

Lab 10 Feedback

- Adhere to interface
 - Accepted parameter types
 - Type of what is returned
- Use methods you've already written
 - `addPerson`
- What to return when errors

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Lab 11: Three Parts

- Linux practice:
 - Using the `wc` command
- Social Network extensions
 - Binary search – find people in same network
 - Exception handling – handling bad files
 - UI: add search functionality
- Two-dimensional lists
 - Including Connect Four

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wc Command

- **wc**: Word Count
 - Count up the lines of Social Network code from Lab 10
 - Compare with code for this assignment
- Specific directions are in the lab

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Social Network, Extended

- Searching Overview
 - Allows you to search for people by their network – lower cased, without spaces for more intuitive results
 - Update `SocialNetwork` class and UI appropriately

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Summary of Modifications to Binary Search

- Add a search method
 - Takes as parameter the network to search for
- Check the *network* of the Person that is at the midpoint
 - Lower cased, without spaces
- After found, add to the list of Persons who match
 - Get the Persons before and after that person in the list that have the same network and add to list
- Represent (in method) and handle (in UI) when no people belong to network
- For "most intuitive" results:
 - Lowercase the key, remove spaces
 - Changes algorithm again slightly

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Social Network, Extended

- Exception handling
 - Every time open a file in one of *your* methods, add exception handling
 - Print out error message and return from method
 - Better: return `True` or `False` from method
 - True if works
 - Then UI can check what returned and print appropriate message

```
try
  <code that could throw an exception>
except [error-type]:
  <handle exception appropriately>
```

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SocialNetwork Code

- Fix the major problems in your code first
- Or, use the code in the handouts/lab11 directory
 - person.py, social.py, facespace.py

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Review

- How do you create a 2D list?
- How do you get the 2nd element in the 3rd “row” of a list?
- How do you find the number of lists in a 2D list?
- How do you find the number of elements in one of those lists?

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2D List Practice

- Creating, printing, processing 2D list
- ConnectFour
 - Opportunities for extra credit
 - Read through given code to see what is available
 - Implement make move

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Problem: C4 - Making a Move

- The player clicks on a column, meaning that's where the player wants to put a checker
- How do we update the board?

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ConnectFour Class

- Data
 - Board, a 2D list
- Methods
 - Constructor
 - Display the board
 - Play the game
 - Repeat:
 - Get input/move from user
 - Check if valid move
 - Make move
 - Display board
 - Check if win
 - Change player

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Looking Ahead

- Bring your final exam envelopes to me by Friday so that I can stuff them
- Bring your final exam questions tomorrow
- Course evaluations will be on Sakai under Tests & Quizzes – You'll get an email
 - 70% complete evaluations → 1% lab points added to lab grade
 - For every 10%, additional 1%

Thanks to Alicia and Amy
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