Porting Shadertoy effects to Qt Quick Effect Maker

You can use effects created in Shadertoy in Qt Quick Effect Maker. When you use Shadertoy

Contents

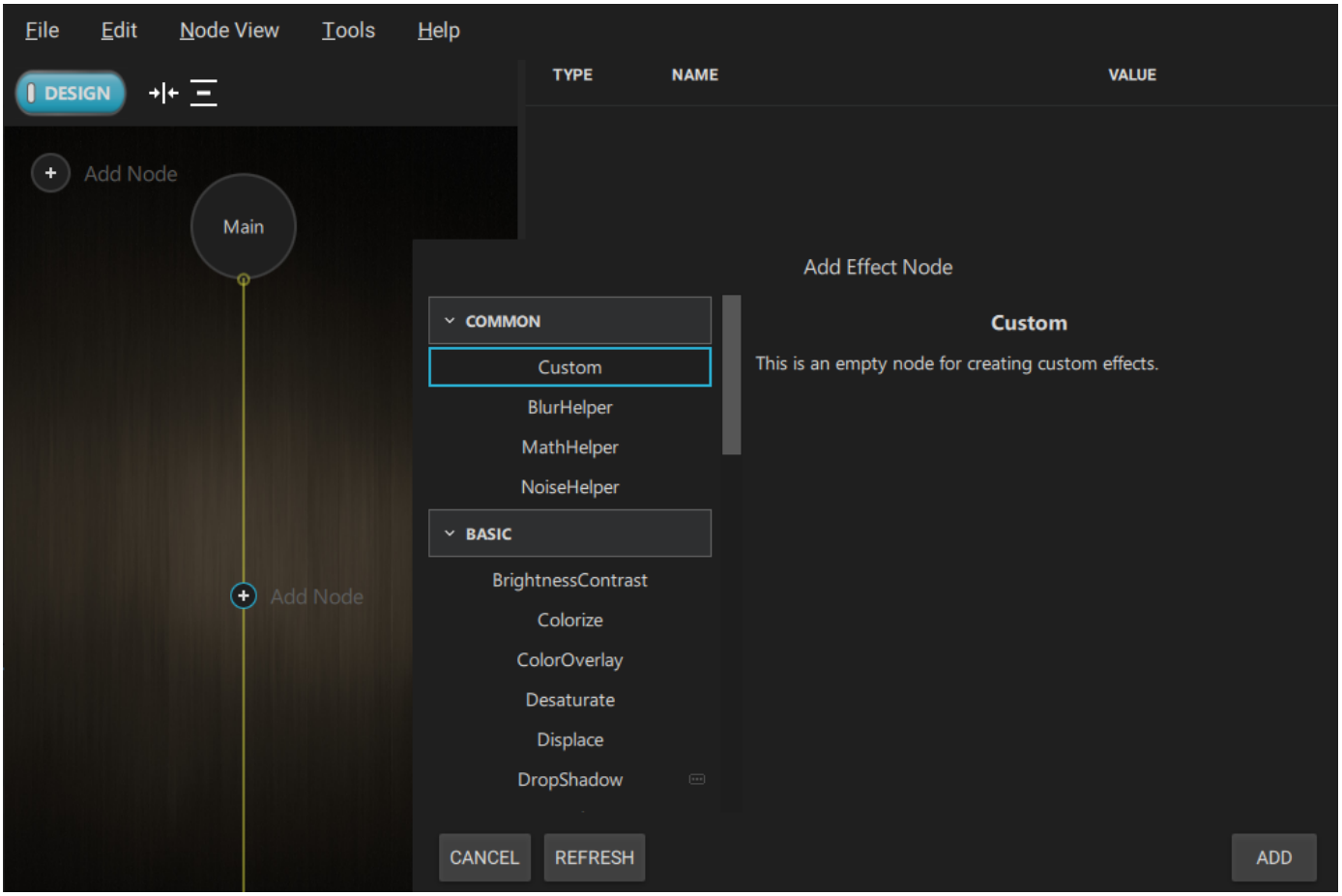
effects, consider the following:

- Qt Quick Effect Maker doesn't support the following Shadertoy features:
  - Multipass effects (Buffer tabs)
  - Audio
  - Cube maps
  - 3D textures
- Shadertoy supports only fragment shaders and built-in textures. To improve the effect performance in Qt Quick Effect Maker, move some calculations to the vertex shader and use custom images to simplify the shader code.
- The coordinate system differs between Shadertoy and Qt Quick Effect Maker. In Shadertoy, the origin (0,0) is located in the lower-left corner while Qt Quick Effect Maker has the origin in the upper-left corner.

Using a Shadertoy effect in Qt Quick Effect Maker

To use a Shadertoy effect in Qt Quick Effect Maker:

1. In Qt Quick Effect Maker, create a new effect.
2. In the node editor, select **Add node** and then, under **Common**, select **Custom**. This creates an empty node.



3. In Shadertoy, copy all the code from the **Image** tab.
4. In Qt Quick Effect Maker, double-click the **Custom** node in the node editor. This opens the code editor.
5. Paste the Shadertoy code to the **Frag** tab.
6. Find the `Main` function in the code, it looks something like:

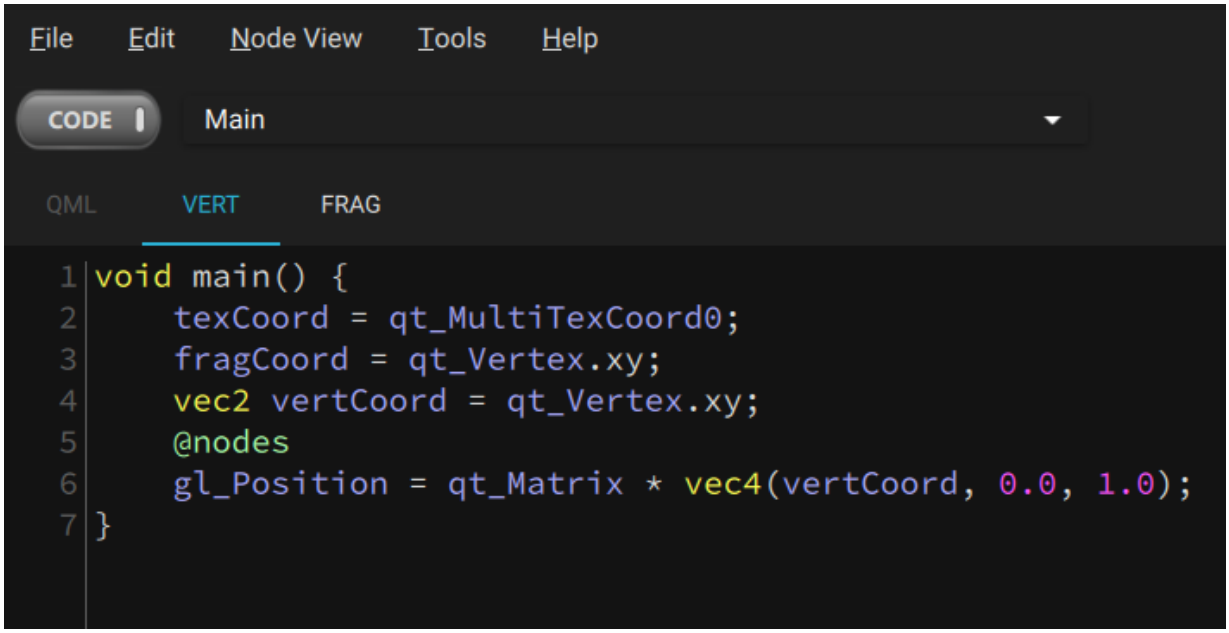
```
void mainImage( out vec4 fragColor, in vec2 fragCoord )
```

7. Replace this line with:

```
@main
```

> **Note:** You can't have `@main` and the following { on the same line.

8. Optional. If the effect depends on the coordinate system, it appears flipped upside down. To solve this, you need to flip the y-coordinate:
    1. Go to the **Vert** tab.



2. In the drop-down menu, select **Main**.
3. Find the `fragCoord` line, it should look something like:

```
fragCoord = qt_Vertex.xy;
```

4. Replace this line with:

```
fragCoord = vec2(qt_Vertex.x, iResolution.y - qt_Vertex.y);
```

5. Similarly, you might need to adjust `texCoord` and `iMouse`.

Now, the effect runs and looks the same as the Shadertoy effect.

Creating a blur effect Wiggly