What Next?
Python, Java, CSE Courses

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UW CSE 160
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We want your feedback!

https://uw.iasystem.org/survey/236240

• Exams - Format/Timing/Policies?
  – How was the group aspect for you?

• More Practice
  – Things we have done: links on course web page
    • Section examples that are meant to be similar to code you will need to write for the HW
    • CodingBat
    • CheckIn (HW5)
    • HW intro videos.
  – Are there other types of practice you would like? what?

• Lecture Time/Activities
  – Gradescope in-class activities:
    Do you wish we had more of these? Done differently?

• Ed Board/Discord – Best ways to get help?
  – I know there’s an “unofficial” class discord. Was it useful to you?
  – Should we make an “official” Discord?
There is more to learn!

• You have come a long way from the first day of class!
  – But there is more to learn!
• Data analysis, data science, and data visualization
• Scaling up:
  – Larger and more complex programs
  – Algorithm selection
  – “Big data”: out-of-memory data, parallel programming, ...
• Ensuring correctness
  – Principled, systematic design, testing, and programming
  – Coding style
• Managing complexity
  – Programming tools: testing, version control, debugging, deployment
  – Graphical User Interfaces (GUIs), user interaction
  – Data structures and algorithms
  – Working in a team
More UW Computer Science Courses!!

You could take any of these now!

- [21sp] CSE 163 Intermediate Data Programming
- [every quarter + summer] CSE 142, 143, 143x Programming in Java (143x only in fall)
- [21sp] CSE 154 Web Programming
- [21sp] CSE 416 Intro to Machine Learning (requires Stat 311/390)
- [every quarter] INFO/STAT/CSE 180 Intro to Data Science (some Math pre-req)
- [21sp] CSE 414 Intro to Databases *NEW!*

Require CSE 143:

- [every quarter] CSE 373 Data Structures & Algorithms (all year)
- [21sp] CSE 412 Intro to Data Visualization (or CSE 163)
- CSE 374 Intermediate Programming Concepts & Tools

Require CSE 373:

- CSE 410 Computer Systems (Operating Systems & Architecture)
- CSE 413 Programming Languages and their Implementation
- CSE 415 Artificial Intelligence
- CSE 417 Algorithms and Complexity
More Info on UW CSE Courses!!

• Which Course should I take:
  – https://courses.cs.washington.edu/courses/cse160/21wi/which-class/

• Intro CSE courses:
More Python Resources

• More Python practice:
Why the Python language?

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Comparison of Python with Java

• Python is better for learning programming
• Python is better for small programs
• Java is better for large programs

Main difference: dynamic vs. static typing
• Dynamic typing (Python): put anything in any variable
• Static typing (Java):
  – Source code states the type of the variable
  – Cannot run code if any assignment might violate the type