

Mahjong Solitaire

- 144 tiles arranged in a 5-layer pyramidal structure
- Tiles are divided in suits (dots, bamboo and characters), honors (winds and dragons) and bonus tiles (seasons and flowers)
- The aim of the game is to remove all the tiles in pairs
- Tiles can be removed only if they are open, i.e., they
 have no tile on top of them and they have at least
 one vertical side without a neighbour
- If no pair can be removed a game is lost

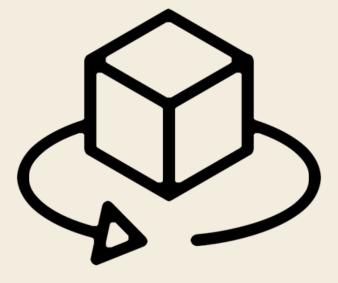


Project features



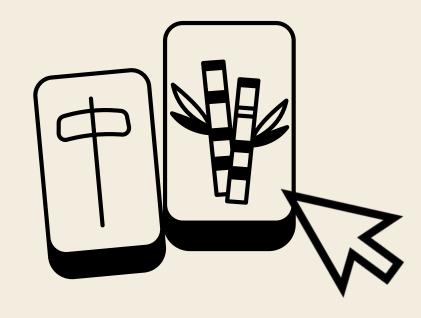
Customization

The game allows selection of multiple textures and light settings



3D solitaire

The tile structure can be observed from multiple angles (look-at camera model)



Selectable objects

Tiles can be selected with the mouse

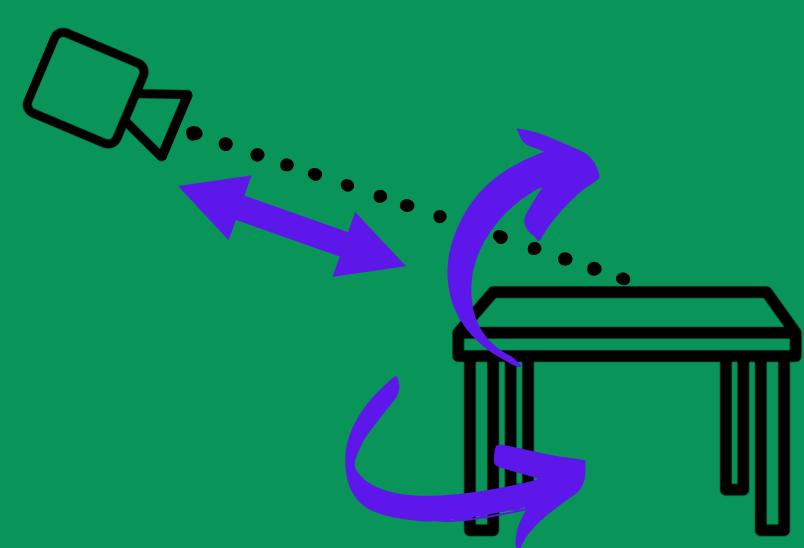


The camera

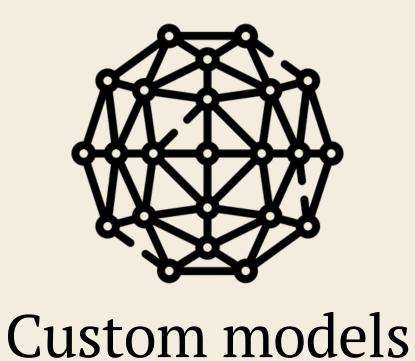
The player is free to move the camera around the mahjong pyramid, changing the vertical angle and the side from which to look at it, and can zoom in and zoom out.

When in the menu, the camera is fixed at a certain position.

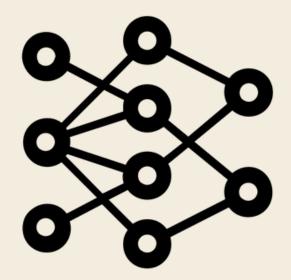
LookAt model



Implementation details



All the models and textures were either generated manually or downloaded from the Internet



State machine

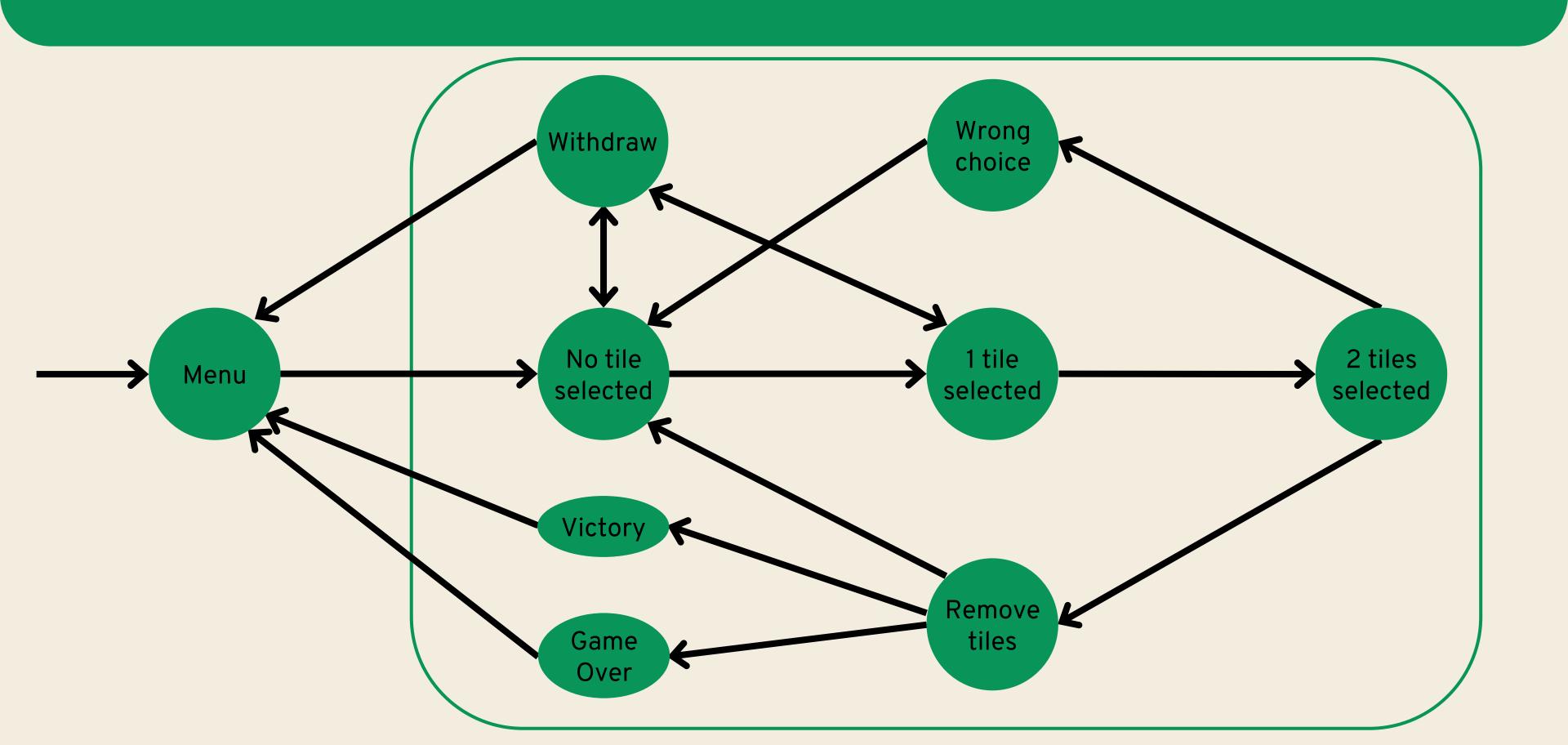
The game logic is implemented as a state machine



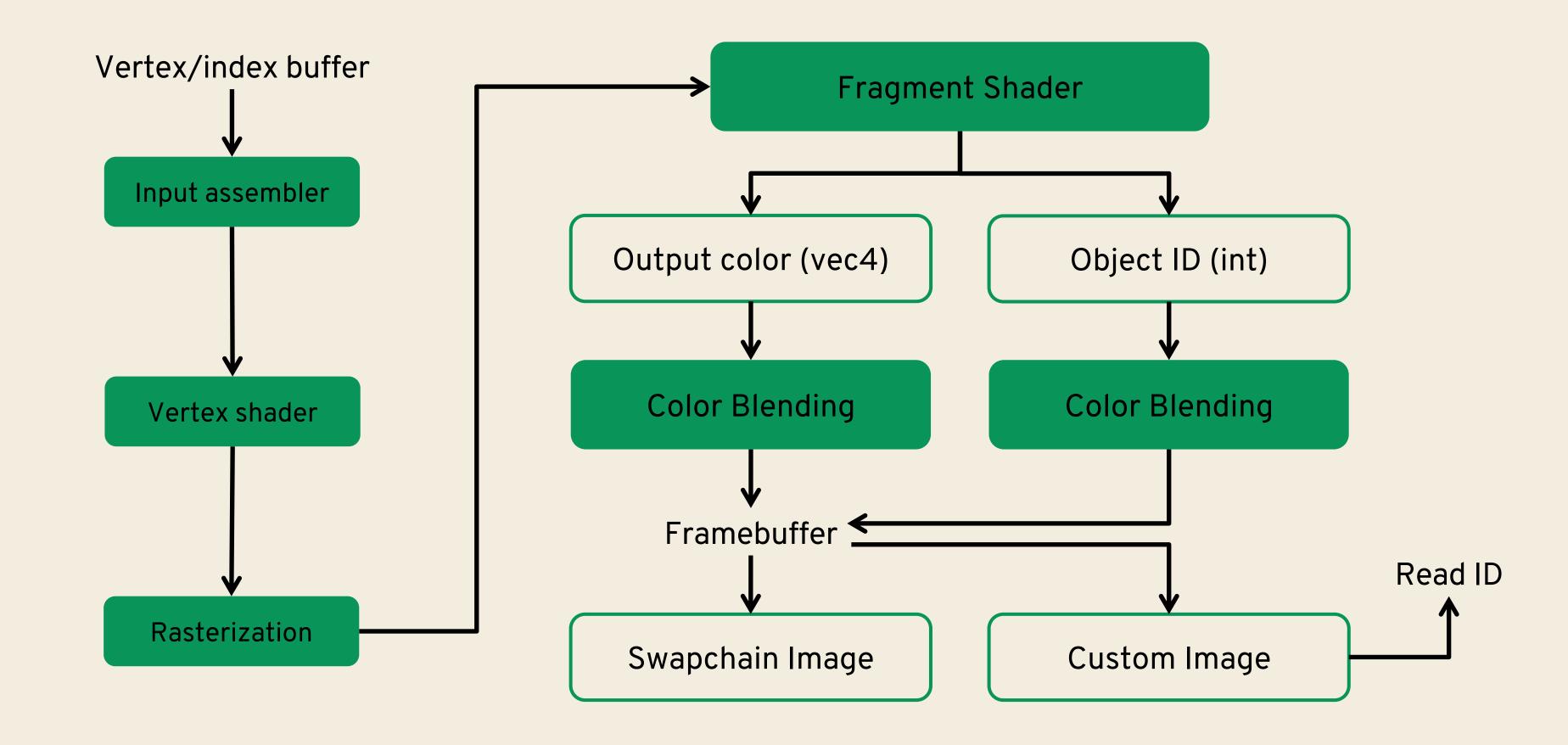
Render-to-texure

Element selection is allowed by a render-to-texture mechanism

The state machine



Render-to-texture





Game over



Victory

