#Material code breakdown that I saved as separate rib file into the materials folder under the archives folder.

#Coral

Pattern "PxrManifold2D" "PxrManifold2D1"

"float angle" [0]

"float scaleS" [1]

"float scaleT" [1]

"float offsetS" [0]

"float offsetT" [0]

"int invertT" [0]

"string primvarS" [""]

"string primvarT" [""]

# "PxrManifold2D1:result"

# txmake -mode periodic ../tiffs/coral.tif ../textures/coral.tex

Pattern "PxrTexture" "PxrTexture1"

"string filename" ["coral.tex"]

"int firstChannel" [0]

"int atlasStyle" [0]

"int invertT" [1]

"int filter" [1]

"float blur" [0.0]

"int lerp" [1]

"color missingColor" [1. 0. 1.]

"float missingAlpha" [1.0]

"int linearize" [1]

# Example manifold connection

"reference struct manifold" ["PxrManifold2D1:result"]

# "PxrTexture1:resultRGB"

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [1.0]

"reference color diffuseColor" ["PxrTexture1:resultRGB"]

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#Sand

Pattern "PxrManifold2D" "PxrManifold2D1"

"float angle" [0]

"float scaleS" [1]

"float scaleT" [1]

"float offsetS" [0]

"float offsetT" [0]

"int invertT" [0]

"string primvarS" [""]

"string primvarT" [""]

# "PxrManifold2D1:result"

# txmake -mode periodic ../tiffs/sand.tif ../textures/sand.tex

Pattern "PxrTexture" "PxrTexture1"

"string filename" ["sand.tex"]

"int firstChannel" [0]

"int atlasStyle" [0]

"int invertT" [1]

"int filter" [1]

"float blur" [0.0]

"int lerp" [1]

"color missingColor" [1. 0. 1.]

"float missingAlpha" [1.0]

"int linearize" [1]

# Example manifold connection

"reference struct manifold" ["PxrManifold2D1:result"]

# "PxrTexture1:resultRGB"

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [1.0]

"reference color diffuseColor" ["PxrTexture1:resultRGB"]

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#Coral\_Top

Pattern "PxrManifold2D" "PxrManifold2D1"

"float angle" [0]

"float scaleS" [1]

"float scaleT" [1]

"float offsetS" [0]

"float offsetT" [0]

"int invertT" [0]

"string primvarS" [""]

"string primvarT" [""]

# "PxrManifold2D1:result"

Pattern "PxrMix" "PxrMix1"

"color color1" [1 0.961 0.833]

"color color2" [0.591 0.658 0.597]

"reference float mix" ["PxrManifold2D1:resultS"]

# "PxrMix1:resultRGB" uses->|color|vector|normal|point|

# "PxrMix1:resultR" uses->|float|

# "PxrMix1:resultG" uses->|float|

# "PxrMix1:resultB" uses->|float|

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [1.0]

"reference color diffuseColor" ["PxrMix1:resultRGB"]

"int diffuseDoubleSided" [1]

"color specularFaceColor" [0.665 0.738 0.672]

"float specularRoughness" [0.8]

"int specularDoubleSided" [1]

"float presence" [1]

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#Teapot Base Color

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [0.7]

"color diffuseColor" [0.962 1 0.984]

"int diffuseDoubleSided" [1]

"color specularFaceColor" [0.793 0.890 0.815]

"float specularRoughness" [0.8]

"int specularDoubleSided" [0]

"float presence" [1]

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#Ceramic

Pattern "PxrManifold2D" "PxrManifold2D1"

"float angle" [0]

"float scaleS" [1]

"float scaleT" [1]

"float offsetS" [0]

"float offsetT" [1]

"int invertT" [0]

"string primvarS" [""]

"string primvarT" [""]

# "PxrManifold2D1:result"

Pattern "PxrMix" "PxrMix1"

"color color1" [0.617 0.687 0.610]

"color color2" [0.526 0.738 0.624]

"reference float mix" ["PxrManifold2D1:resultS"]

# "PxrMix1:resultRGB" uses->|color|vector|normal|point|

# "PxrMix1:resultR" uses->|float|

# "PxrMix1:resultG" uses->|float|

# "PxrMix1:resultB" uses->|float|

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [1.0]

"reference color diffuseColor" ["PxrMix1:resultRGB"]

"int diffuseDoubleSided" [1]

"color specularFaceColor" [0.665 0.738 0.672]

"float specularRoughness" [0.8]

"int specularDoubleSided" [1]

"float presence" [1]

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#Mermaid Plate

Pattern "PxrManifold2D" "PxrManifold2D1"

"float angle" [0]

"float scaleS" [1]

"float scaleT" [1]

"float offsetS" [0]

"float offsetT" [0]

"int invertT" [0]

"string primvarS" [""]

"string primvarT" [""]

# "PxrManifold2D1:result"

# txmake -mode periodic ../tiffs/mermaidplate.tif ../textures/mermaidplate.tex

Pattern "PxrTexture" "PxrTexture1"

"string filename" ["mermaidplate.tex"]

"int firstChannel" [0]

"int atlasStyle" [0]

"int invertT" [1]

"int filter" [1]

"float blur" [0.0]

"int lerp" [1]

"color missingColor" [1. 0. 1.]

"float missingAlpha" [1.0]

"int linearize" [1]

# Example manifold connection

"reference struct manifold" ["PxrManifold2D1:result"]

# "PxrTexture1:resultRGB"

Pattern "PxrManifold2D" "PxrManifold2D2"

"float angle" [0]

"float scaleS" [1]

"float scaleT" [1]

"float offsetS" [0]

"float offsetT" [0]

"int invertS" [0]

"int invertT" [1]

"string primvarS" [""]

"string primvarT" [""]

# "PxrManifold2D2:result"

Pattern "PxrBump" "PxrBump1"

"float scale" [0.5]

"int disable" [0]

"float inputBump" [0.0]

"string filename" ["mermaidplatenormal.tex"]

"int firstChannel" [0]

"int atlasStyle" [0]

"int invertT" [1]

"float blur" [0.0]

"int lerp" [1]

"normal inputN" [1. 0. 0.]

"int reverse" [0]

"float adjustAmount" [0.0]

"float surfaceNormalMix" [0.0]

# Examples manifold connection

"reference struct manifold" ["PxrManifold2D1:result"]

# "PxrBump1:resultN" uses->|normal|

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [1.0]

"reference color diffuseColor" ["PxrTexture1:resultRGB"]

"int diffuseDoubleSided" [1]

"color specularFaceColor" [0.2 0.2 0.2]

"float specularRoughness" [0.5]

"int specularDoubleSided" [0]

"float presence" [1]

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#Plate Base

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [0.7]

"color diffuseColor" [0.577 0.552 0.533]

"int diffuseDoubleSided" [1]

"color specularFaceColor" [0 0 0]

"float specularRoughness" [0.8]

"int specularDoubleSided" [0]

"float presence" [1]

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#Plate Rim

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [0.7]

"color diffuseColor" [0.378 0.179 0.034]

"int diffuseDoubleSided" [1]

"color specularFaceColor" [0.895 0.693 0.545]

"float specularRoughness" [0.6]

"int specularDoubleSided" [1]

"float presence" [1]

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#Cup Base

Pattern "PxrManifold2D" "PxrManifold2D1"

"float angle" [0]

"float scaleS" [1]

"float scaleT" [1]

"float offsetS" [0]

"float offsetT" [0]

"int invertT" [0]

"string primvarS" [""]

"string primvarT" [""]

# "PxrManifold2D1:result"

# txmake -mode periodic ../tiffs/coral.tif ../textures/coral.tex

Pattern "PxrTexture" "PxrTexture1"

"string filename" ["coral.tex"]

"int firstChannel" [0]

"int atlasStyle" [0]

"int invertT" [1]

"int filter" [1]

"float blur" [0.0]

"int lerp" [1]

"color missingColor" [1. 0. 1.]

"float missingAlpha" [1.0]

"int linearize" [1]

# Example manifold connection

"reference struct manifold" ["PxrManifold2D1:result"]

# "PxrTexture1:resultRGB"

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [1.0]

"reference color diffuseColor" ["PxrTexture1:resultRGB"]

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#Cloth

Pattern "PxrManifold2D" "PxrManifold2D1"

"float angle" [0]

"float scaleS" [1]

"float scaleT" [1]

"float offsetS" [0]

"float offsetT" [0]

"int invertT" [0]

"string primvarS" [""]

"string primvarT" [""]

# "PxrManifold2D1:result"

# txmake -mode periodic ../tiffs/clothnormal.tif ../textures/clothnormal.tex

Pattern "PxrTexture" "PxrTexture1"

"string filename" ["cloth.tex"]

"int firstChannel" [0]

"int atlasStyle" [0]

"int invertT" [1]

"int filter" [1]

"float blur" [0.0]

"int lerp" [1]

"color missingColor" [1. 0. 1.]

"float missingAlpha" [1.0]

"int linearize" [1]

# Example manifold connection

"reference struct manifold" ["PxrManifold2D1:result"]

# "PxrTexture1:resultRGB"

Pattern "PxrManifold2D" "PxrManifold2D2"

"float angle" [0]

"float scaleS" [1]

"float scaleT" [1]

"float offsetS" [0]

"float offsetT" [0]

"int invertS" [0]

"int invertT" [1]

"string primvarS" [""]

"string primvarT" [""]

# "PxrManifold2D2:result"

Pattern "PxrBump" "PxrBump1"

"float scale" [1.0]

"int disable" [0]

"float inputBump" [0.0]

"string filename" ["clothnormal.tex"]

"int firstChannel" [0]

"int atlasStyle" [0]

"int invertT" [1]

"float blur" [0.0]

"int lerp" [1]

"normal inputN" [1. 0. 0.]

"int reverse" [0]

"float adjustAmount" [0.0]

"float surfaceNormalMix" [0.0]

# Examples manifold connection

"reference struct manifold" ["PxrManifold2D1:result"]

# "PxrBump1:resultN" uses->|normal|

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [1.0]

"reference color diffuseColor" ["PxrTexture1:resultRGB"]

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#Wood

Pattern "PxrManifold2D" "PxrManifold2D1"

"float angle" [0]

"float scaleS" [1]

"float scaleT" [1]

"float offsetS" [0]

"float offsetT" [0]

"int invertT" [0]

"string primvarS" [""]

"string primvarT" [""]

# "PxrManifold2D1:result"

# txmake -mode periodic ../tiffs/woodtable.tif ../textures/woodtable.tex

Pattern "PxrTexture" "PxrTexture1"

"string filename" ["woodtable.tex"]

"int firstChannel" [0]

"int atlasStyle" [0]

"int invertT" [1]

"int filter" [1]

"float blur" [0.0]

"int lerp" [1]

"color missingColor" [1. 0. 1.]

"float missingAlpha" [1.0]

"int linearize" [1]

# Example manifold connection

"reference struct manifold" ["PxrManifold2D1:result"]

# "PxrTexture1:resultRGB"

Bxdf "PxrSurface" "PxrSurface1"

"float diffuseGain" [1.0]

"reference color diffuseColor" ["PxrTexture1:resultRGB"]