Making a Glyph Spritesheet Cheat Sheet

GAME2050 Game Programming I

Sean Morrow

Follow the instructions below to make a spritesheet of glyphs. This spritesheet is required to use with CreateJS's BitmapText in order to display dynamic text in your game.

- 1. Create a new "glyphs" folder in your project folder's lib/spritesheets folder
- 2. Open Photoshop and create new PSD that is 1500 x 100px with a transparent background and 72dpi resolution (no need to save the PSD)
- 3. Open GlyphlmageMaker.jsx in VS Code and modify variables to desired font / color / size / set of glyphs:

```
var myGlyphs = "0123456789";
var myColor = "#4b4848";
var mySize = 24;
var myFont = "PressStart2P-Regular";
```

Note the name of the font must be the Postscript name which is not always the name of the font you would see in an app. Finding this name can be tricky – google "[my font name] postscript name"

- 4. Back in Photoshop, run the script by going to file / scripts / browse and select GlyphImageMaker.jsx (will take time to startup and load script)
- 5. When the dialog appears setup as following:
 - Click the browse button and select the newly created /glyphs folder
 - Set the file type to PNG-24 to support transparent background
 - Set transparency checkbox to true
 - Set trim layers checkbox to true
 - Everything else should be left as default
- 6. Press the "Run" button and the script will generate an individual PNG file for each glyph in the /glyphs folder
- Open texture packer and drag the entire folder of the generated glyph PNGs into left panel
- 8. Switch the settings panel to advanced settings
- 9. Adjust the settings as follows and note unusual setting outlined in red:

Data Section

Data Format:

easeljs/createjs

JSON file:

Select the lib/spritesheets folder in the project folder and set name to glyphs.json

Framerate:

30 (or whatever your FPS is of your game)

Trim sprite names:

True

Prepend folder name:

False

Auto-detect animations:

True

Texture Section

Texture format:

png-8 indexed

This can be adjusted to a higher bit format of PNG if quality is affected.

Layout Section

Size constraints:

Powers of two (loads better)

Algorithm:

Basic

Detect identical sprites:

True

Leave all other settings to their default

- 10. Adjust the pivot point to be "Top Left" by selecting all glyphs and clicking the "Sprite Settings" button. The pivot points will be far too far from the top of each glyph. Select all sprites and adjust the pivot point by dragging it down to be just above the top left of the glyph
- 11. Save your texture packer project in "/lib/spritesheets/" of your project folder as a glyphs.tps file
- 12. Press the "publish sprite sheet" button to generate the sprite sheet PNG and the JSON file