

## Figure 1: Instructions for creating "Blob" program.

Start Interface Builder  
Save as Programming/Blob/blob and create a project file with the File/Project  
Select File/New Application  
Double click the Classes toolkit in the lower left window  
Sub-class View and call it BlobView  
Drag a CustomView and two sliders in to the main window  
Inspect the CustomView and make it an instance of the BlobView  
Add rotate and zoom action methods using the class inspector  
Make connections from the sliders to the BlobView  
Inspect slider limits to be 0 to 360 for rotate and -.9 to 3 for zoom  
Unparse the BlobView  
Add blob.psw file to project  
Select File/Save  
Make additions to BlobView.h and BlobView.m given in figure 2 and 3  
Select File/Make  
Run by double clicking the blob.debug icon

Changes to BlobView.h  
(additions in Bold)

### -----Figure 2: Changes to BlobView.h-----

```
/* Generated by Interface Builder */  
  
#import <appkit/View.h>  
  
@interface BlobView:View  
{  
    float rot, mag;  
}  
  
- rotate:sender;  
- zoom:sender;  
  
@end
```

### -----Figure 3: Changes to BlobView.h-----

```

/* Generated by Interface Builder */

#import "BlobView.h"
#import <dpsclient/wraps.h>
#import <appkit/Control.h>
#import "blob.h"

@implementation BlobView

- rotate:sender
{
    rot = [sender floatValue];
    [self display];
    return self;
}

- zoom:sender
{
    mag = [sender floatValue];
    [self display];
    return self;
}

- drawSelf:(NXRect*)r :(int)c
{
    NXEraseRect(&bounds);
    PStranslate(bounds.size.width/2.0, bounds.size.height/2.0);
    PSScale(mag+1.0, mag+1.0);
    PSrotate(rot);
    PSsetgray(NX_BLACK);
    drawBlob(100.0, 5.0);
    return self;
}

@end

```

----- **Figure 4 Content of blob.psw** -----

```

defineps drawBlob(float size, lineWidth)
    lineWidth setlinewidth
    newpath
        0 0 moveto
        size 0 lineto
        size size lineto

```

```
    0 size lineto
    0 0 lineto
    size size rlineto
    0 size moveto
    size 0 lineto
stroke
endps
```