

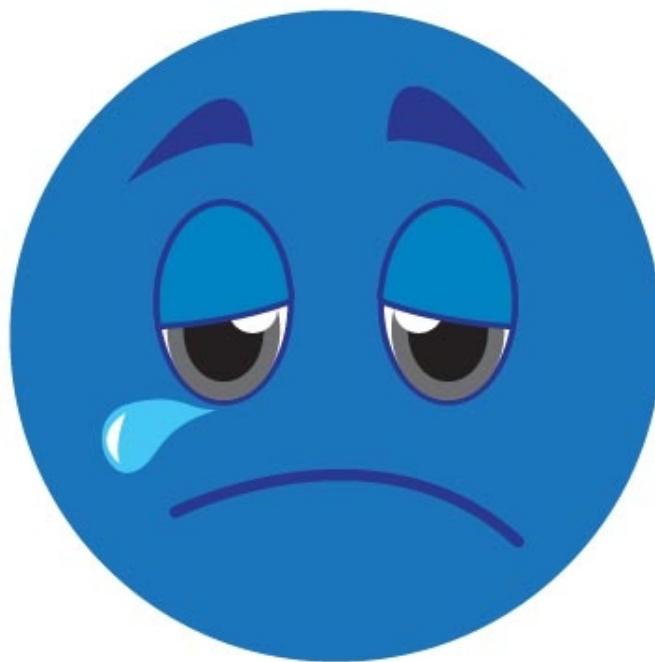
YEAH Session #7

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

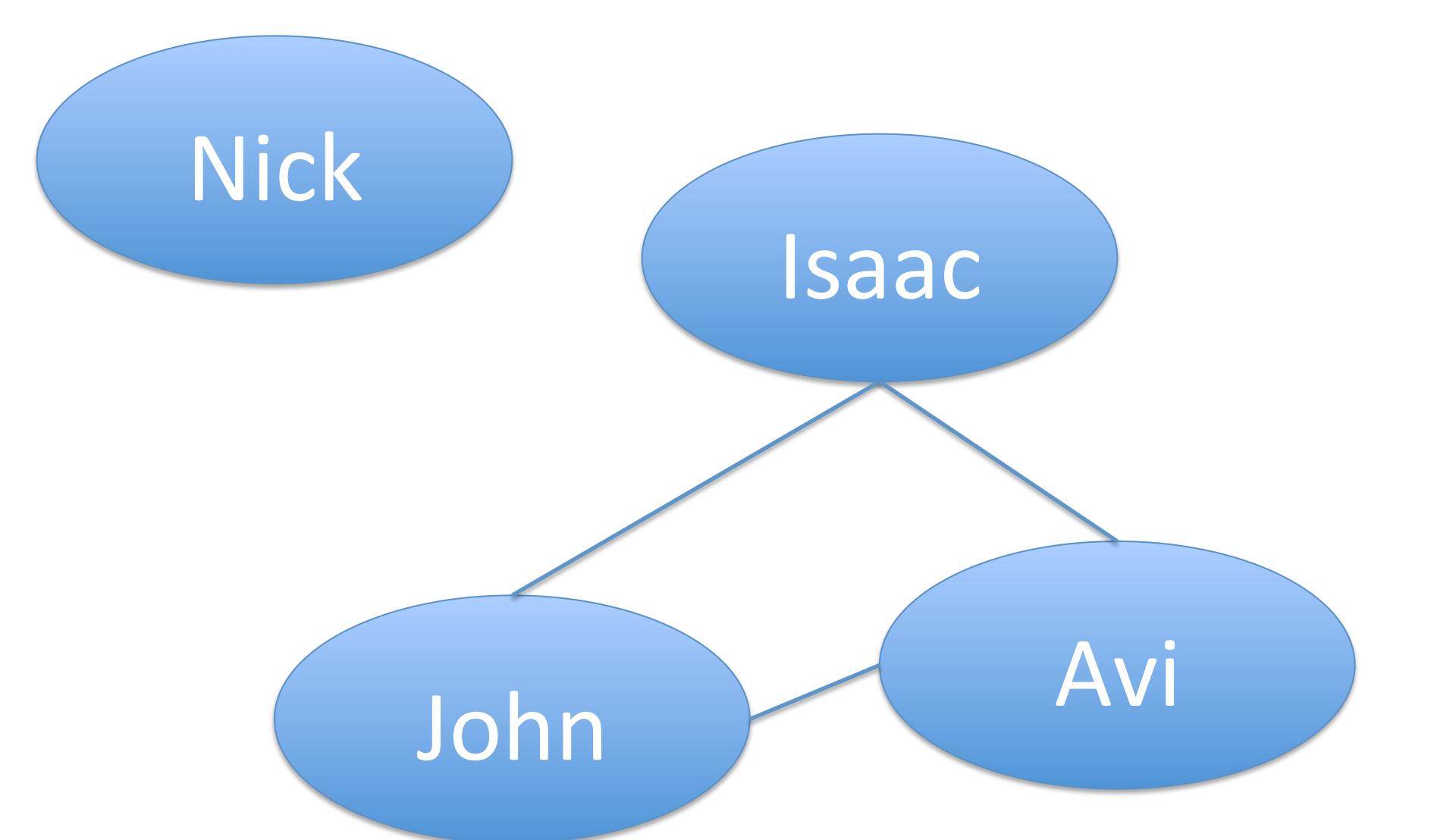


YEAH Hours Schedule

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



What is a Social Network?



Nick

Isaac

John

Avi

Friendships always reciprocal!

Nick

Isaac

John

Avi

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



File Edit

Name

Add

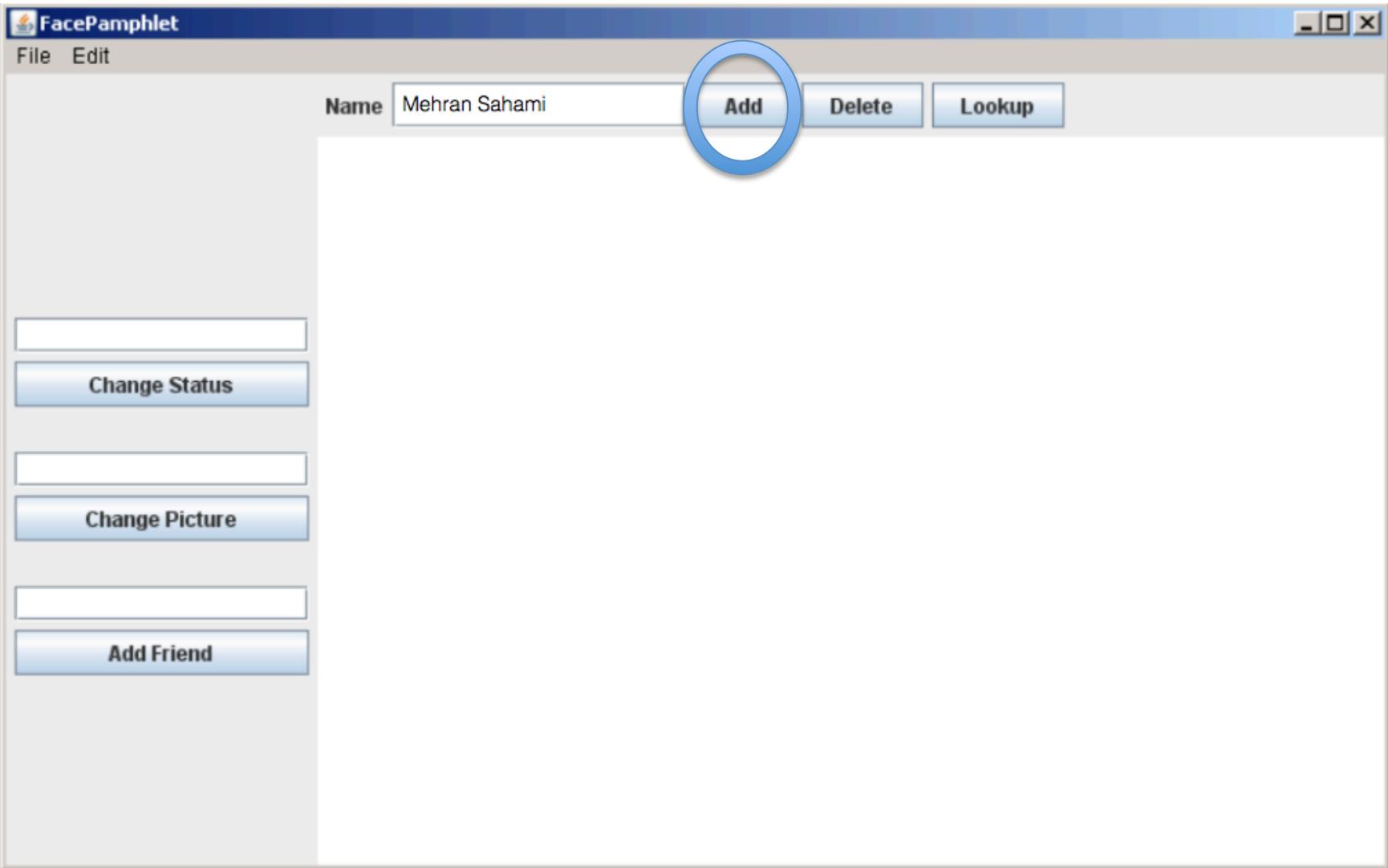
Delete

Lookup

Change Status

Change Picture

Add Friend





File Edit

Name Mehran Sahami

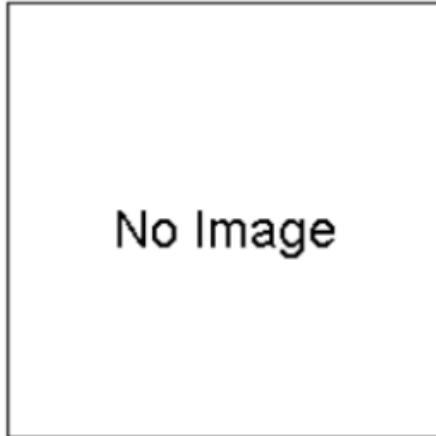
Add

Delete

Lookup

Mehran Sahami

Friends:



No Image

Change Status

Change Picture

Add Friend

No current status

New profile created

Change Status



File Edit

Name Mehran Sahami

Add

Delete

Lookup

Mehran Sahami

Friends:

coding like a fiend

Change Status

No Image

Change Picture

Add Friend

No current status

New profile created



File Edit

Name Mehran Sahami

Add

Delete

Lookup

Mehran Sahami

Friends:

coding like a fiend

Change Status

No Image

Change Picture

Add Friend

Mehran Sahami is coding like a fiend

Status updated to coding like a fiend

Change Picture



File Edit

Name Mehran Sahami

Add

Delete

Lookup

Mehran Sahami

Friends:

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Add Friend

No Image

Mehran Sahami is coding like a fiend

Status updated to coding like a fiend

Name Mehran Sahami

[Add](#)[Delete](#)[Lookup](#)

Mehran Sahami

Friends:

coding like a fiend

[Change Status](#)

MehranS.jpg

[Change Picture](#)[Add Friend](#)**Mehran Sahami is coding like a fiend****Picture updated**

Create Another Profile

Name Julie Zelenski

Add**Delete****Lookup**

Mehran Sahami

Friends:

coding like a fiend

Change Status

MehranS.jpg

Change Picture**Add Friend****Mehran Sahami is coding like a fiend****Picture updated**

File Edit

Name Julie Zelenski

Add

Delete

Lookup

Julie Zelenski

Friends:

coding like a fiend

Change Status

MehranS.jpg

Change Picture

No Image

Add Friend

No current status

New profile created

Add A Friend

File Edit

Name Julie Zelenski

Add

Delete

Lookup

Julie Zelenski

Friends:

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

No Image

No current status

New profile created



File Edit

Name Julie Zelenski

Add

Delete

Lookup

Julie Zelenski

Friends:

Mehran Sahami

No Image

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

No current status

Mehran Sahami added as a friend

Look up a profile

FacePamphlet

File Edit

Name: Mehran Sahami Add Delete **Lookup**

Julie Zelenski

Friends:
Mehran Sahami

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

No Image

No current status

Mehran Sahami added as a friend

 FacePamphlet

File Edit

Name Add Delete Lookup

Mehran Sahami



coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

Friends:
Julie Zelenski

Mehran Sahami is coding like a fiend

Displaying Mehran Sahami

Delete a profile



File Edit

Name Julie Zelenski

Add

Delete

Lookup

Julie Zelenski

Friends:

Mehran Sahami

coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

No Image

No current status

Displaying Julie Zelenski

FacePamphlet

File Edit

Name Julie Zelenski Add Delete Lookup

Julie Zelenski

Friends:
Mehran Sahami

coding like a fiend

Change Status

MehranS.jpg

Change Picture

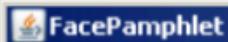
Mehran Sahami

Add Friend

No Image

No current status

Displaying Julie Zelenski



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 Add Delete **Lookup**

Mehran Sahami



coding like a fiend

Change Status

MehranS.jpg

Change Picture

Mehran Sahami

Add Friend

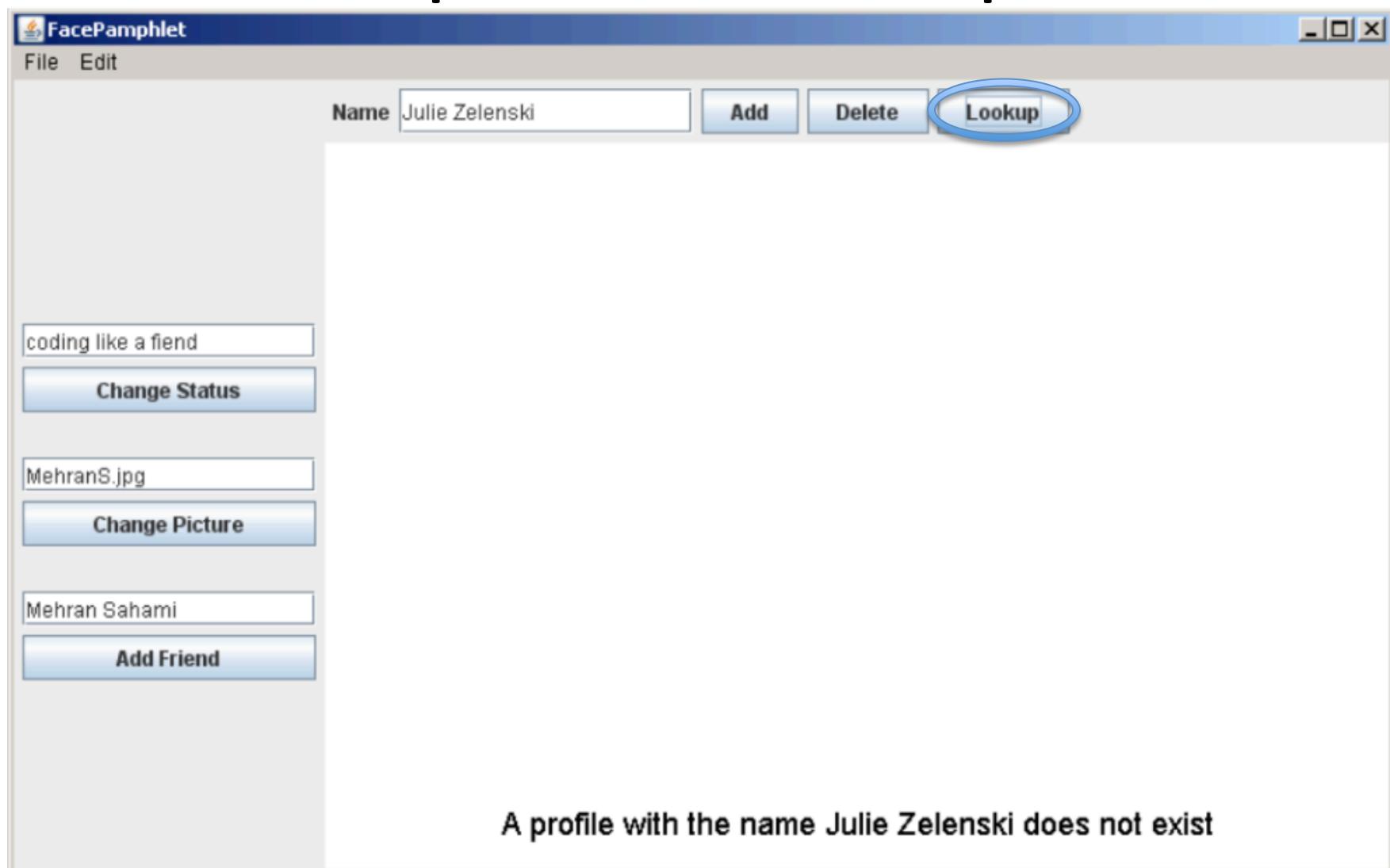
Mehran Sahami is coding like a fiend

Friends:

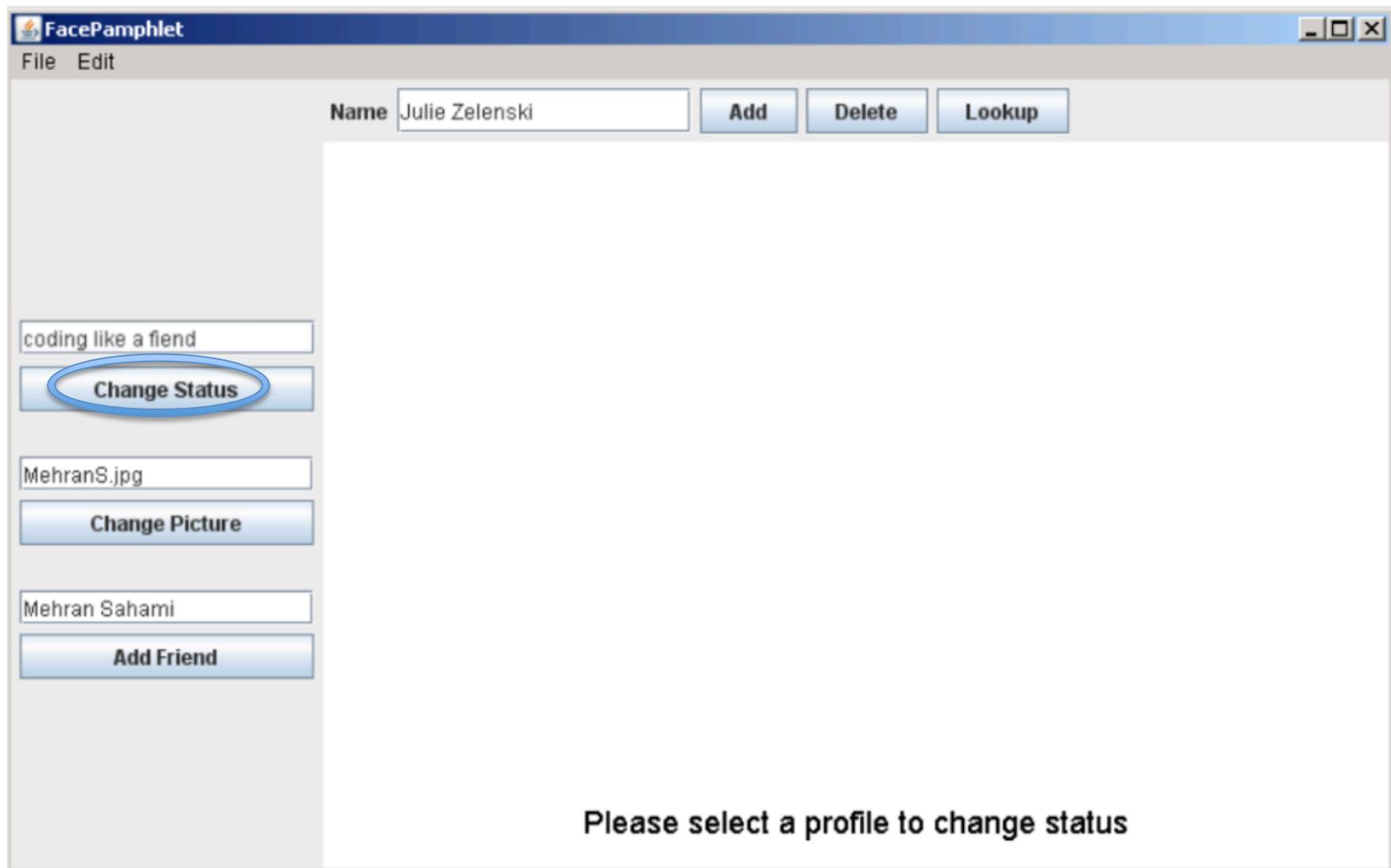
Displaying Mehran Sahami

Error Checking: Some Examples

Look up nonexistent profile



Set status when no profile is displayed



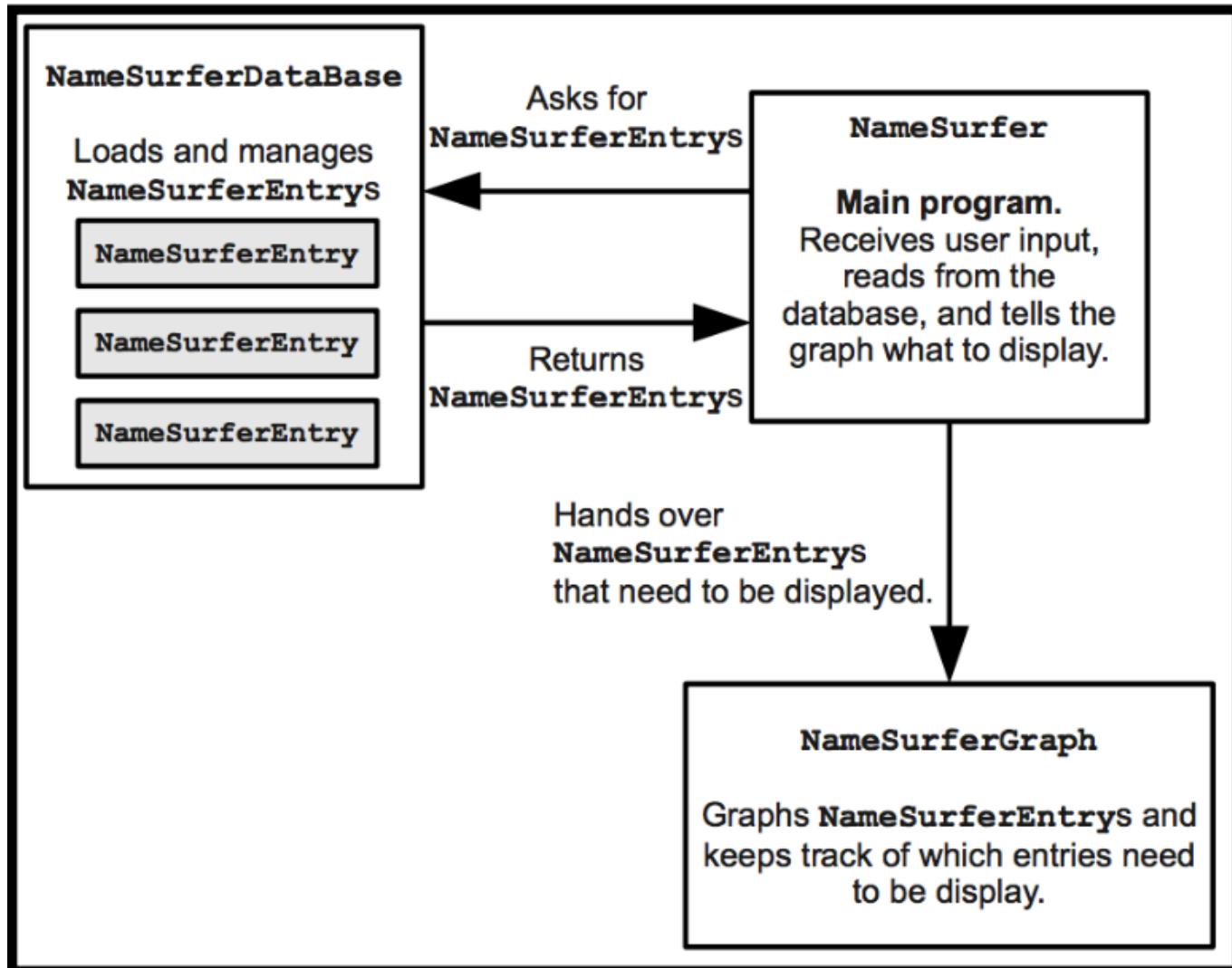
See handout/keep an eye
out for other possible
errors and edge cases!

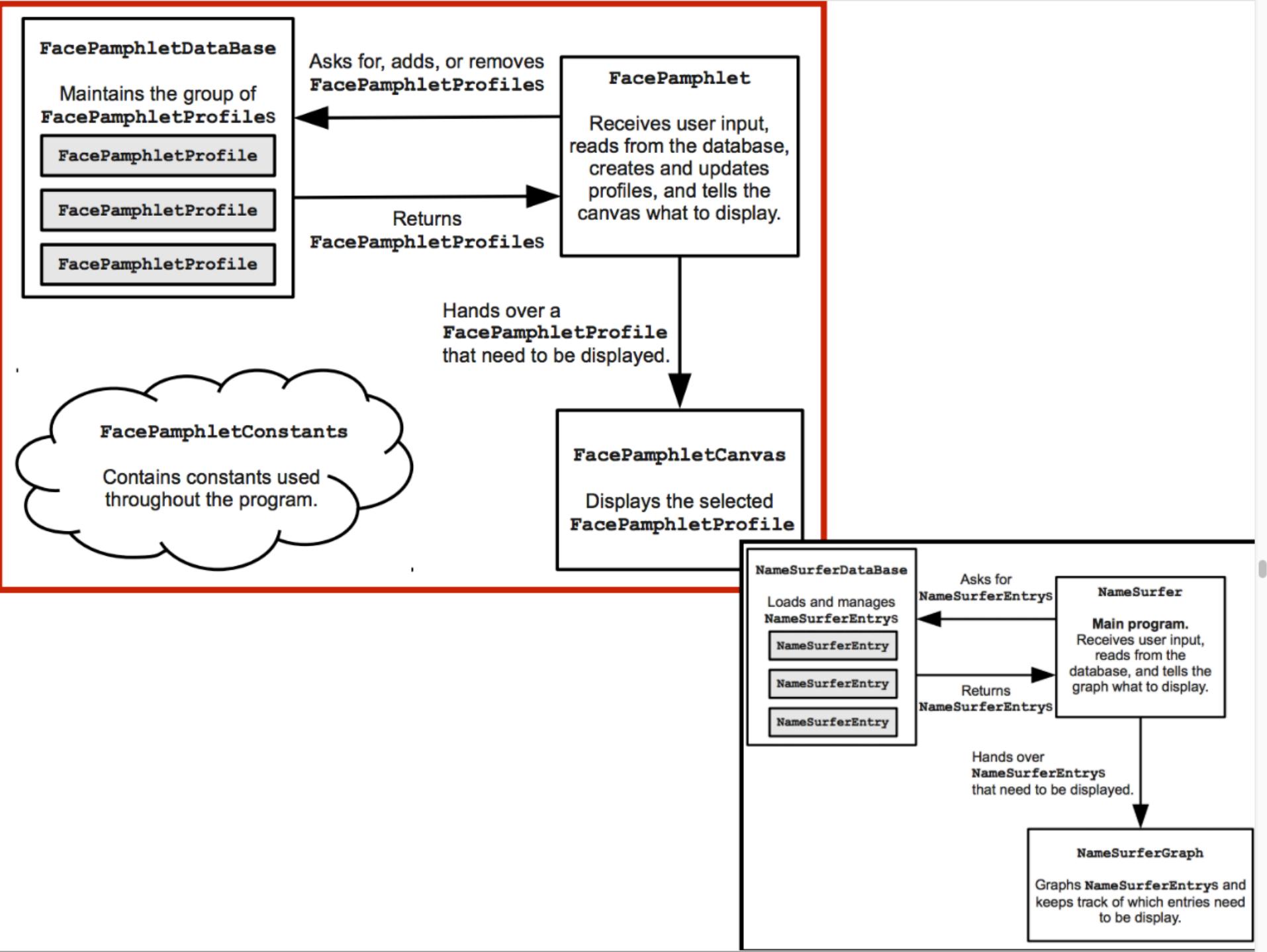
Program Overview

FacePamphlet

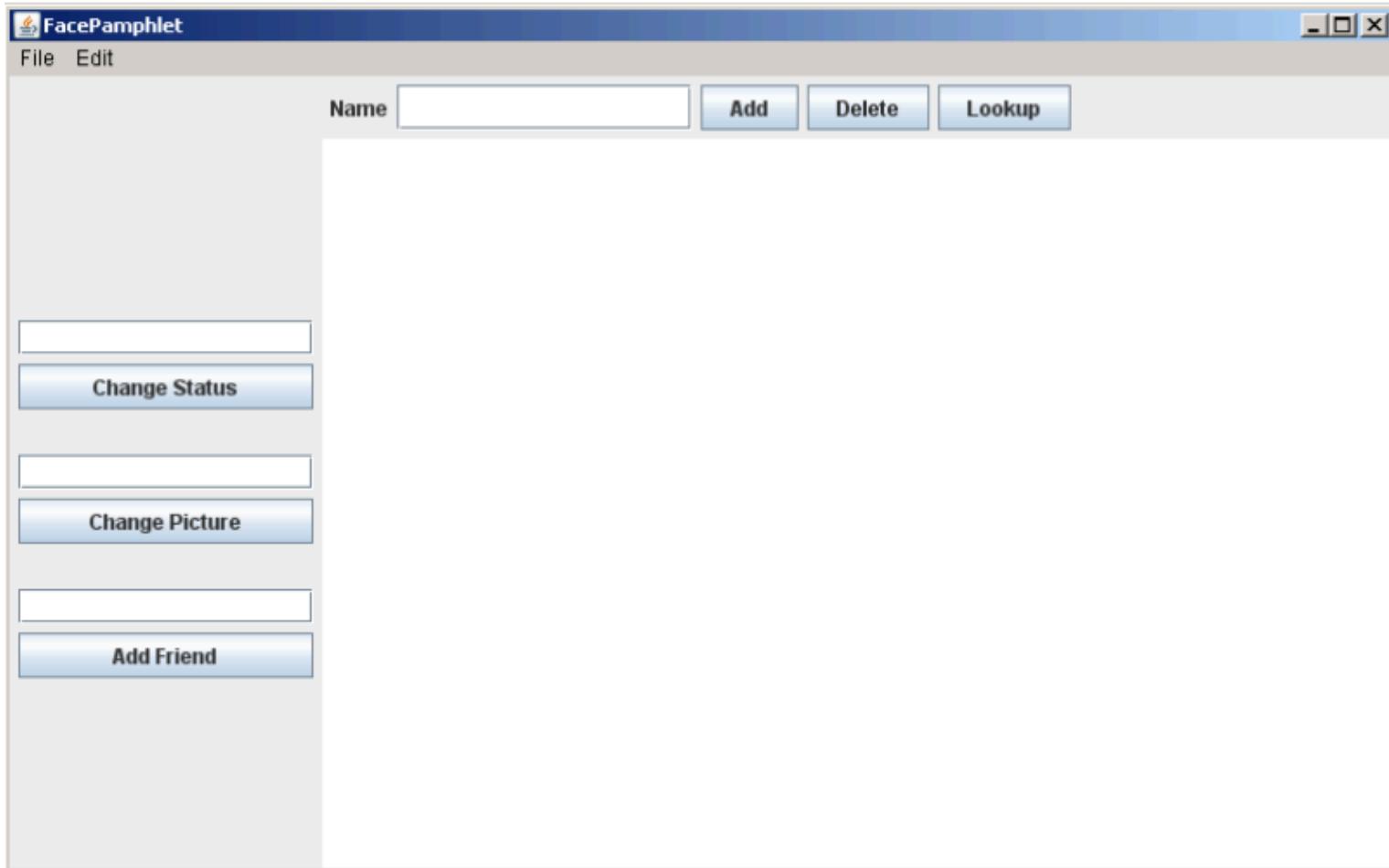
- FacePamphlet – main program – handles interactors, main program flow
- FacePamphletCanvas – all drawing, displaying of profiles (doesn't resize)
- FacePamphletProfile – a single profile in the social network (name, optional image, optional status, friend list)
- FacePamphletDatabase – keeps track of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

String

```
public GImage getImage()
```

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

GImage

```
public String getStatus()
```

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

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

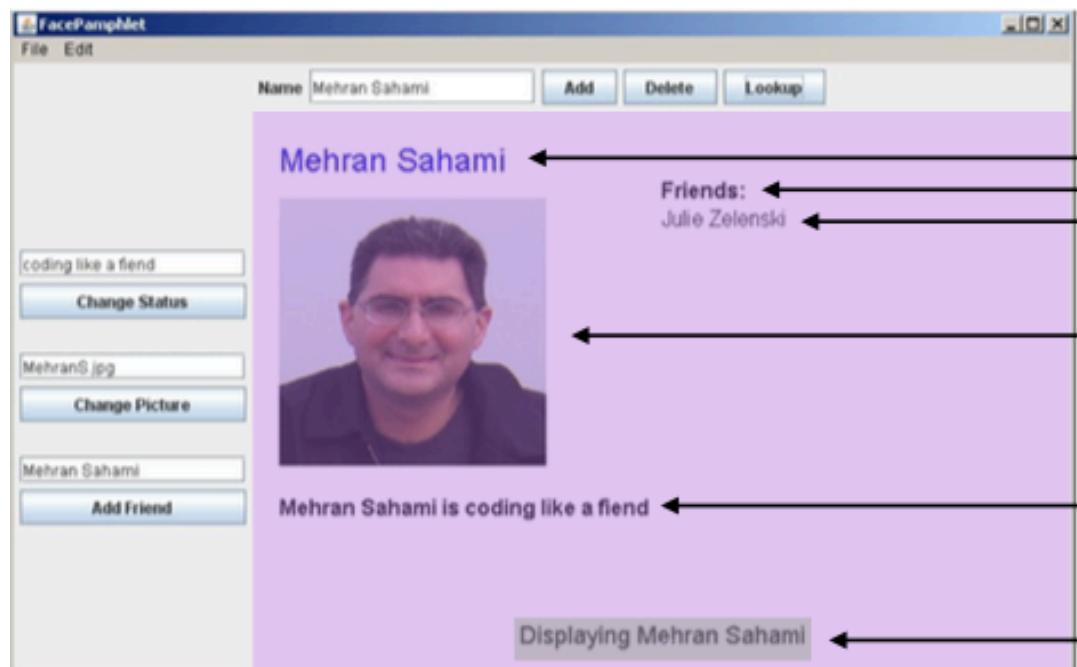
```
public void showMessage(String msg)
```



class: FacePamphletCanvas

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

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

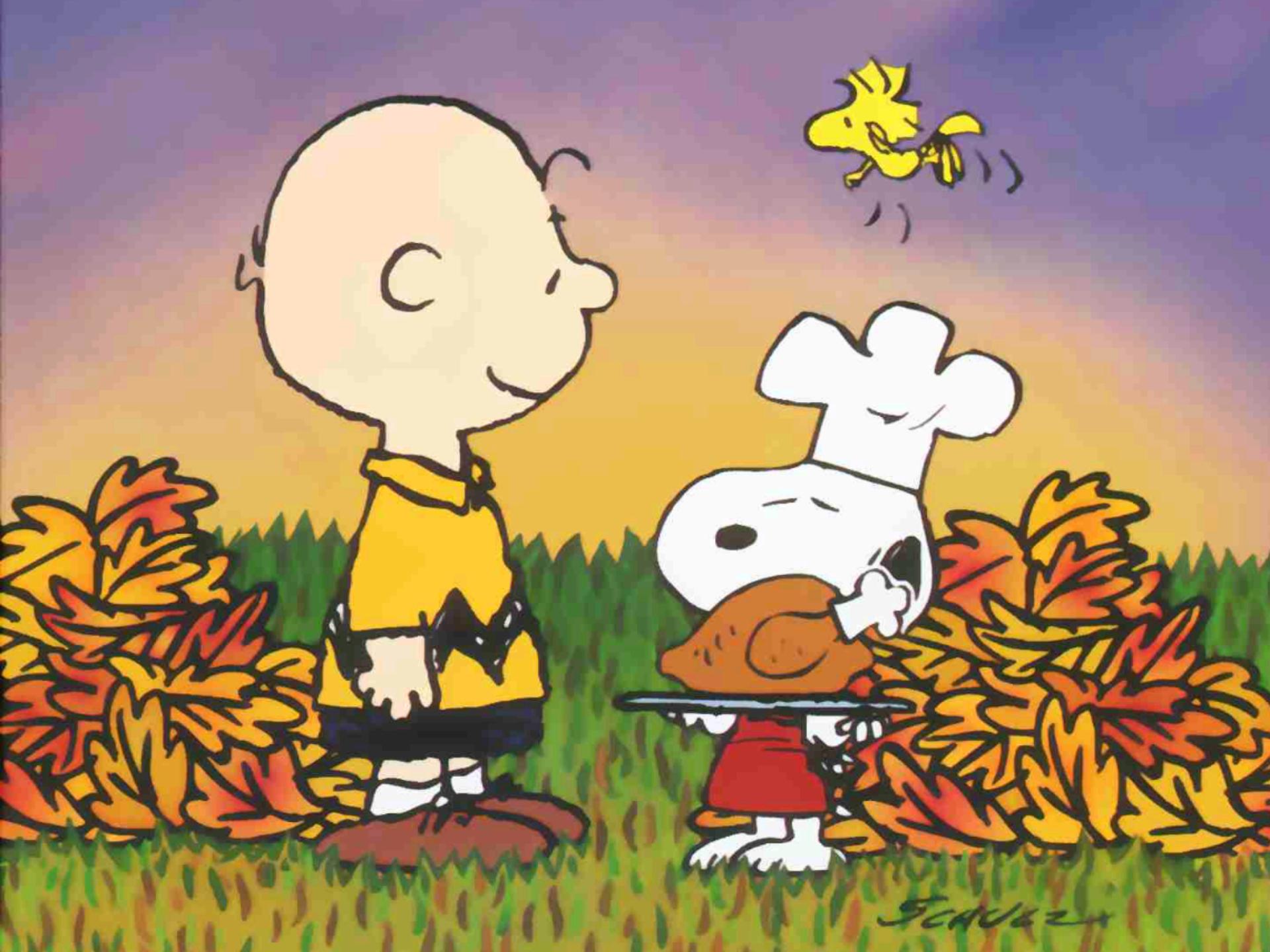


Tricky Parts

- 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!



SCHAUER