

YEAH Session #7

November 21, 2014, 4:15-5:15 PM

Nick Troccoli

FacePamphlet

File Edit

Name

Mehran Sahami

Friends:



Mehran Sahami is coding like a fiend

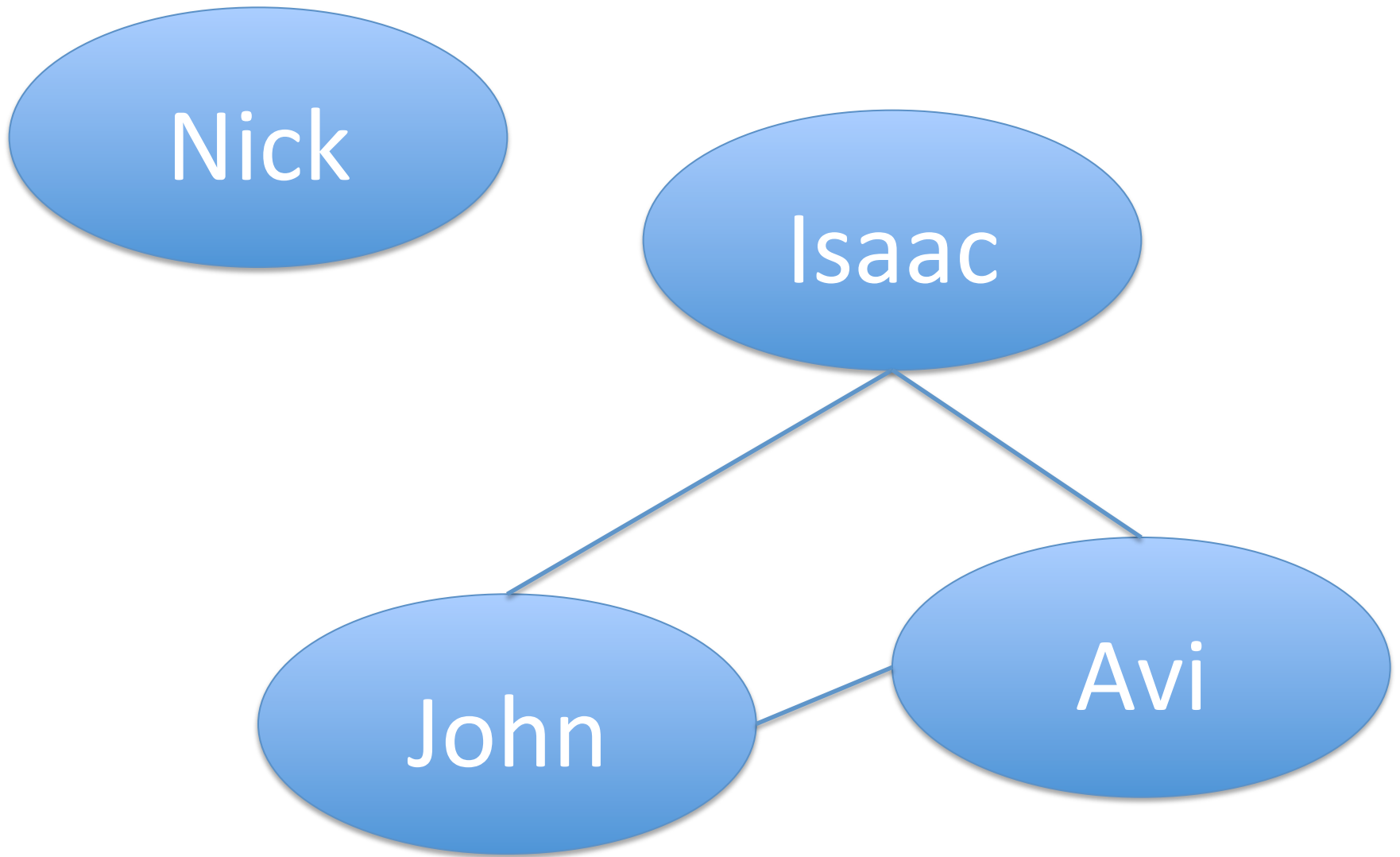
Picture updated

YEAH Hours Schedule

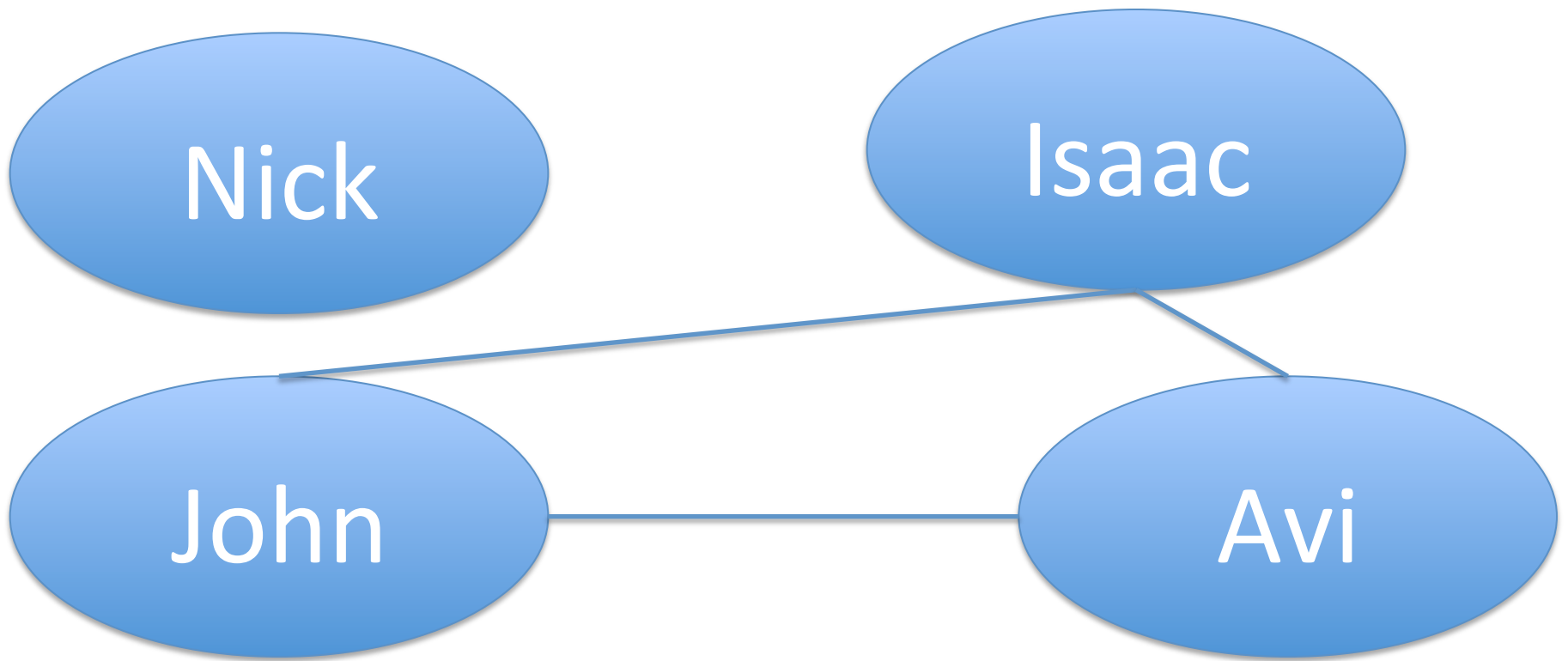
Topic	Date	Time	Location
Assignment 7	Today!	Now!	Here!



What is a Social Network?



Friendships always reciprocal!



Isaac's
Friends:

John
Avi

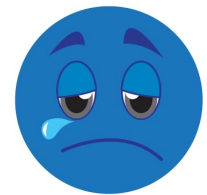
John's
Friends:

Isaac
Avi

Avi's
Friends:

John
Isaac

Nick's
Friends:



FacePamphlet!

- Due at 3:15PM on Friday, Dec. 5
- NO LATE DAYS OR LATE SUBMISSIONS!
- Practice with:
 - Social network data structures
 - Interactors
 - Gimages
 - Graphics
 - Iterators
 - And more!

What can your awesome
social network do?

Adding a Profile

FacePamphlet

File

Edit

Name

Add

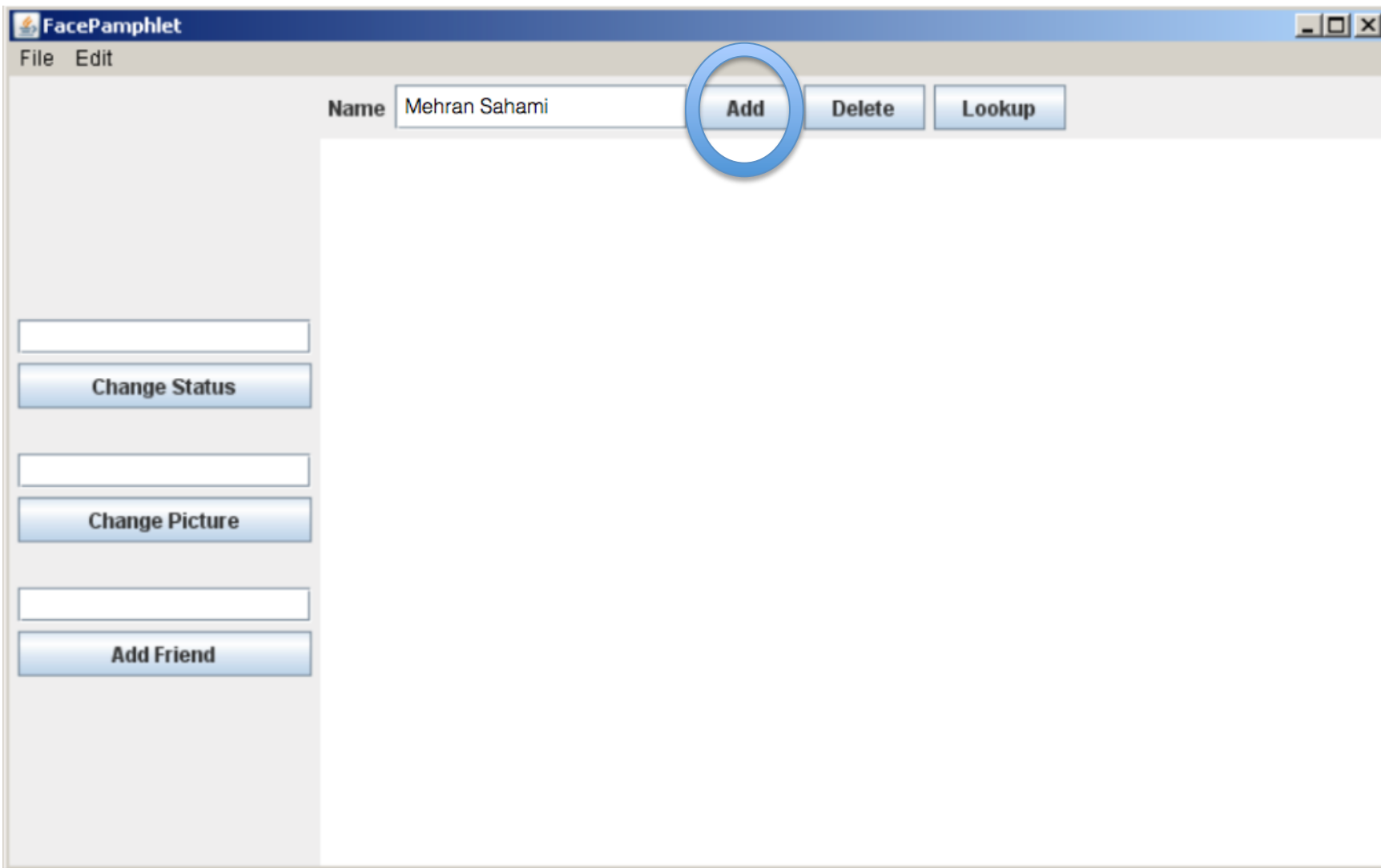
Delete

Lookup

Change Status

Change Picture

Add Friend



FacePamphlet

File

Edit

Name

Mehran Sahami

Add

Delete

Lookup

Change Status

Change Picture

Add Friend

Mehran Sahami

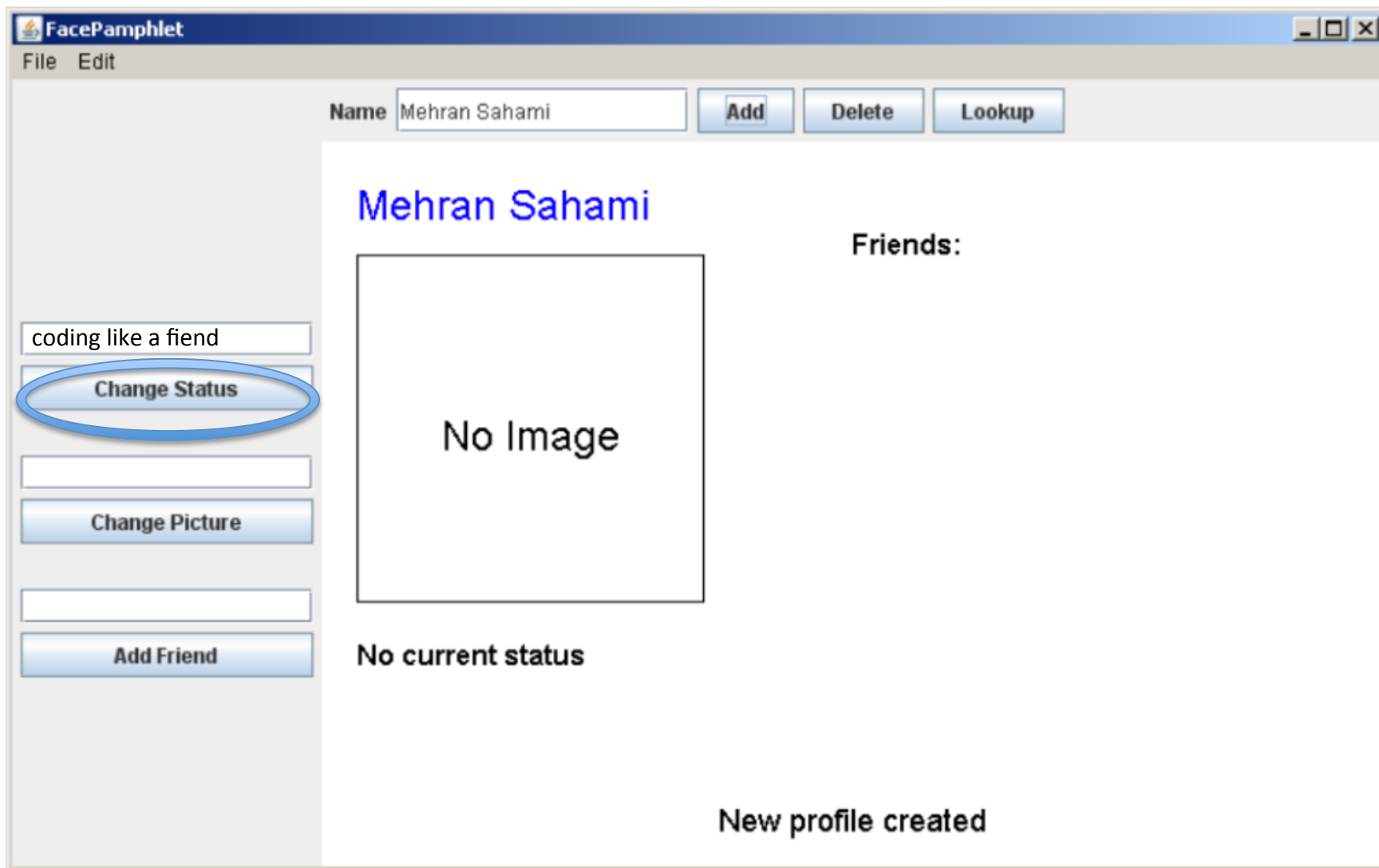
Friends:

No Image

No current status

New profile created

Change Status



FacePamphlet

File Edit

Name

Mehran Sahami

Add

Delete

Lookup

coding like a fiend

Change Status

Change Picture

Add Friend

Mehran Sahami

Friends:

No Image

Mehran Sahami is coding like a fiend

Status updated to coding like a fiend

Change Picture

FacePamphlet

File Edit

Name

Mehran Sahami

Add

Delete

Lookup

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Add Friend

Mehran Sahami

Friends:

No Image

Mehran Sahami is coding like a fiend

Status updated to coding like a fiend

FacePamphlet

File Edit

Name

Mehran Sahami

Add

Delete

Lookup

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Add Friend

Mehran Sahami

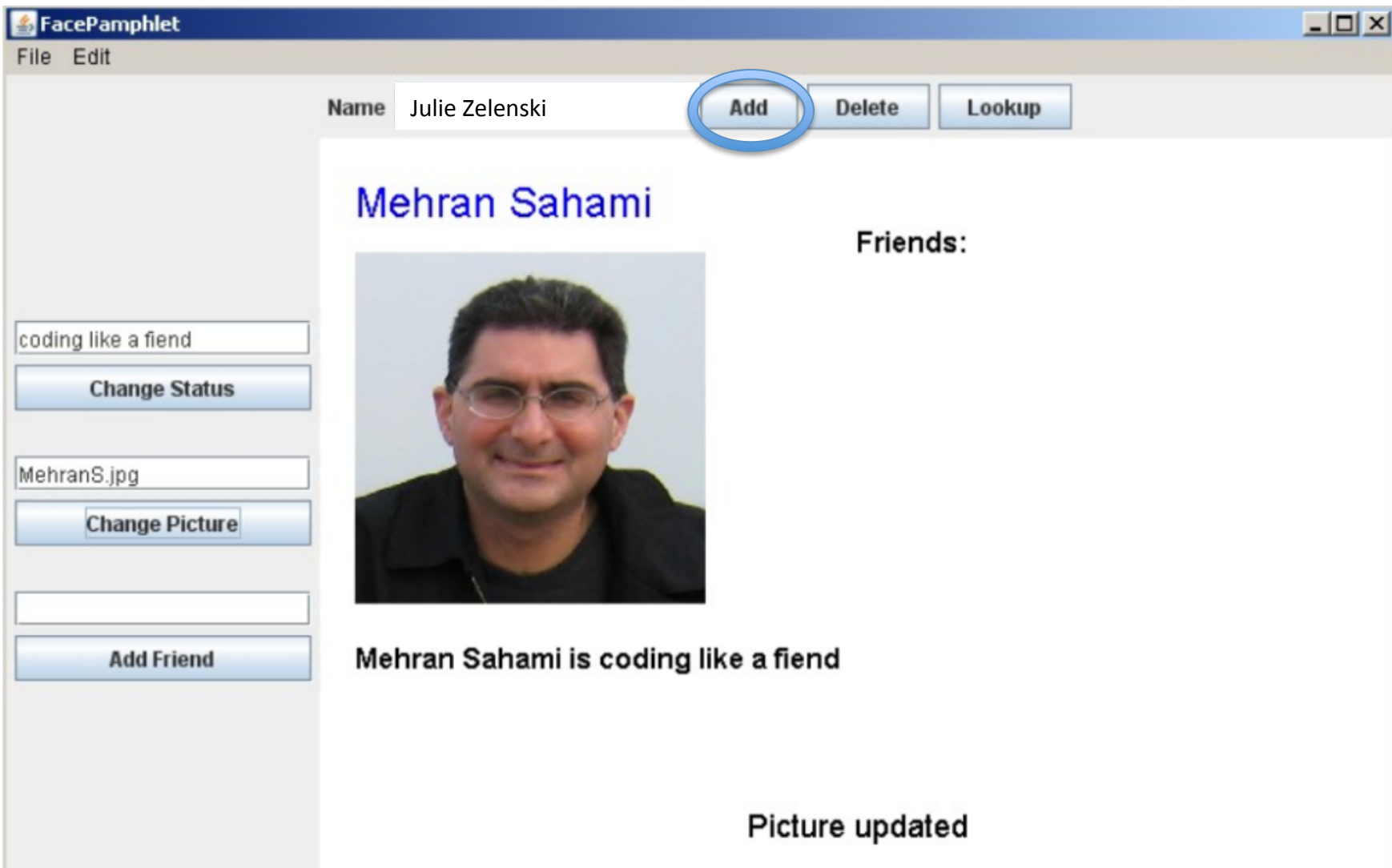


Friends:

Mehran Sahami is coding like a fiend

Picture updated

Create Another Profile



FacePamphlet

File

Edit

Name

Julie Zelenski

Add

Delete

Lookup

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Add Friend

Julie Zelenski

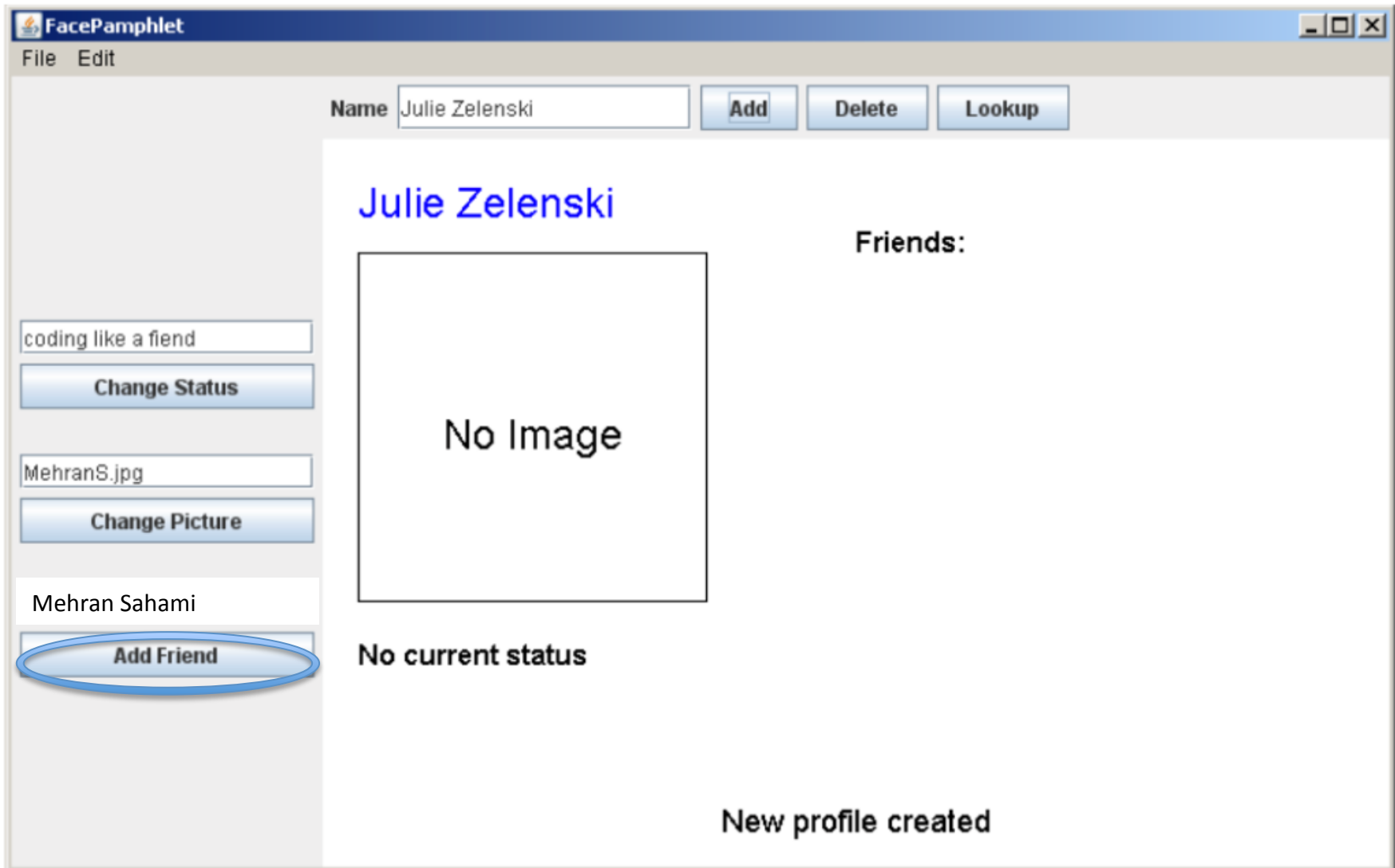
Friends:

No Image

No current status

New profile created

Add A Friend



FacePamphlet

File

Edit

Name

Julie Zelenski

Add

Delete

Lookup

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

Julie Zelenski

No Image

No current status

Friends:

Mehran Sahami

Mehran Sahami added as a friend

Look up a profile

FacePamphlet

File

Edit

Name

Mehran Sahami

Add

Delete

Lookup

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

Julie Zelenski

No Image

No current status

Friends:

Mehran Sahami

Mehran Sahami added as a friend

FacePamphlet

File

Edit

Name

Mehran Sahami

Add

Delete

Lookup

Mehran Sahami



Mehran Sahami is coding like a fiend

Friends:

Julie Zelenski

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

Displaying Mehran Sahami

Delete a profile

FacePamphlet

File Edit

Name

Julie Zelenski

Add

Delete

Lookup

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

Julie Zelenski

No Image

No current status

Friends:

Mehran Sahami

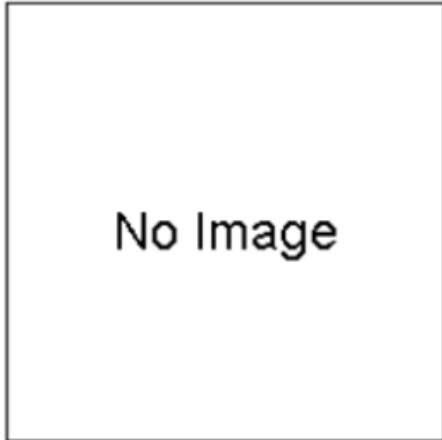
Displaying Julie Zelenski

FacePamphlet

File Edit

Name

Julie Zelenski



Friends:
Mehran Sahami

No current status

Displaying Julie Zelenski

FacePamphlet

File

Edit

Name

Julie Zelenski

Add

Delete

Lookup

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

Profile of Julie Zelenski deleted

Now let's look up Mehran....

FacePamphlet

File Edit

Name

Mehran Sahami



Friends:

Mehran Sahami is coding like a fiend

Displaying Mehran Sahami

Error Checking: Some Examples

Look up nonexistent profile

The screenshot shows the FacePamphlet web application interface. At the top, there is a blue header bar with the text "FacePamphlet" and a small icon. Below the header, there is a menu bar with "File" and "Edit". The main content area is divided into two sections. The top section contains a form with a "Name" label, a text input field containing "Julie Zelenski", and three buttons: "Add", "Delete", and "Lookup". The "Lookup" button is circled in blue. The bottom section contains a large white area with the text "A profile with the name Julie Zelenski does not exist". On the left side of the interface, there are three input fields with corresponding buttons: "coding like a fiend" with "Change Status", "MehranS.jpg" with "Change Picture", and "Mehran Sahami" with "Add Friend".

FacePamphlet

File Edit

Name Julie Zelenski Add Delete **Lookup**

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

A profile with the name Julie Zelenski does not exist

Set status when no profile is displayed

The screenshot shows the FacePamphlet web application interface. The title bar reads "FacePamphlet" with standard window controls. Below the title bar is a menu bar with "File" and "Edit". The main content area is divided into a left sidebar and a main panel. The sidebar contains three input fields with corresponding buttons: a status field with the text "coding like a fiend" and a "Change Status" button (highlighted with a blue oval), a picture field with the text "MehranS.jpg" and a "Change Picture" button, and a name field with the text "Mehran Sahami" and an "Add Friend" button. The main panel at the top has a "Name" label followed by an input field containing "Julie Zelenski", and three buttons: "Add", "Delete", and "Lookup". At the bottom of the main panel, a message reads "Please select a profile to change status".

FacePamphlet

File Edit

Name Julie Zelenski Add Delete Lookup

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

Please select a profile to change status

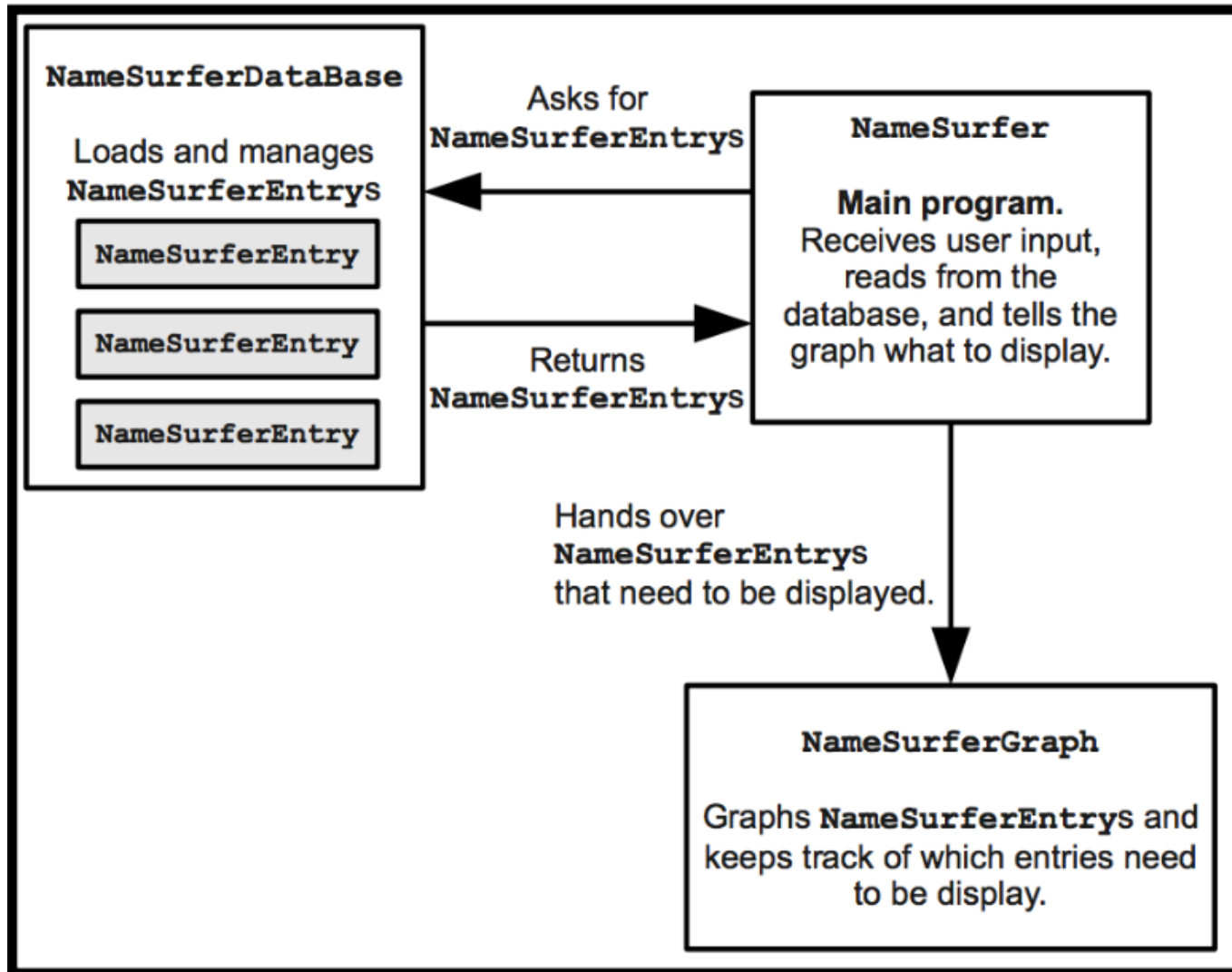
See handout/keep an eye
out for other possible
errors and edge cases!

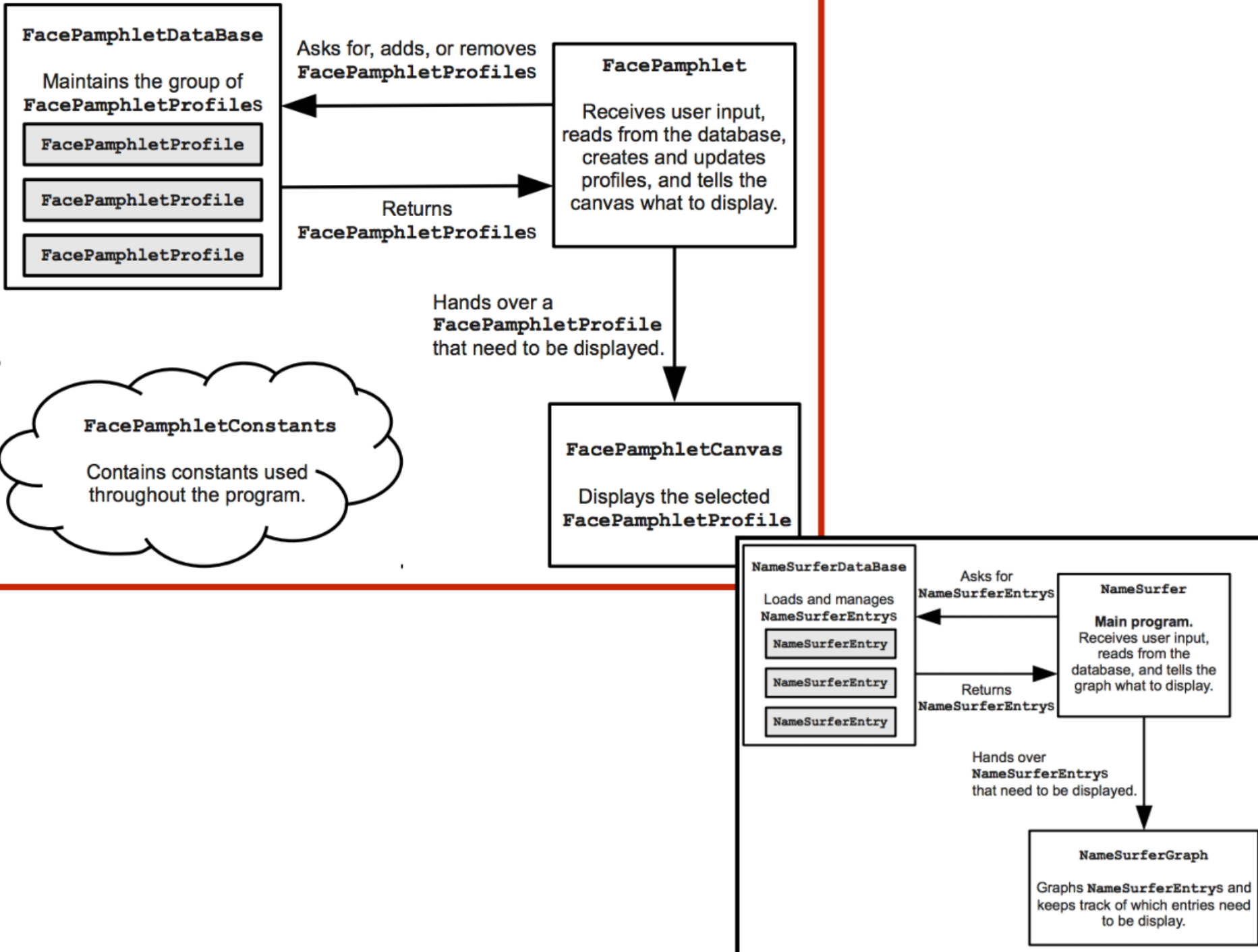
Program Overview

FacePamphlet

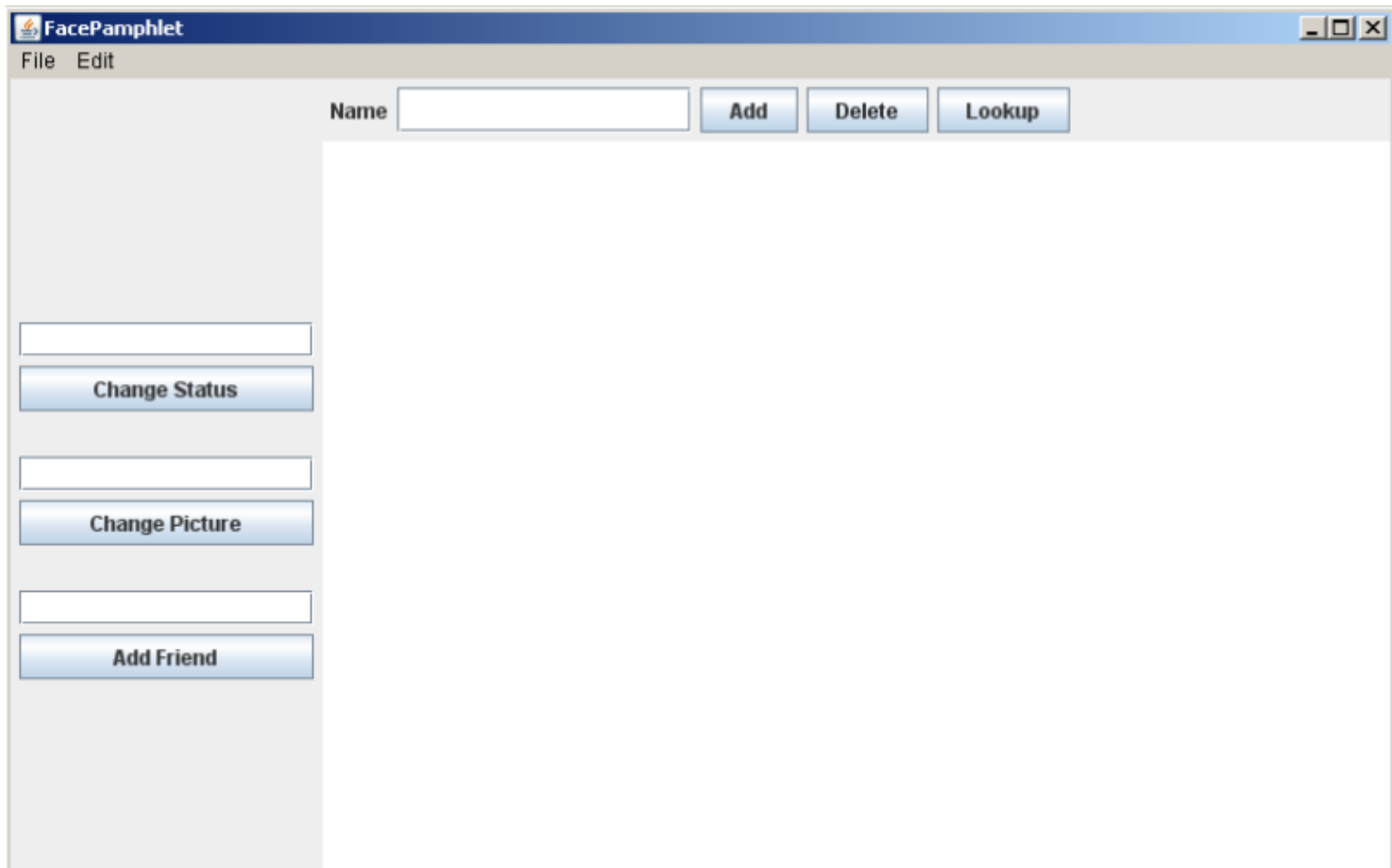
- FacePamphlet – main program – handles interactors, main program flow
- FacePamphletCanvas – all drawing, displaying of profiles (doesn't resize)
- FacePamphletProfile – a single profile in the social network (name, optional image, optional status, friend list)
- FacePamphletDatabase – keeps track of all profiles. Add, delete, look up profiles.
- FacePamphletConstants

That Seems Familiar...





Milestone 1: Interactors



Remember to respond to ENTER in text fields on the left!

```
textField.addActionListener(this);
```

Milestone 2: FacePamphletProfile

class: FacePamphletProfile

(instance variables)



class: FacePamphletProfile

```
public String getName()
```

String

(instance variables)



class: FacePamphletProfile

```
public String getName()
```

```
public GImage getImage()
```

```
public void setImage(GImage image)
```

String

GImage

(instance variables)



class: **FacePamphletProfile**

```
public String getName()
```

```
public GImage getImage()
```

```
public void setImage(GImage image)
```

```
public String getStatus()
```

```
public void setStatus(String status)
```

String

GImage

String

(instance variables)



class: FacePamphletProfile

```
public String getName()
```

```
public GImage getImage()
```

```
public void setImage(GImage image)
```

```
public String getStatus()
```

```
public void setStatus(String status)
```

```
public boolean addFriend(String friend)
```

```
public boolean removeFriend(String friend)
```

```
public Iterator<String> getFriends()
```

String

GImage

String

??

(instance variables)



Iterators

```
Iterator<String> it = profile.getFriends();  
  
while(it.hasNext()) {  
    String friend = it.next();  
    // Do something with that friend's name  
}
```

Milestone 3: FacePamphletDatabase

FacePamphletDatabase

// Adding profiles

```
public void addProfile(FacePamphletProfile profile)
```

// Asking for profiles

```
public FacePamphletProfile getProfile(String name)
```

// Removing profiles

```
public void deleteProfile(String name)
```

// Checking for profiles

```
public boolean containsProfile(String name)
```

Milestone 4: Entering Profile Info

Change Status

- Get status from the text box
- Use `.setStatus()` on the current profile to set it to the entered status
- Error checking for when no profile is being displayed

Change Picture

- Get picture filename from text box
- Attempt to get GImage for that filename
- Use .setPicture() on current profile to set it to the new picture

```
GImage image = null;
```

```
try {
```

```
    image = new GImage(filename);
```

```
    // image loaded successfully if we get here!
```

```
} catch (ErrorException ex) {
```

```
    // Code that is executed if filename cannot
```

```
    // be opened – error message
```

```
}
```

Add Friend

- Get the name from the text box
- Make sure it's a valid user profile!
- Use `.addFriend()` to add the new friend

Milestone 5: FacePamphletCanvas

Make sure to use all the constants in
FacePamphletConstants!

class: FacePamphletCanvas



class: FacePamphletCanvas

```
public void showMessage(String msg)
```



class: FacePamphletCanvas

```
public void showMessage(String msg)
```

```
public void displayProfile(FacePamphletProfile profile)
```

Objects

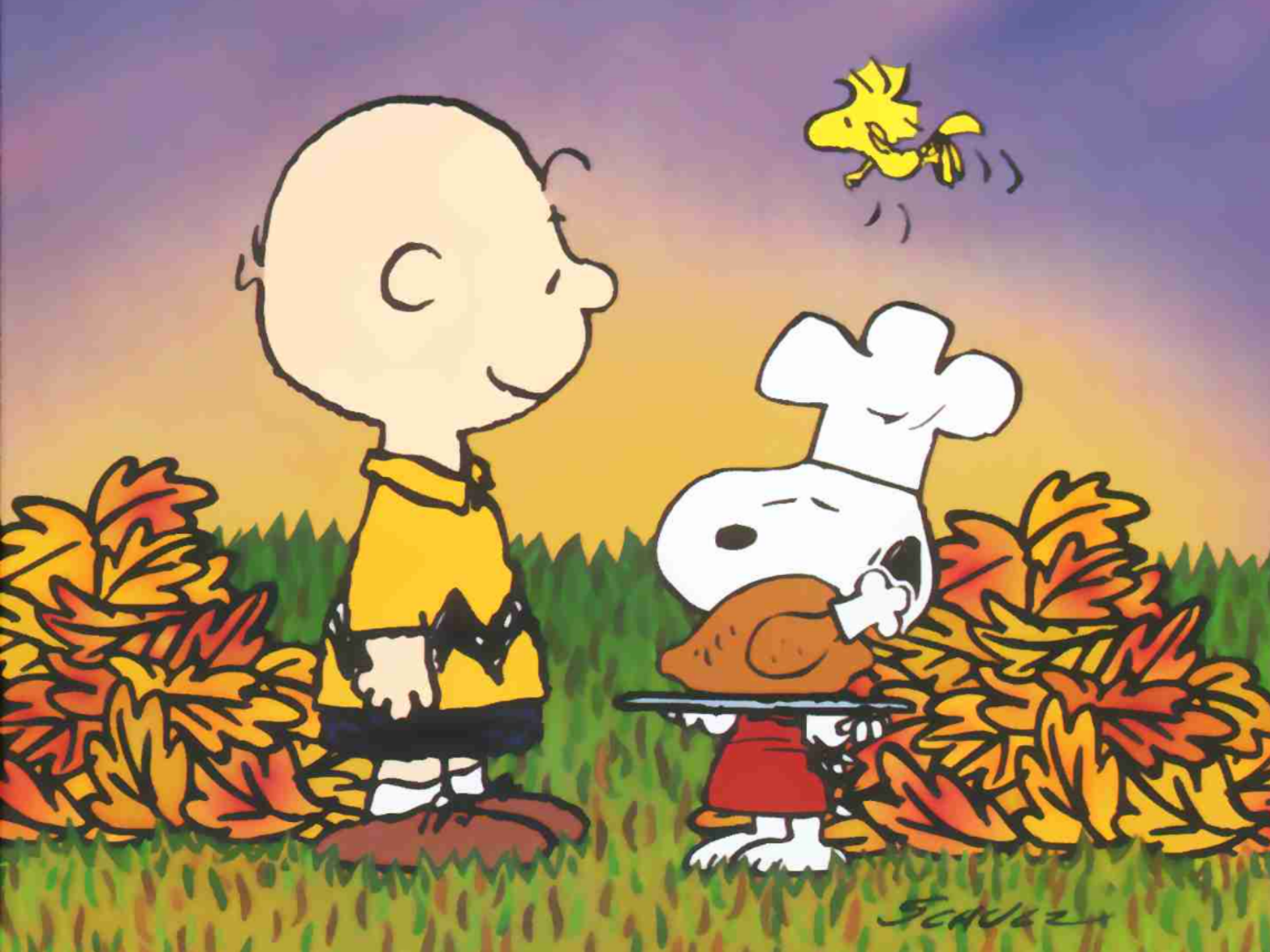


Tricky Parts

- Removing profiles (also modifying friends lists of everyone who is friends with that person)
- Make sure you display all status messages
- Edge cases/Error checking!

Final Tips

- Think about similarities between FacePamphlet and NameSurfer
- Go to the LaIR!
- Incorporate IG feedback
- Add awesome extensions!
- Have fun!
- Thanks for coming to YEAH hours!



SCHULZ