Substance designer Notes

Terminology

Substance Package – collection of resources that are used to produce a Substance.

Substance – single file containing all of the information of the package.

1. Click New Substance – options

Template – Standard (outputs – diffuse/spec/normal)

Template PBR – roughness

Template PBR – Specular

Shows which maps will be exported from file. You can add outputs like AO and emission.

1. Name graph

Size mode – set to absolute

Height/Width – 2K

Format – relative to parent

1. Click OK

UI comes to life.

Explorer – package explorer – shows outputs

Graph View – shows output nodes (Basecolor, Normal, etc)

Inputs – Circle that allows you to connect nodes.

Parameters – attributes to adjust based on the object selected.

Library – packed full of useful things/effects/resources

3D View – Basic manipulation controls

2D View – Basic UV Viewport

1. Customize Viewport.

Move explorer above parameters.

Move 3D View to far left.

Move Library Beneath 2D View

Resize as needed

Stack 2D on top of 3D, this view change be changed with tabs.

1. Save Package

Right click on Unsaved Package (ex) – save as – save inside substance designer folder.

ADD MESH RESOURCES

1. Right click file name (ex) – link – 3D Mesh – Browse and grab FBX/OBJ file.

Mesh will be located in the resources folder system.

Double Click mesh to load it inside the 3D view.

Select Resources folder – new – new folder – Meshes. Move all of your meshes inside of that folder. So that we can easily find new resources that are brought in.

1. 3D – Materials – Each material from maya is being read – here you can come and change the shader. Change from relief to Physically based Shader. Material will change. Do that for each different mesh set.

In 3D view, on left side you may click the light node to move lights. You also hold the shift key to move light. You make click gears at bottom to access light attributes. (color, position, background image, exposure, post effects)

1. Library – environment maps. Click and drag to 3D view to update image. Preview with HDR image works best for the model/texture.

ADDING BITMAP RESOURCES

Bitmap Images – Base images to create substances on top of.

1. Resources – new folder – painted maps. Import or link bitmap images. You may import basic painted files from substance painter.

* Created new folder – painted maps\_all\_resources.
* Shows each layer as a separate bitmap from the PSD file.

1. Create new bitmap resources – right click resources – new – bitmap resource – name “demo\_underscore\_bitmap” Non linked file.

BAKING ADDIDTIONAL BITMAP RESOURCES

1. Using a normal output instead of a height output.

* Will Bake normal map onto appropriate mesh.
* Mesh1\_high – right click – Bake model Information
  + Scene info baking dialog.
  + Need add bakers to mesh.
  + Click + button to see maps that we can bake onto the low resolution. Start with the normal map. Options – map type – tangent space – Orientation – Open GL. (to use in Maya and Unity) Go to Right – Linked resource – options on where you want your file to be saved. (ex. Baked Maps folder)
  + Output size – set to 2K
  + Select HD mesh.
* Bake Curvature Map
  + Leave mostly default settings.
  + Select normal map from previous baker.
* Bake Position – one axis – y axis

1. Mesh1\_low resources folder created.