

**AbstractSimplicialComplex** $\langle$ `int`, `Global`, `Vertex`, `void`, `Color`, ..., `N` $\rangle$  $()$ ;

Node<0>

```
Global data;  
vectormap<int,*Node<1>> up;
```

Node<2>

```
arraymap<int,*Node<3>> up;  
vectormap<int,*Node<1>> down;
```

Node<1>

```
Vertex data;  
arraymap<int,*Node<2>> up;  
vectormap<int,*Node<0>> down;
```

Node<3>

```
Color data;  
arraymap<int,*Node<4>> up;  
vectormap<int,*Node<2>> down;
```