



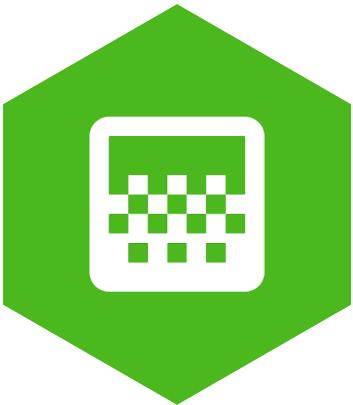
CREATING VARIETY OF ICONS

By Smart Generation

TECHNICAL ARTIST



Tools



Shaders



Effects



Art-Heavy
Game Features

ICON COLLECTION



ICON COLLECTION REQUIREMENTS

- ◆ We need 100s of icons
- ◆ good quality
- ◆ Need to fit the style of other icons in the game
- ◆ Different in shape and color
- ◆ Limited space in memory and app size
- ◆ Should be easy to extend the collection in the future
- ◆ Avoid manual work
- ◆ Create a tool which is fun to use

sprite atlas?



WE CAN DO BETTER

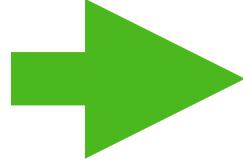


LAYERING

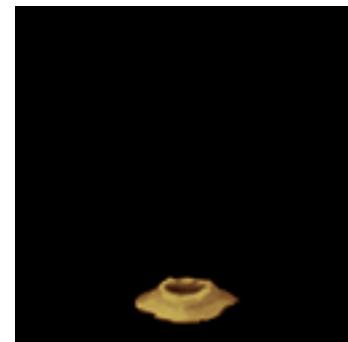
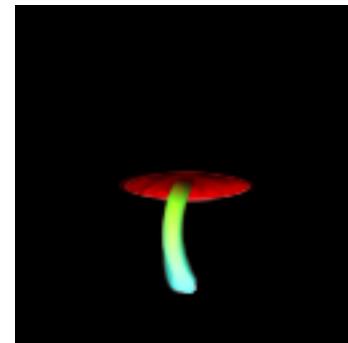
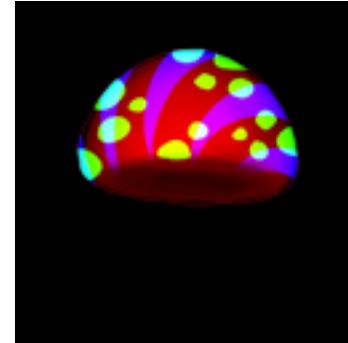


- ◆ Split into parts
- ◆ Assemble with a shader

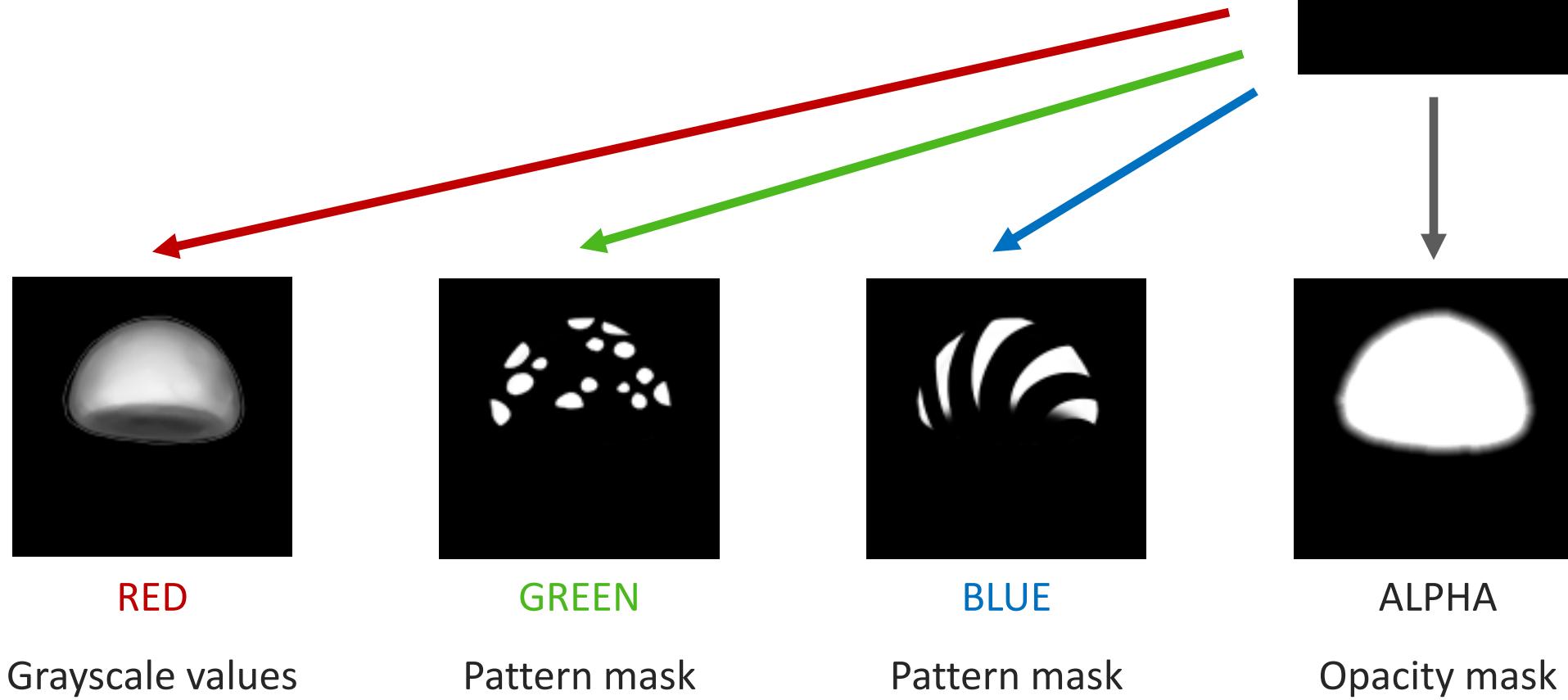
COMBINATIONS



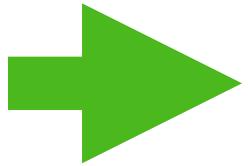
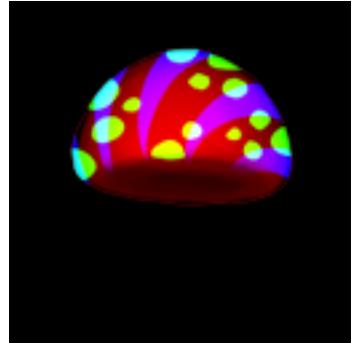
TEXTURES



COLOR CHANNELS

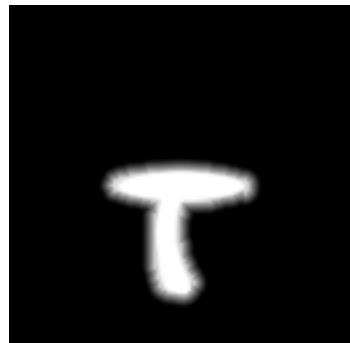


COLOR COMBINATIONS



LIVE DEMO

OUTLINES



mask = max(alpha1,
max(alpha2, alpha3))



outlineMask =
smoothstep(0.1, 0.2, mask)



iconMask =
smoothstep(0.7, 1.0, mask)



outline =
outlineMask - iconMask



CAVEATS

- ◆ Icons generated from materials cannot be batched -> More draw calls
- ◆ Empty space on textures cannot be used
- ◆ Compression artifacts very prominent if mask textures are compressed



QUESTIONS? COMMENTS?

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<https://github.com/innogames/collectionicontool>

END OF PRESENTATION

*Thank
you*