
Subject: Re: Arrys vs Vectors

Posted by [kohait00](#) on Tue, 21 Dec 2010 11:36:22 GMT

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i'd recommend to use Vector here, see Core/Gtypes.h for Size and Point implementations, they also are templates, and are only Moveable<>, no need for you to MoveableAndDeepCopyOption<> them. it is a lightweight pointer class as i can see. it is best copied. i suppose T is double or float..

picked is misleading... Upp has own usage for pick stuff, think of a different name for it.

also, use the initializer list in constructors, and the implicit logic of classes (aka implicit copy constructor).

think of what you really need to have getters/setters to. better make the members public in this case.

```
template<class T>
class Point3D : Moveable<Point3D<T> >
{
public:
    T x,y,z,w;
    unsigned int id,layer;
    bool taken;
public:
    Point3D ()
        : x(T())
        , y(T())
        , z(T())
        , w((T)1.0)
        , id(0)
        , layer(-1)
        , taken(0)
    {}
```

```
    Point3D (const T& a, const T& b, const T& c, unsigned int e, bool f, unsigned int g, const T&
d=(T)1.0)
        : x(a)
        , y(b)
        , z(c)
        , w(d)
        , id(e)
        , layer(g)
        , taken(f)
    {}
```

//use implicit copy constructor

```

//this one should probaly be Point3D<T> operator*(const T& o) const, since yours is modifying
object
void operator*(const T& o){
    x*=o;
    y*=o;
    z*=o;
    w*=o;
}

Point3D<T> operator+(const Point3D<T> &o){
    return Point3D<T>(x+o.x(),y+o.y(),z+o.z(),w+o.w());
}

void Serialize(Stream& s){
    s%x%y%z%w%id%taken%layer;
}

String ToString()const{
    String s;
    s<<"x:"<<x<<","<<"y:"<<y<<","<<"z:"<<z<<","<<"w:"<<w<<","<<"id:"<<id<<","<<"taken:"<<taken<
    <","<<"layer:"<<layer;
    return s;
}
};

GUI_APP_MAIN
{
    Vector<Point3D<double> > v;
    v.Add();

    Vector<Point3D<double> > vw;
    vw <= v;

    Point3D<double> p;
    p = v[0];
}

```
