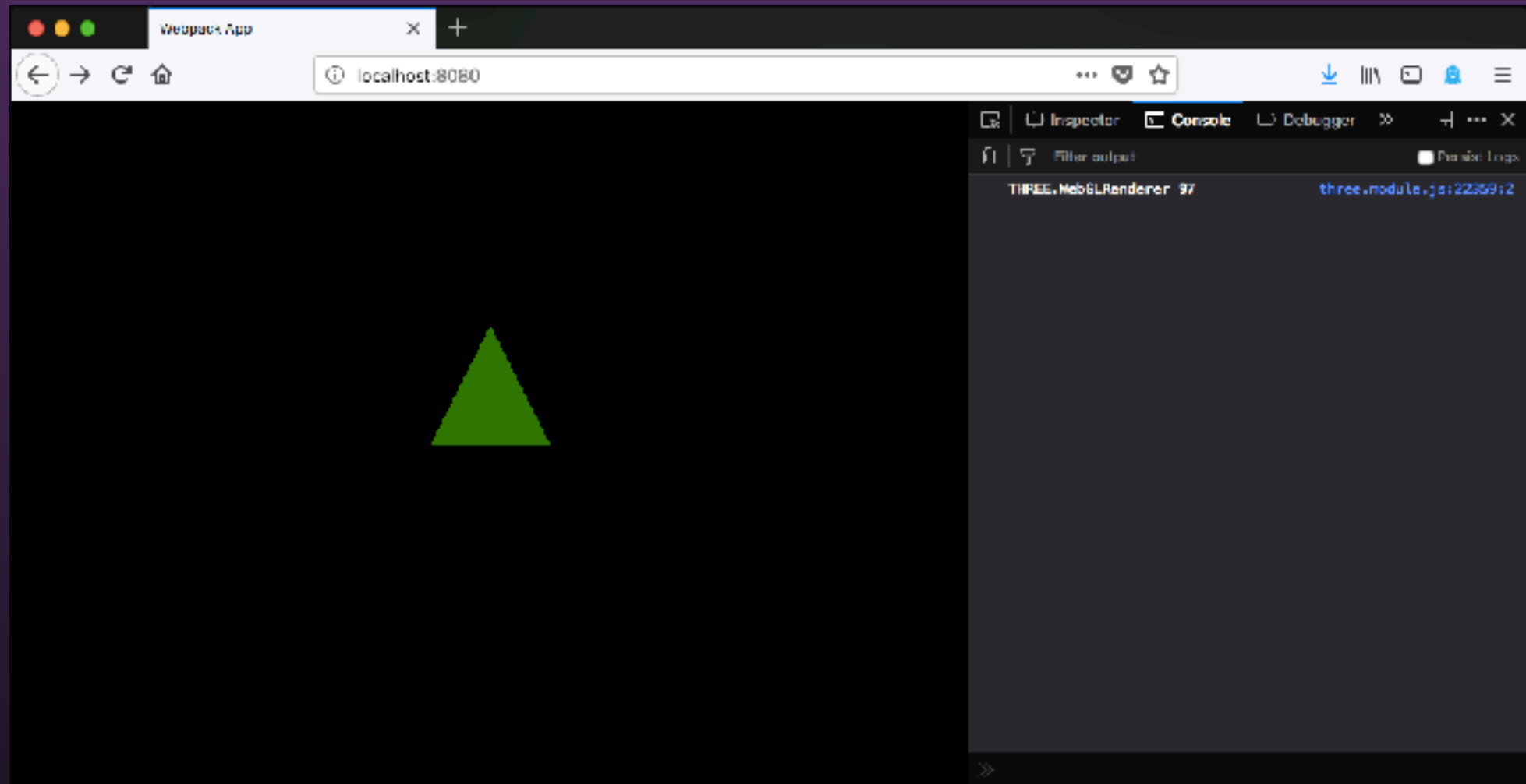
# Computer Generated Landscapes

## November Update

Tom Arnold

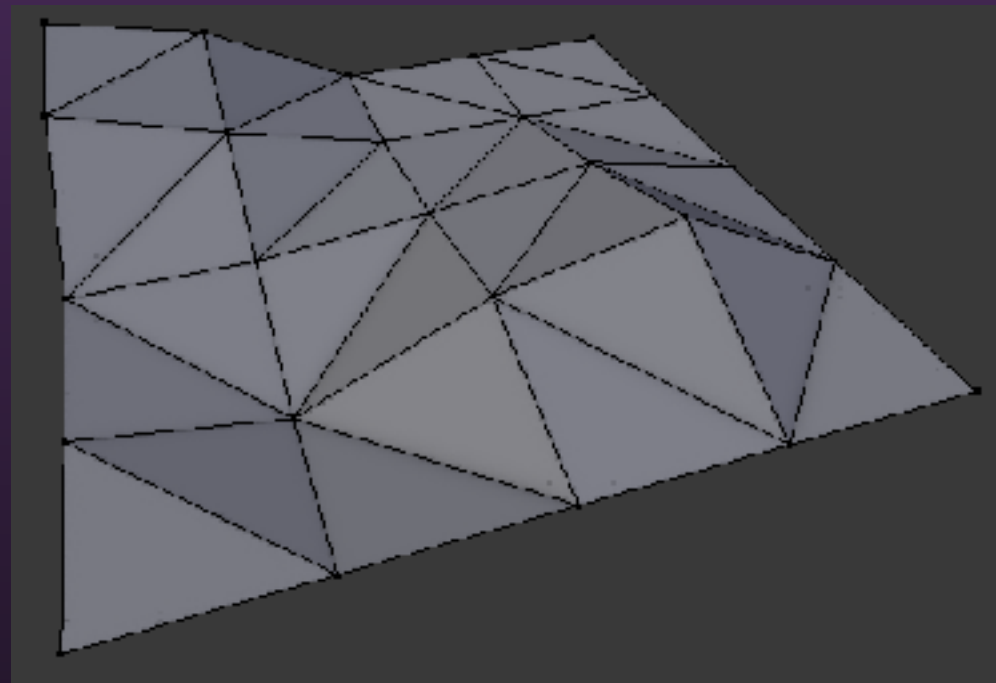
# Project

- Basic skeleton with Webpack / ThreeJS
- <https://bitbucket.org/Tom9729/csci716-project>



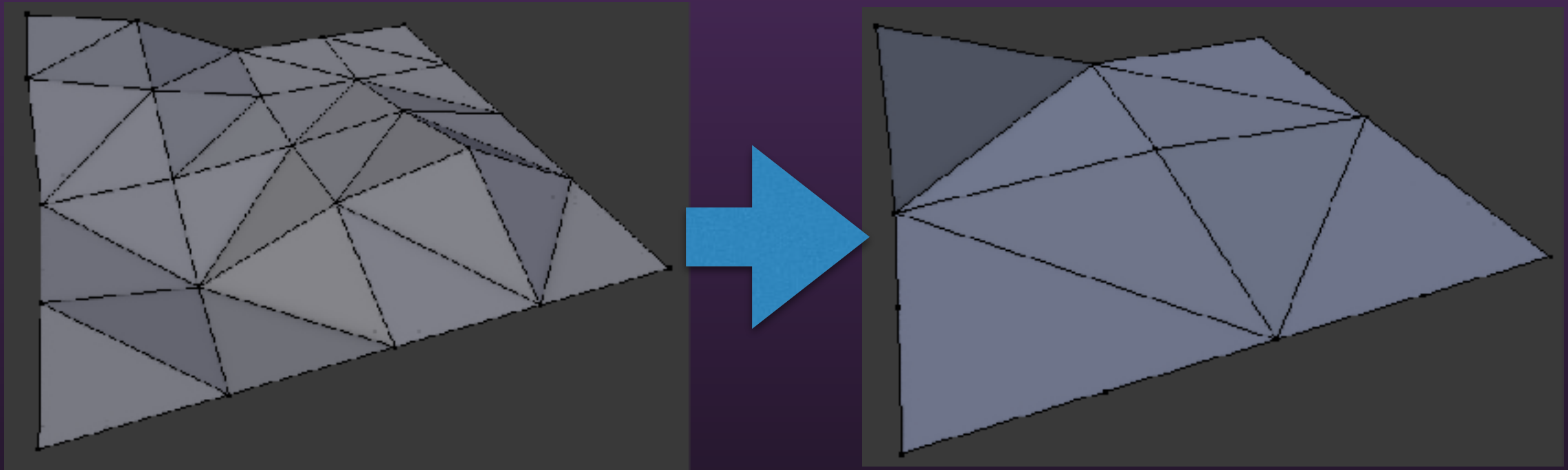
# Level of Detail Algorithms

- Render parts of scene at lower quality to save resources
- Focusing on triangulated height maps



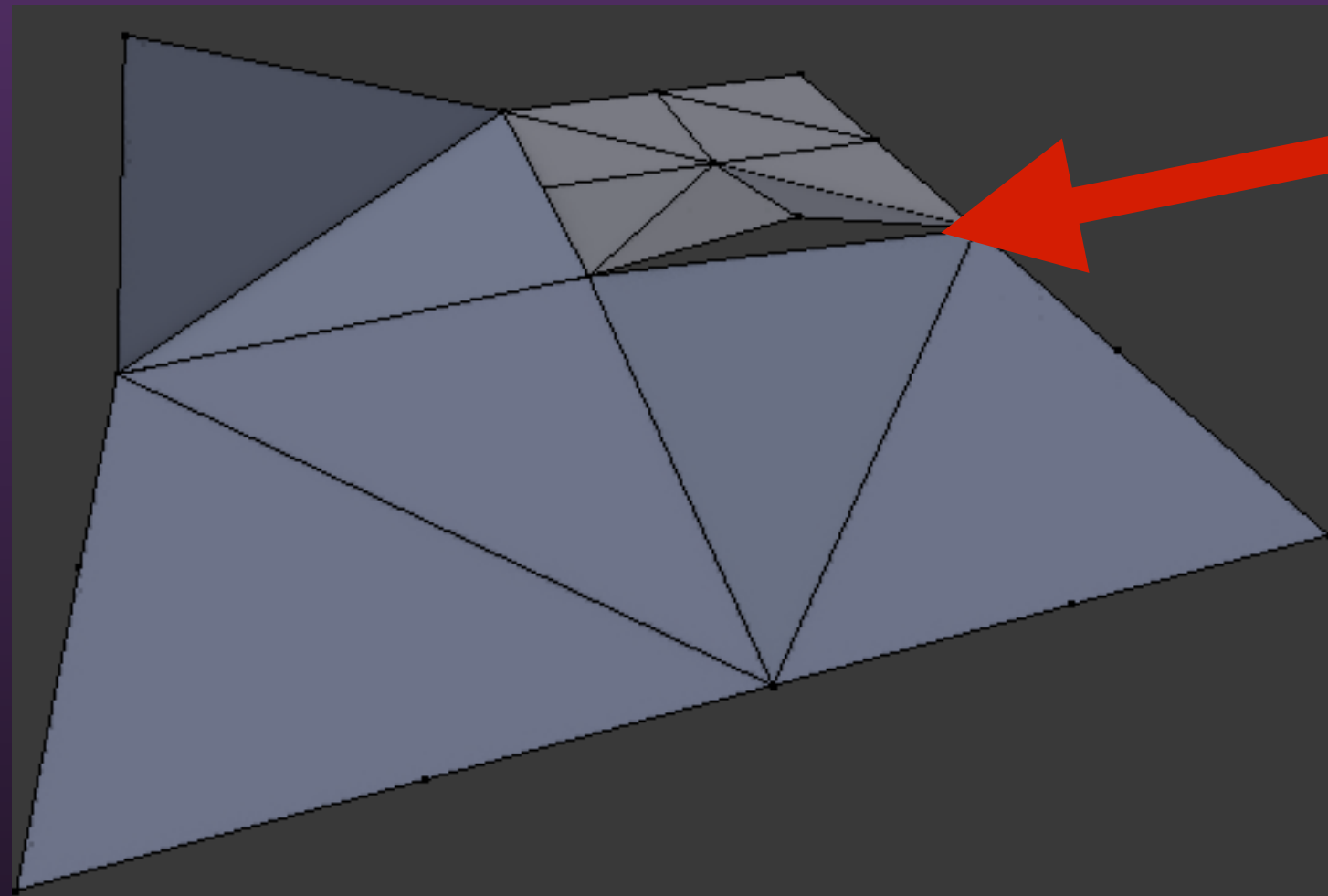
# Approach

- Work backwards from full resolution
  - Full resolution = 8 triangles
  - Low resolution = 2 triangles



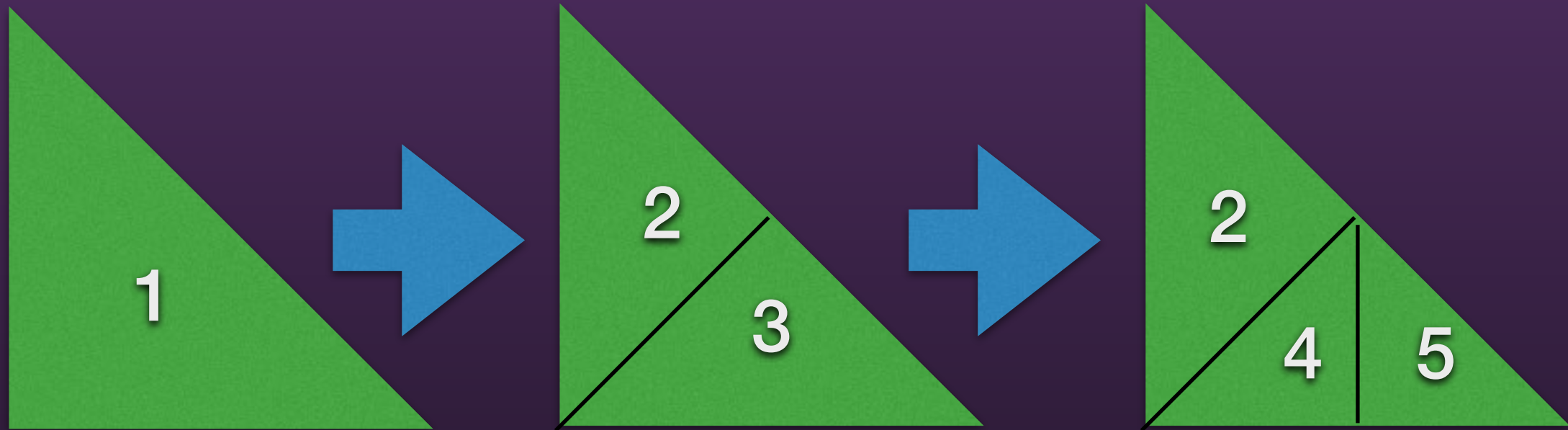
# Problem

- Connecting different resolutions leaves gaps



# Triangle Binary Trees

- Kind of like quad-tree / binary tree hybrid
- Recursively split triangles



# What's Next

- Implement binary triangle trees