

**Details, Details**

```
public class Slideshow
{
    private Picture[] images;
    private Sound[] sounds;

    public Slideshow( Picture[] see, Sound[] hear )
    {
        images = see;
        sounds = hear;
    }

    ...
}
```

```
public class Slideshow
{
    private Picture[] images;
    private Sound[] sounds;

    public Slideshow( Picture[] see, Sound[] hear )
    {
        images = see;
        sounds = hear;
    }

    public Slideshow()
    {
        images = new Picture[0];
        sounds = new Sound [0];
    }
    ...
}
```

*... the simplest show( ) method to satisfy the assignment ...*

```
public show()
{
    for ( int i = 0; i < sounds.length; i++ )
    {
        images[i].show();
        sounds[i].blockingPlay();
    }
}
}
```

*... a more complete show( ) method ...*

```
public show()
{
    Picture canvas =
        new Picture( getCanvasWidth(), getCanvasHeight() );

    for ( int i = 0; i < sounds.length; i++ )
    {
        canvas.clear();
        canvas.placeInCenter( images[i] );
        canvas.repaint();
        sounds[i].blockingPlay();
    }
}
```

```
public static void main( String[] args )
{
    Picture[] images = loadPictures();
    Sound [] sounds = loadSounds();

    Slideshow theShow = new Slideshow( images, sounds );
    theShow.show();
}

public static Picture[] loadPictures()
{
    String[] imageNames = { "wallingf-250x328.jpg", ... };

    Picture[] images = new Picture[imageNames.length];
    for ( int i = 0; i < imageNames.length; i++ )
        images[i] = new Picture(
            FileChooser.getMediaPath(imageNames[i]) );

    return images;
}
```

# Fixing a Solution

...to this exercise:

*Write a Student method named emailDomain()  
that returns just the primary domain  
of the student's e-mail address.*

```
> Student s = new Student( "810061 04,SCHAFER,J,BEN,123456,schafer@cs.uni.edu" );  
> s.emailDomain()  
"uni.edu"  
  
> Student t = new Student(  
    "810061 04,GUY,MADE,UP,234567,indecipherable.mess@gmail.com" );  
> t.emailDomain()  
"gmail.com"
```

# Reading Objects from a File

Given a file of commas-separated values such as:

```
Course,Last Name,First Name,Middle Name,UNI ID,e-mail  
810061 04,SCHAFER,J,BEN,123456,schafer@cs.uni.edu  
810061 04,GUY,MADE,UP,234567,indecipherable.mess@gmail.com
```

... create an array of Student objects:

```
student[0] = Ben Schafer  
student[1] = Made Up Guy
```

# Template for a File Reader

```
try {
    BufferedReader source = new BufferedReader( new FileReader(filename) );
    line = source.readLine();           // ignore the header line

    while ( true )
    {
        line = source.readLine();
        if ( line == null )
            break;

        result[count] = new Student( line );
        count++;
        if ( count >= 50 )                // added to ensure we do
            break;                        // not overflow our array
    }

    source.close();
}
catch (IOException e) {
    System.out.println( "An error occurred reading the file " + filename );
    return null;
}
```

# The Premise ...

The university offers each department the chance to contact high school students who have indicated interested in the department.

They send us a big spreadsheet of data...

# The Premise ...

... with an e-mail address, if available,  
in the 12th field.

```
, "J", "Ben", "Schafer",  
  "316 ITTC", , "Cedar Falls", "IA", "50614",  
  "(319)273-2187", , "muttman@hotmail.com",  
  "Computer Science 810 (B)", ...  
, "Delbert", "T", "Quimby",  
  "307 ITTC", , "Cedar Falls", "IA", "50614",  
  "(319)327-2310", , , "Computer Science 810 (B)", ...
```

Notice that a field can be empty.  
(What's the String value?)

## ... The Exercise

We would like to know some information about the e-mail addresses of our prospects.

*Write a **ProspectReader** class that loads an array of e-mail addresses from a CSV prospect file.*

```
public ProspectReader(String filename, int numberOfEntries)
```

# The Rest of the Exercise

*Write a method that returns  
the number of gmail.com addresses in the file.*

*Even better, let us pass in the domain of interest.*

# A Little Fun

As you may have guessed from the first midterm,  
I read the comic FoxTrot.

What if I can't wait for the evening Courier  
to get my daily fix?

*With a little extra Java, I can write a program  
that downloads FoxTrot for me on demand!*