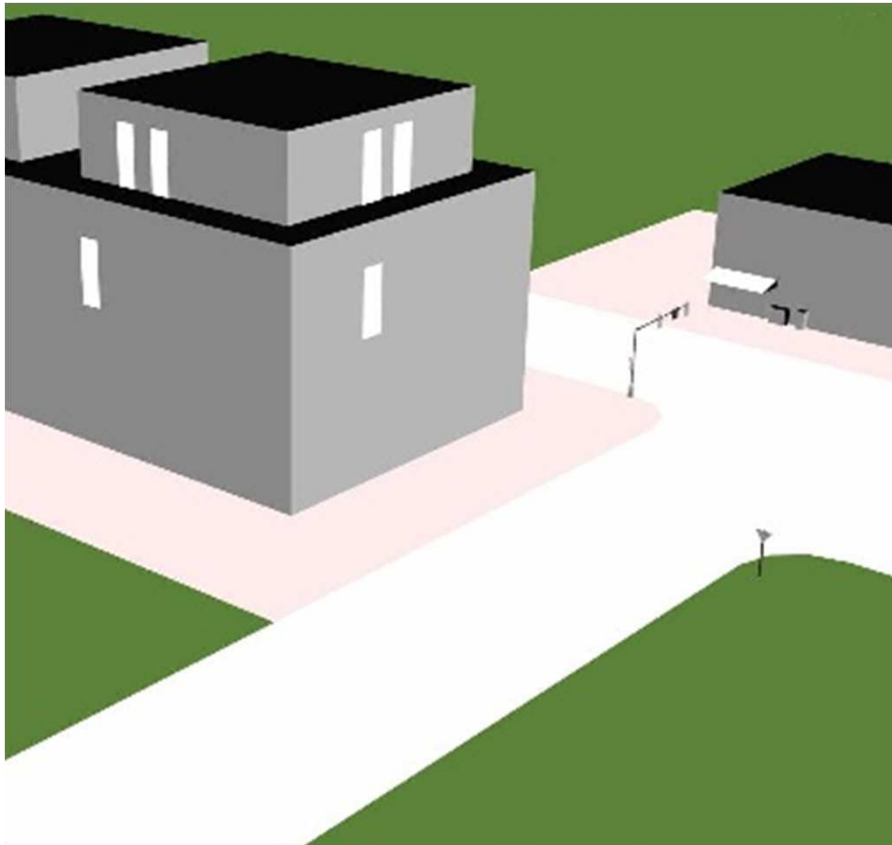


# Texturing

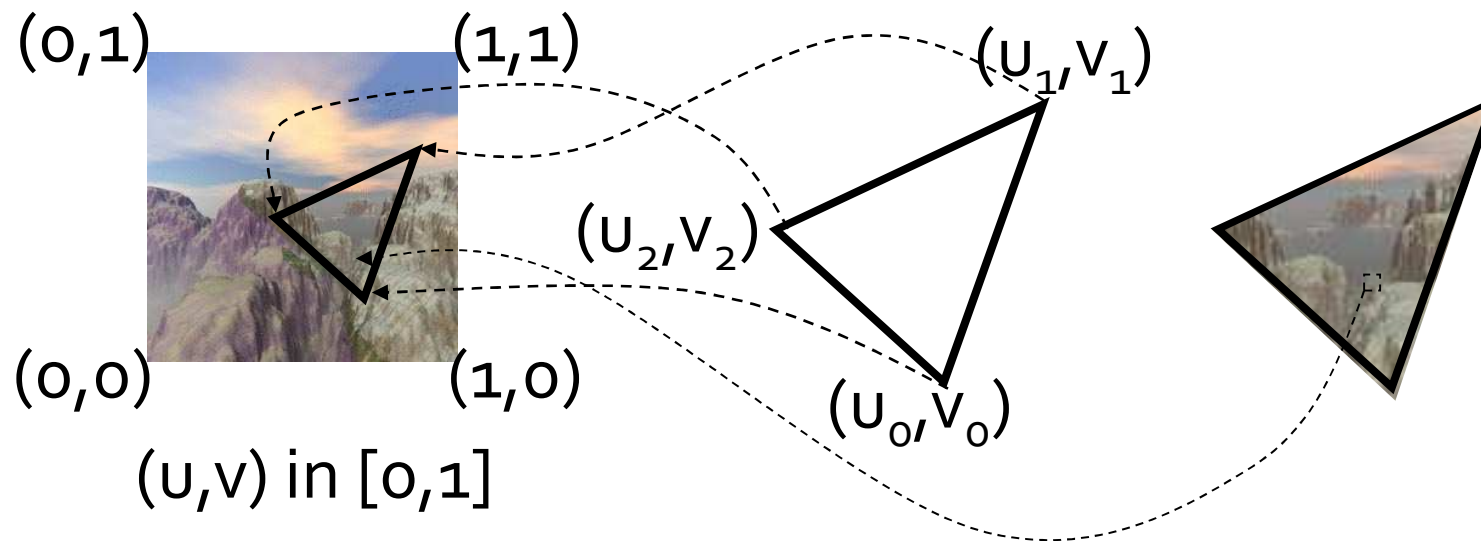
# Texturing = Map Image to Surface



# Adding Surface Detail

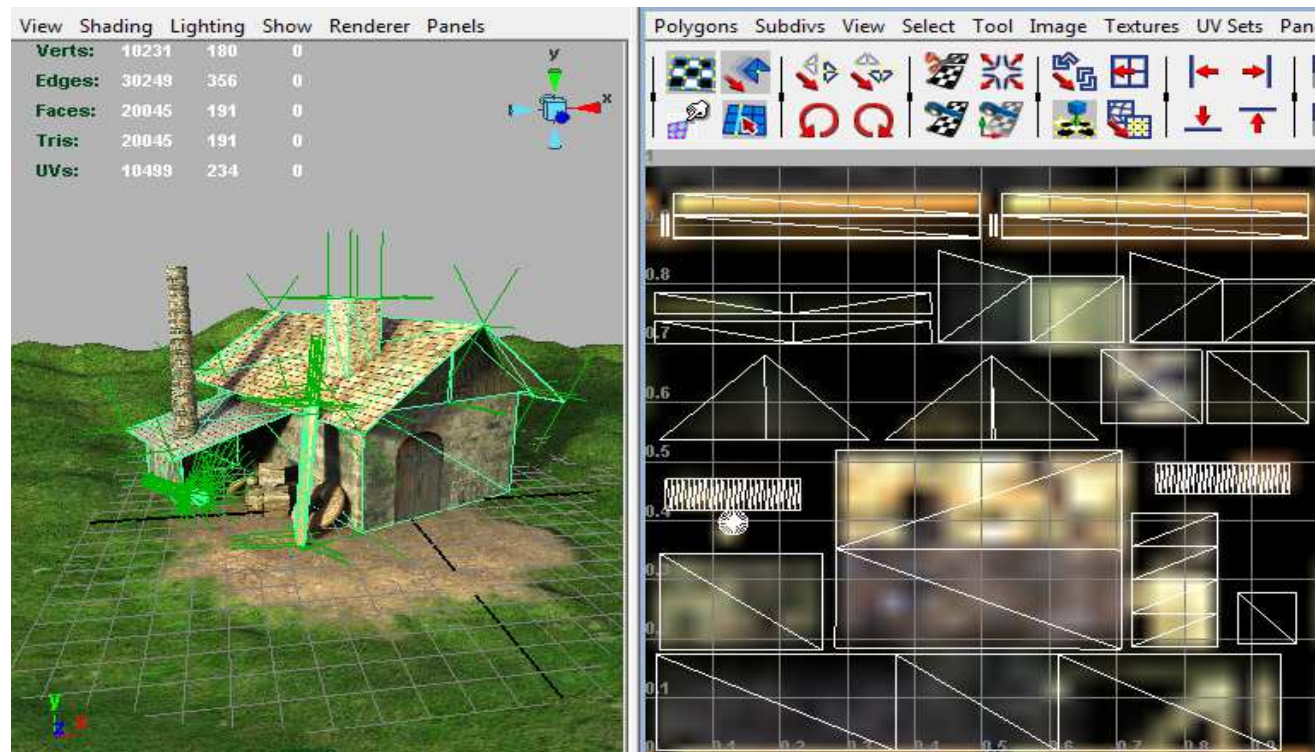


# Mapping – Texture coordinates



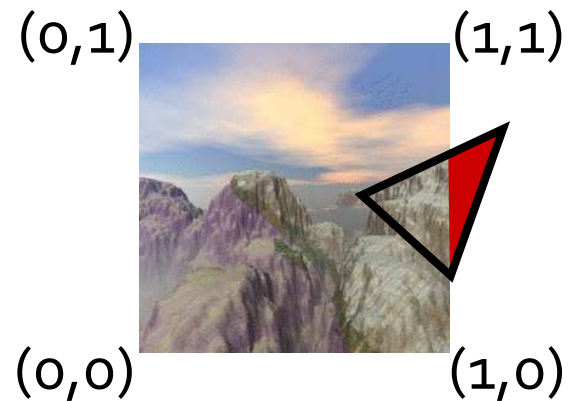
# Texture coordinates

- Where do texture coordinates come from?
  - **Offline:** manual UV coordinates by DCC program
  - Note: **a modeling Problem!**
- Specify yourself



# Texture functions

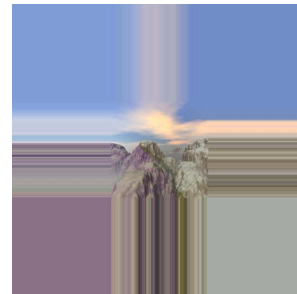
- How to extend texture **beyond** border?
- Border and repeat/clamp modes



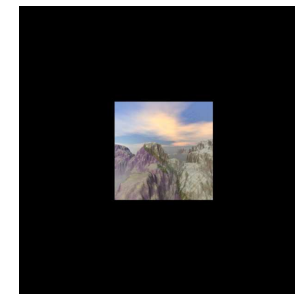
repeat



mirrored



clamp



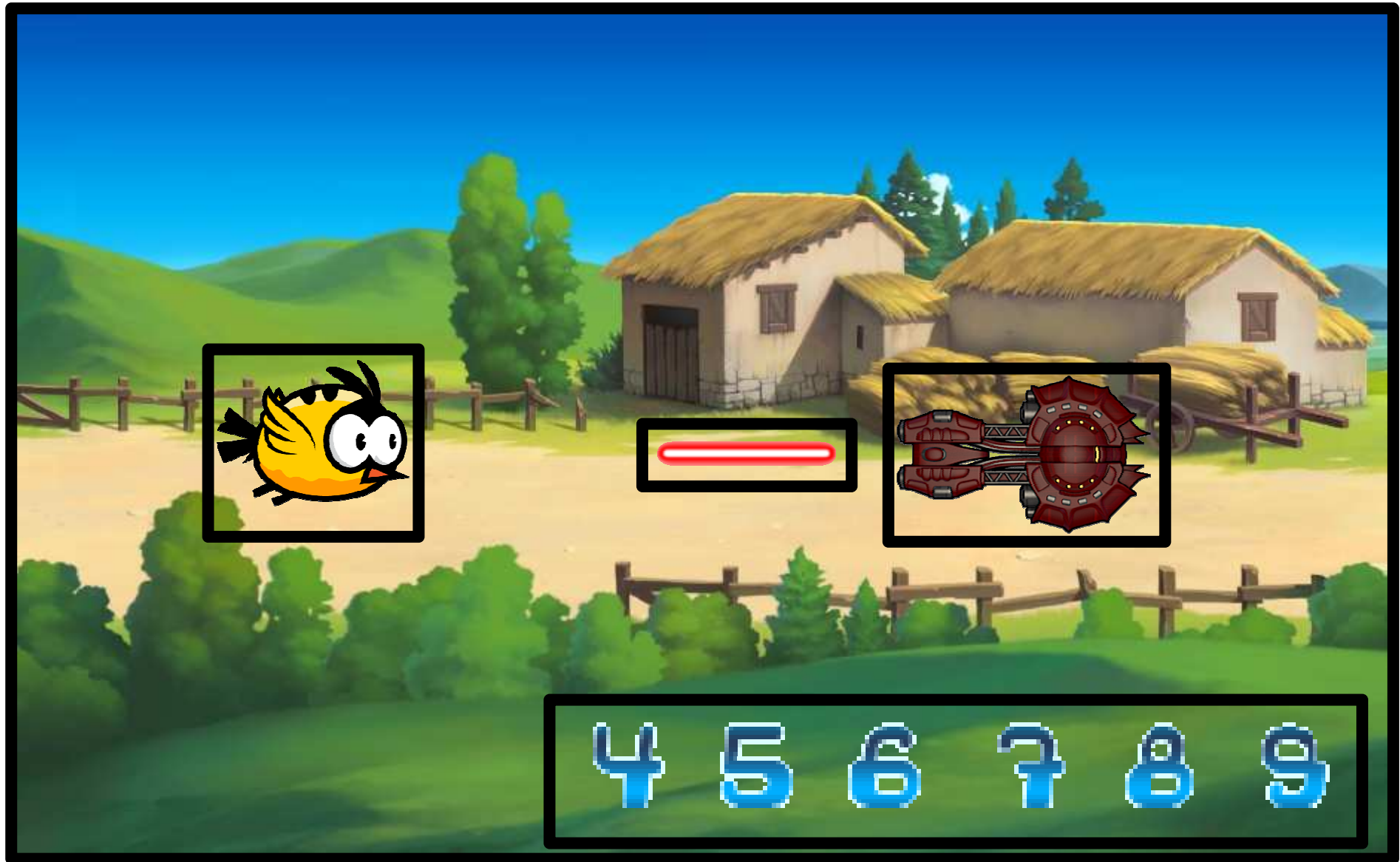
border



# 2D Game Scene

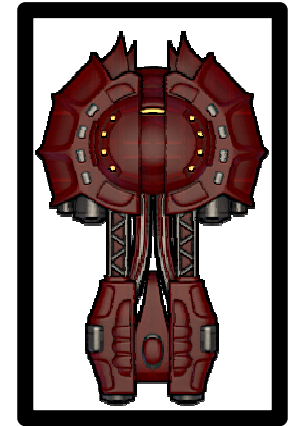
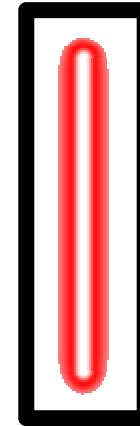
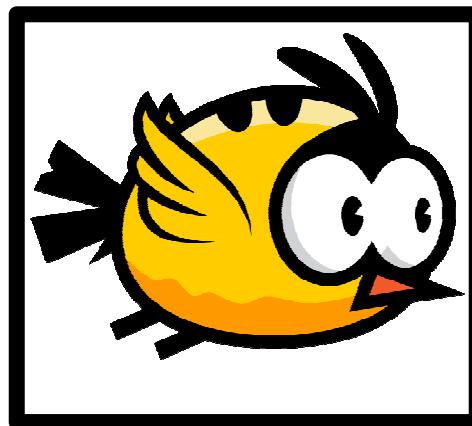


# Scene composed of Sprites

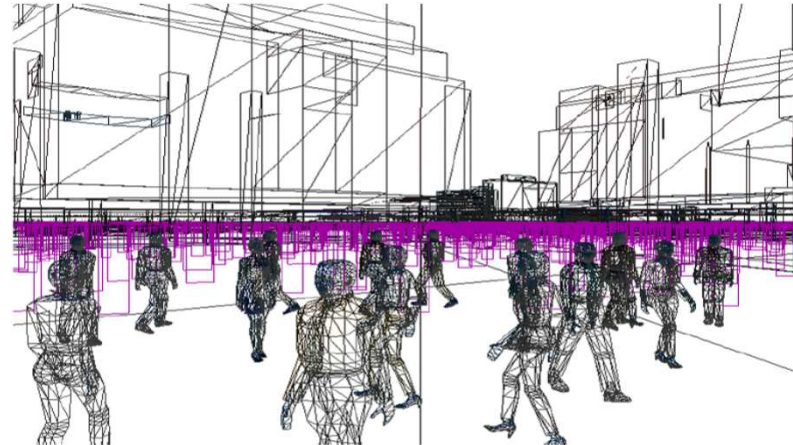
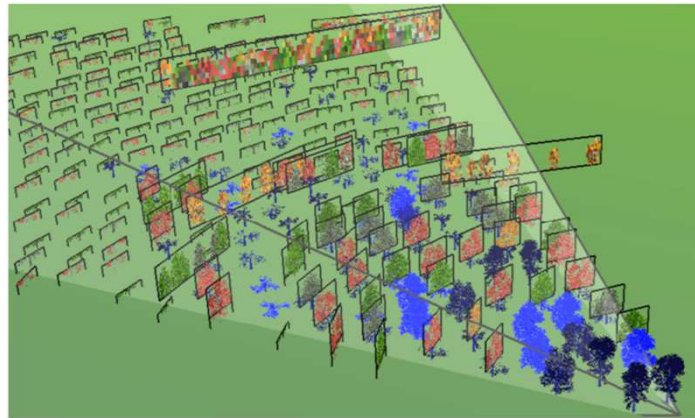
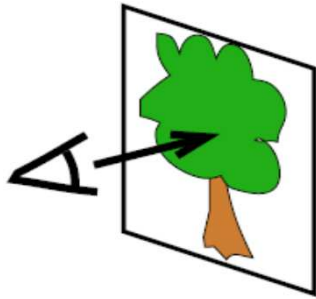




# Sprite – Image of object



# Sprite = Impostor 3D



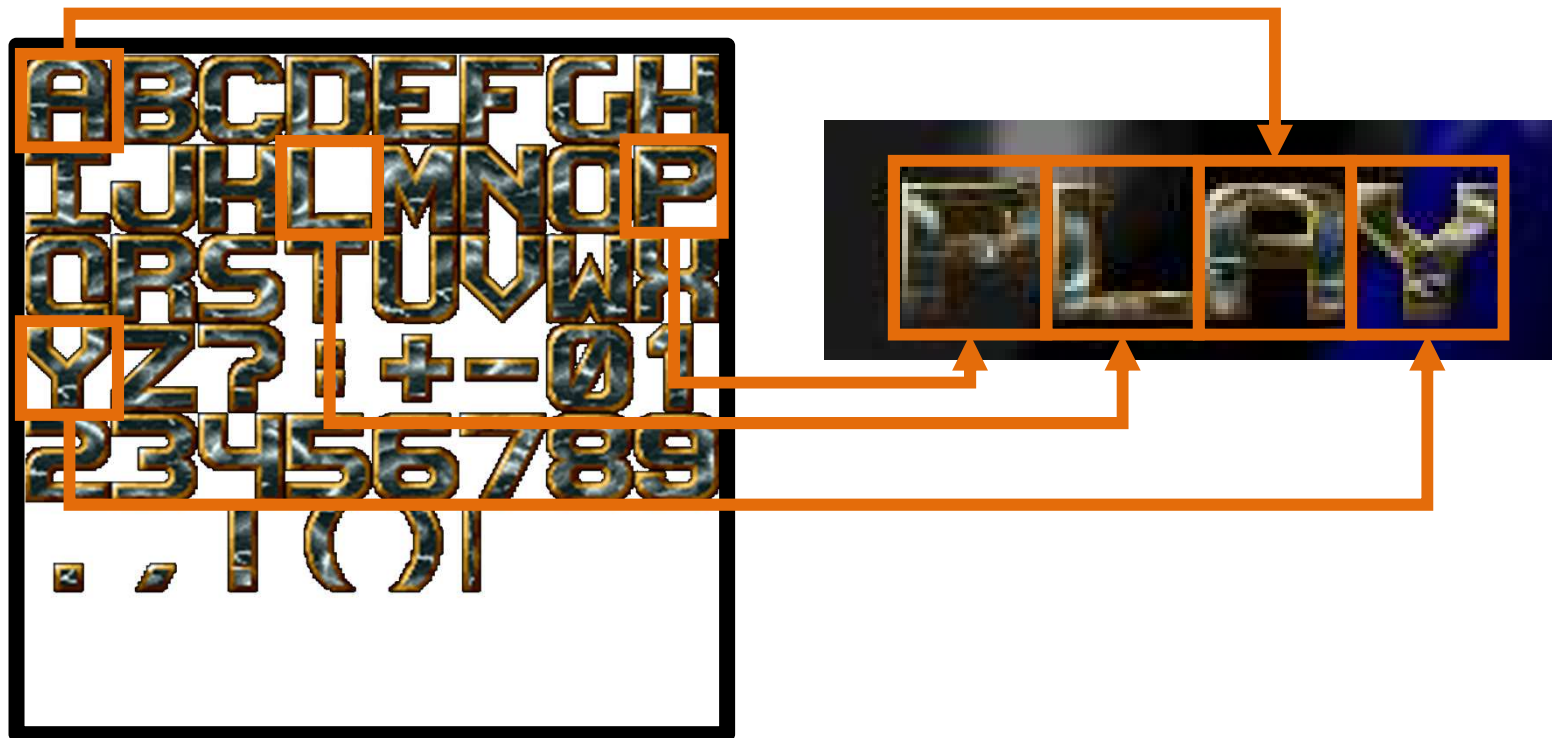
# Bitmap Texture Font

- Want to show changing text



# Bitmap Texture Font

- Idea
  - Characters are from a predefined set
  - Each character has a certain set of texture coordinates
  - Render textured quads one for each character



# Texture Animations

- Each animation frame is stored inside a texture
- Then different frames are accessed over time

