

# Milestone Meeting #3

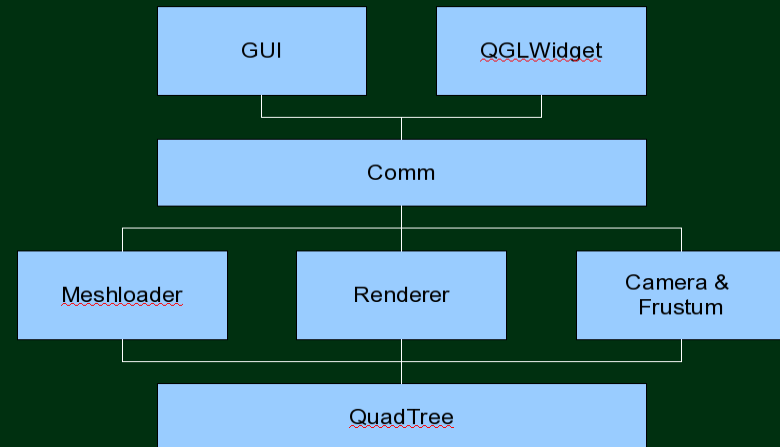
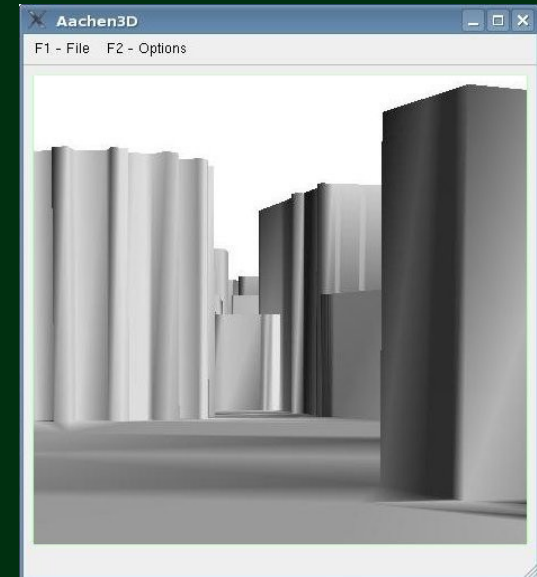
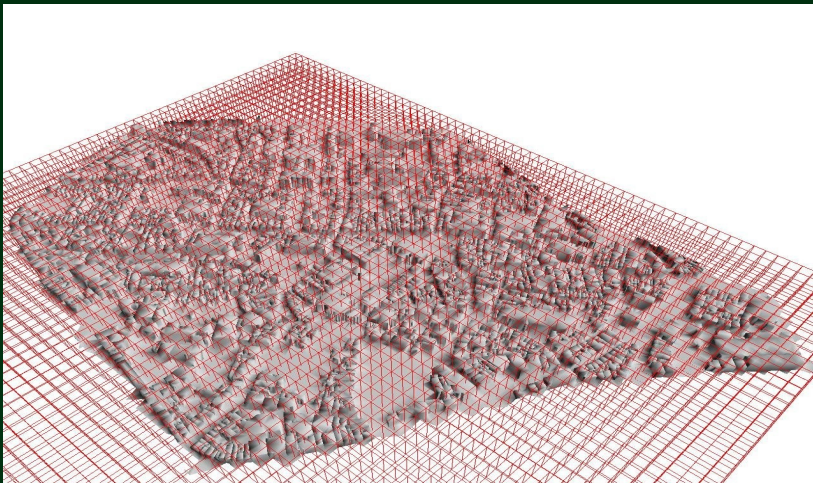
## - Demo -

Michael Königs  
Michael Bußler



# Overview

- Milestone 1:
  - First steps in OpenGL and QT
  - Create Framework
    - Quadtree, Meshloader..
  - Rendering



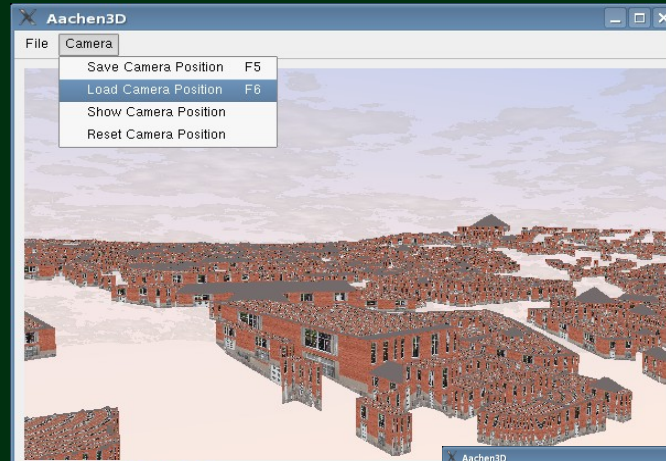
# QuadTree, Camera and Frustum

- Spatial Subdivision
- Automatically fits to mesh
- Sort Triangles into Leafnodes
- Sort Triangles in Leafnodes by id
- Improves Speed of Rendering and Collision detection
- Culling (Intersection Test)

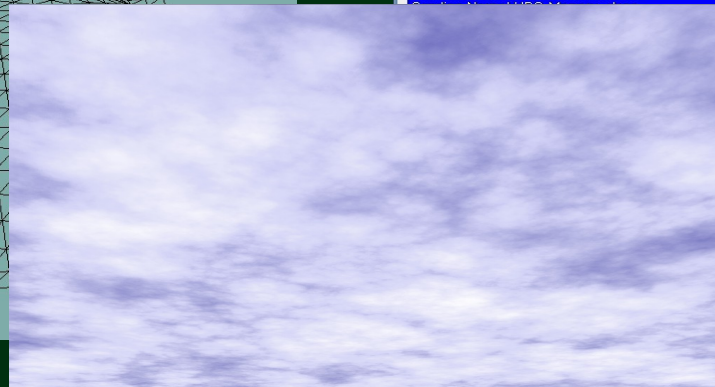
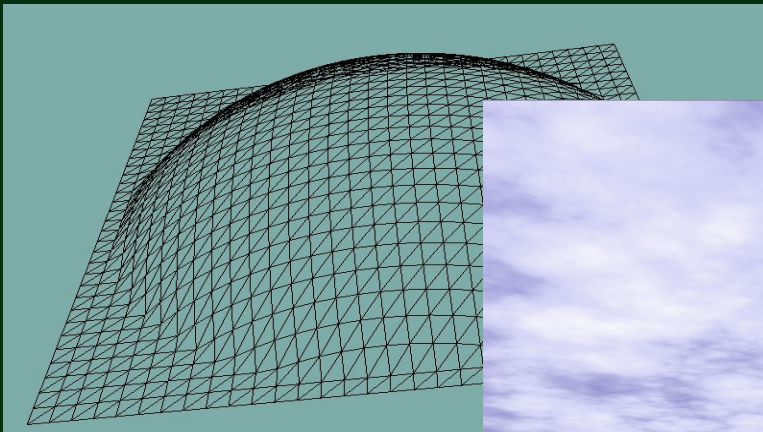


# Overview

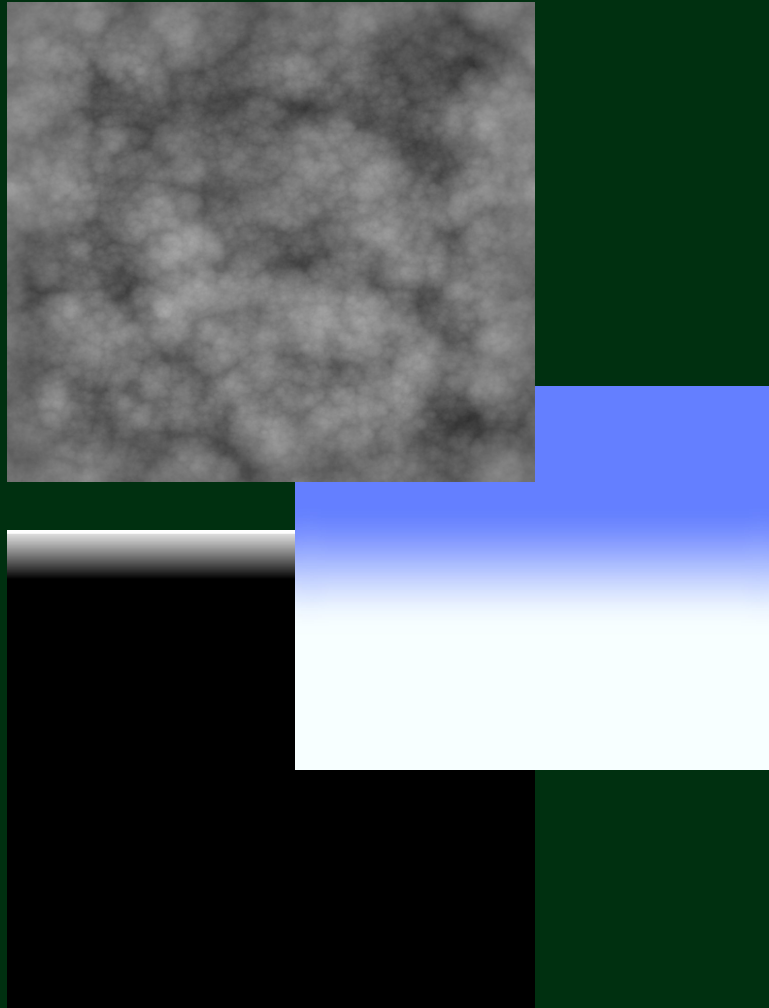
- Milestone 2:
  - Improved GUI
  - Texturing
  - Dynamic Sky Sphere
  - Collision Detection



```
Build IBO ID 0 117 Triangles...  
Build IBO ID 0 553 Triangles...  
Build IBO ID 0 117 Triangles...  
Build IBO ID 0 125 Triangles...  
Triangles in IBOs: 1454140  
done.  
Generating VBO ...done.  
Sending Texture VBO Memory...done.  
Sending Vertices VBO Memory...done.
```



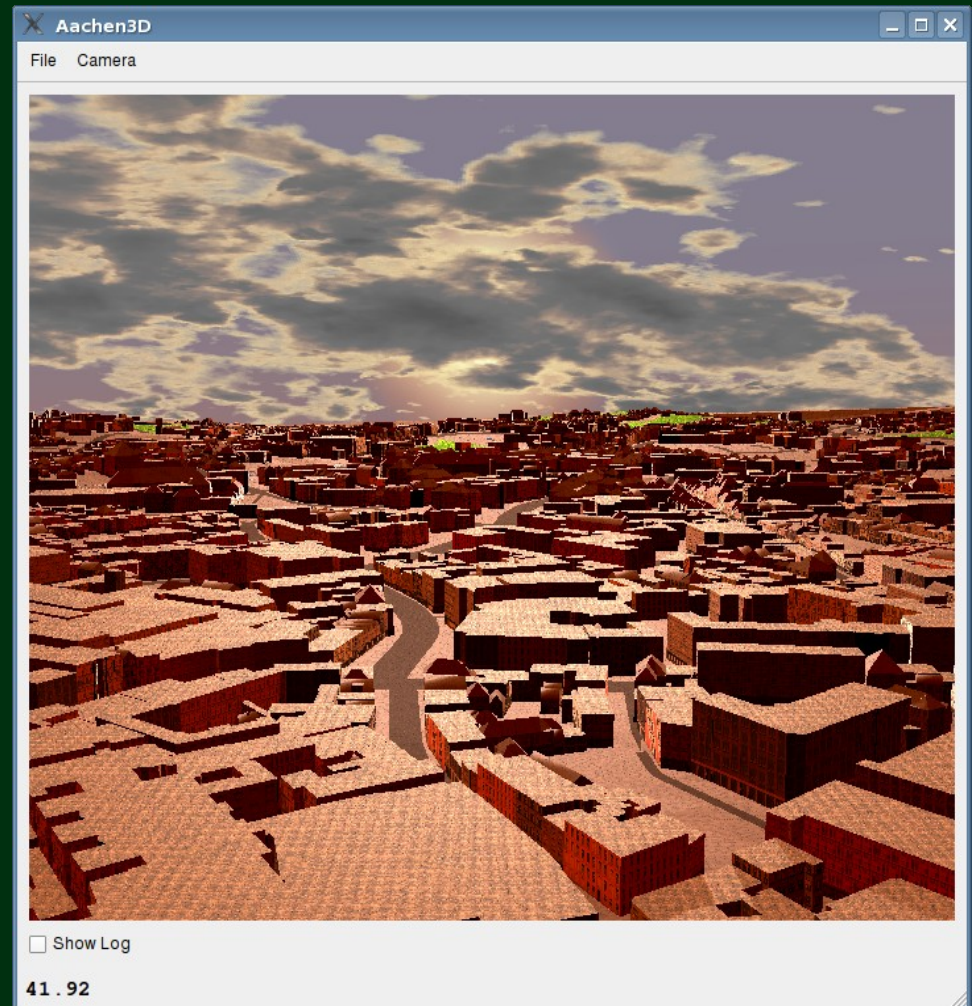
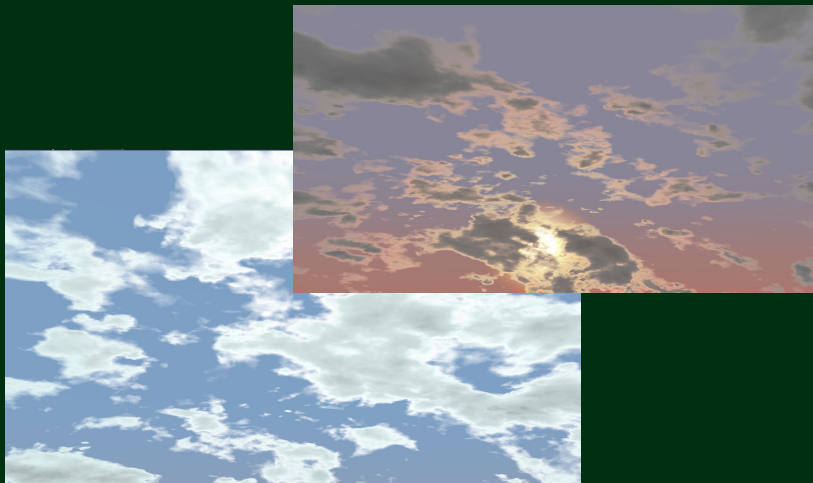
# Sky Sphere Implementation



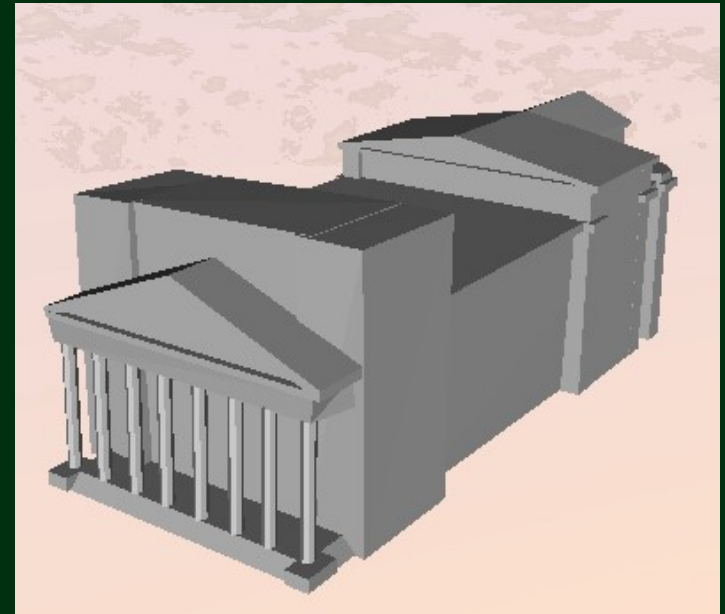
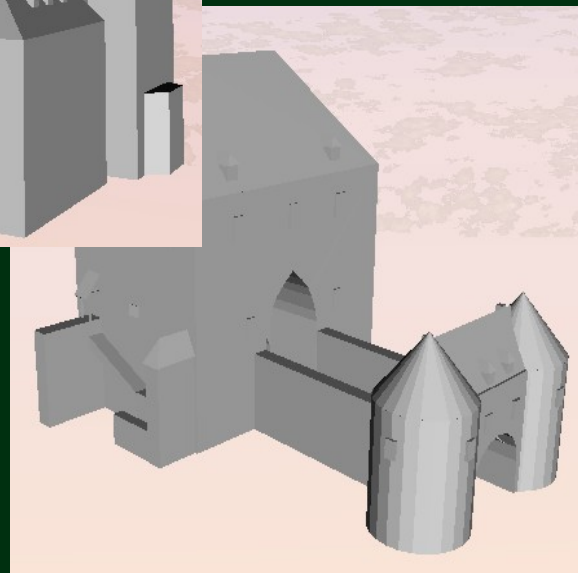
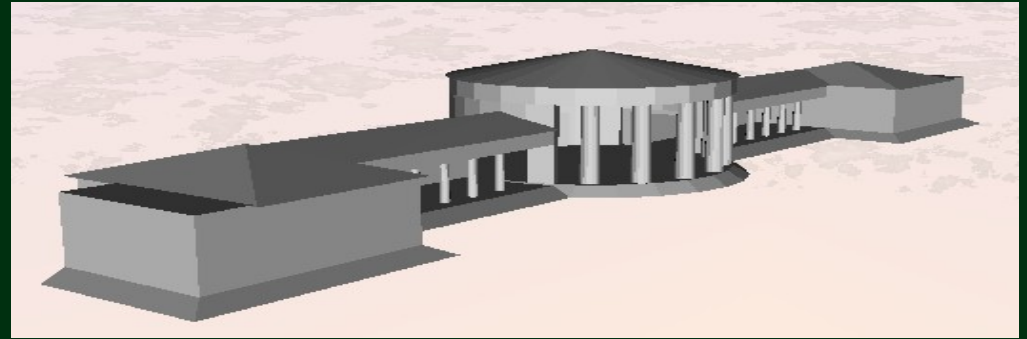
- Generates 3 texcoords
- shader does 3 texture lookups in cloud texture
- Uses a variable blend value to control number of clouds
- Blends cloud value and value from colorfade/sun texture
- Uses different color settings for different weather / daytime

# Overview

- Milestone 3:
  - Shadows
  - VDT
  - Modelloader
  - Bugfixes
  - Create the Demo



# Modelloader

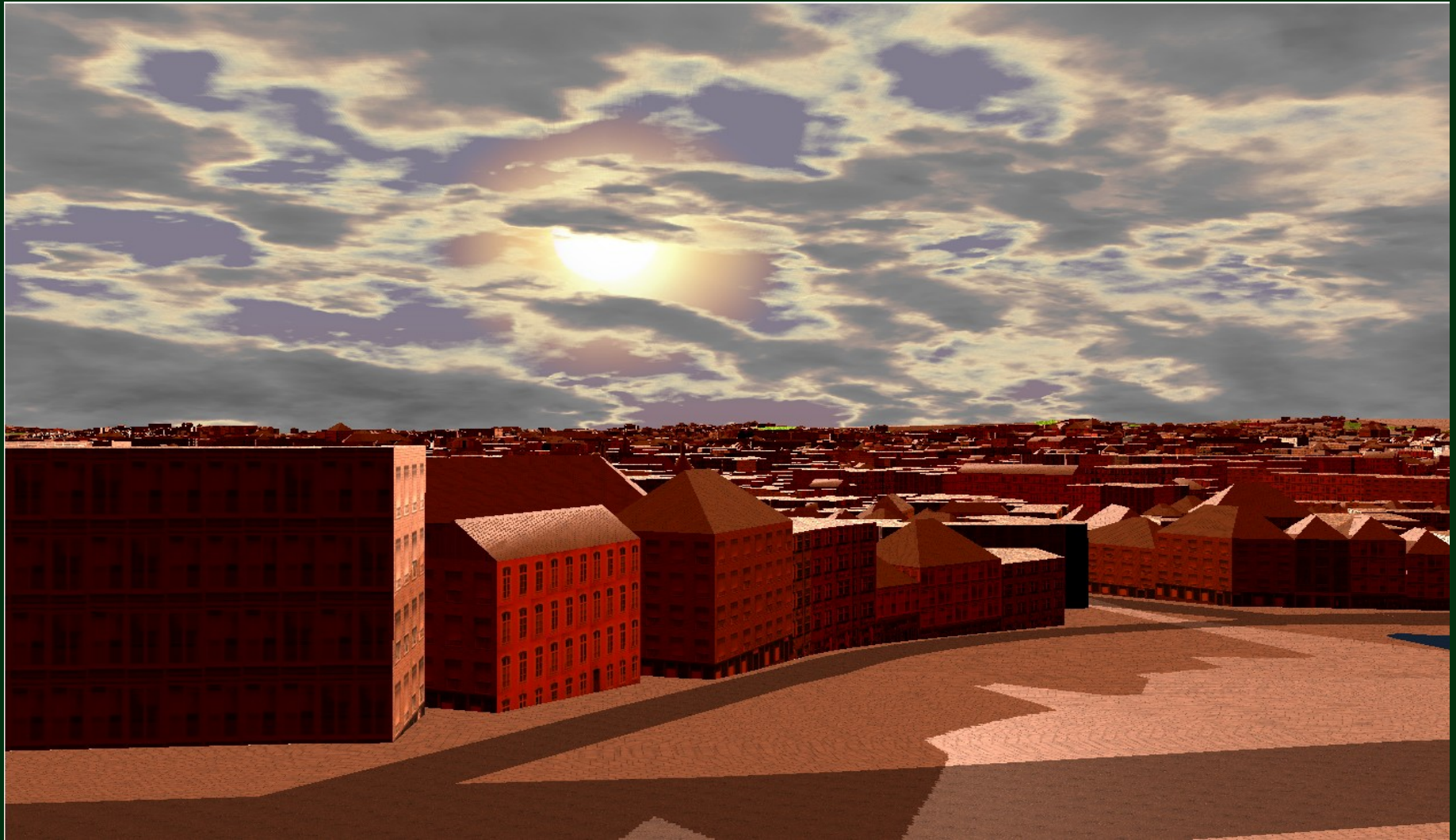


# View Dependent Texturing





# Shadows



# The actual Demo

Will now be presented...



The End

Thank you for your attention