# Inherintance Diagram Example

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This vignette is temporary, and provides an example of using the iv package to create a simple inheritance diagram.

#### NOTE

This package replaces (and is derived from) the umlr package. Currently, much of this package, reflects the earlier package. Many functions may be renamed in the next revision.

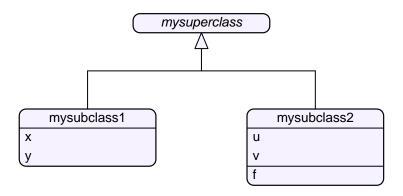
## Simple Example

In the iv package, a uml model is treated in a similar way to a directed graph. We create some nodes (representing classes, etc), then some connections (aka edges) between pairs of nodes. Potentially, we can group a set of connections, to produce what I like to refer to as composite arrows (currently, north-facing only). Then create a model, from the nodes and connections.

```
> umlro.fill (rgb (0.965, 0.95, 1) )
> v0 = umlclass ("mysuperclass", abstract=TRUE, y=-4)
> v1 = umlclass ("mysubclass1", c ("x", "y"), x=-4)
> v2 = umlclass ("mysubclass2", c ("u", "v"), "f", x=4)
> con1 = umlextends (v1, v0)
> con2 = umlextends (v2, v0)
> umlmerge (con1, con2)
> m = uml (v0, v1, v2, con1, con2)
```

We can create a simple GUI (more precisely an interactive plot) to adjust the layout. Closing the plotting window, or clicking on the edge of plot, sets the nodes in place.

```
> umlgui (m)
> umlpdf (m)
```



# **Sweave Notes**

Note that to successfully use this package with Latex, actual image sizes need to be used. In the case of Sweave, one needs to include something along the lines of:

### \usepackage[nogin]{Sweave}

Also note that the commands umlgui and umlpdf don't work within sweave. The gui is interactive and the pdf command creates it's own graphics device.