UnityQuery Cheat Sheet

Hierarchy Queries

```
GameObject o1, o2;

foreach (var child in o1.GetAncestors())
foreach (var child in o1.GetAncestorsAndSelf())
foreach (var child in o1.GetChildren())
foreach (var child in o1.GetDescendants())
foreach (var child in o1.GetDescendantsAndSelf())

foreach (var child in o1.GetDescendants().OnLayer("UI"))

if (o1.IsAncestorOf(o2))
if (o1.IsDescendantOf(o2))

GameObject root = o1.GetRoot();
string path = o1.GetPath();
```

Hierarchy manipulation

```
GameObject o;
o.AddChild();
o.AddChild(prefab);
o.DestroyChildren();
```

Game Object Manipulation

```
Transform t;
t.Reset();
GameObject o;
o.SetLayer("UI");
o.SetLayers("UI");
```

Vector Swizzling

Note that vectors are immutable (with good reason).

```
Vector3 v = new Vector3(1, 2, 3);

Vector2 w = v.XY();
Vector2 w = v.XZ();
Vector2 w = v.YZ();

Vector3 w = v.WithX(4);
Vector3 w = v.WithY(4);
Vector3 w = v.WithZ(4);

Color c = new Color(0.0f, 1.0f, 0.0f, 1.0f);
c = c.WithAlpha(0.8f);
c = c.WithAlpha(205);
```

Picking

Logging

```
Log.Info(this, "Login successful.");
Log.Error(this, "Not enough minerals: {0}", 100);
```