YEAH Session #7
November 30, 2017 5:30-6:30pm
Isabella Garcia-Camargo
Slides by NickTroccoli
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<td>Assignment 7</td>
<td>Today!</td>
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What is a Social Network?
Friendships always reciprocal!
FacePamphlet!

• Due at 1:30PM on Friday, Dec. 8th
• 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
Change Status
coding like a fiend

Mehran Sahami

No Image

No current status

New profile created
Mehran Sahami

Friends:

No Image

Mehran Sahami is coding like a fiend

Status updated to coding like a fiend
Change Picture
Mehran Sahami

Friends:

No Image

Mehran Sahami is coding like a fiend

Status updated to coding like a fiend
Mehran Sahami

Mehran Sahami is coding like a fiend

Picture updated
Create Another Profile
Mehran Sahami

Friends:

Mehran Sahami is coding like a fiend

Picture updated
Julie Zelenski

No Image

No current status

New profile created
Add A Friend
Julie Zelenski

Friends:

No Image

No current status

New profile created
Julie Zelenski

Friends:
Mehran Sahami

No Image

No current status

Mehran Sahami added as a friend
Look up a profile
Mehran Sahami

Julie Zelenski

Friends:
Mehran Sahami

No Image

No current status

Mehran Sahami added as a friend
Mehran Sahami is coding like a fiend

Friends:
Julie Zelenski

Displaying Mehran Sahami
Delete a profile
Displaying Julie Zelenski
Profile of Julie Zelenski deleted
Now let’s look up Mehran....
Error Checking: Some Examples
Look up nonexistent profile

A profile with the name Julie Zelenski does not exist.
Set status when no profile is displayed

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...

**NameSurferDatabase**
- Loads and manages **NameSurferEntries**
  - NameSurferEntry
  - NameSurferEntry
  - NameSurferEntry

**NameSurfer**
- Main program. Receives user input, reads from the database, and tells the graph what to display.

**NameSurferGraph**
- Graphs **NameSurferEntries** and keeps track of which entries need to be displayed.
FacePamphletDataBase
Maintains the group of FacePamphletProfiles
FacePamphletProfile
FacePamphletProfile
FacePamphletProfile

FacePamphlet
Asks for, adds, or removes FacePamphletProfiles
Returns FacePamphletProfiles
Receives user input, reads from the database, creates and updates profiles, and tells the canvas what to display.

FacePamphletCanvas
Displays the selected FacePamphletProfile

FacePamphletConstants
Contains constants used throughout the program.

NameSurferDataBase
Loads and manages NameSurferEntries
NameSurferEntry
NameSurferEntry
NameSurferEntry

NameSurfer
Main program. Receives user input, reads from the database, and tells the graph what to display.

NameSurferGraph
Graphs NameSurferEntries and keeps track of which entries need to be display.
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()
class: FacePamphletProfile

public String getName()

public GImage getImage()

public void setImage(GImage image)
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()
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!