COSC1284

Programming Techniques

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What's next…

Outline

- Announcements
- Assignment in Focus
- Feedback: Your questions answered
- Code Examples (Sumarise Concepts)

Announcements & Discussions

Announcements

Consultation Times

- There will be time allowed in your class for you to ask for help
- You can contact me to arrange a time for help outside of your class.
- ~~You can contact Justin to arrange a time for help outside of your class.~~

Mentoring Sessions

- Peer Mentoring is now available.

  What is Peer Mentoring

  How does it work

  Getting Help

Questions Answered

Manual Spacing / Escape Characters

- Look at Chapter 1 for escape characters
- Look at Chapter 3 for the **printf** method
- Look at Chapter 6 for the **String.format** method

Class commenting

- Each class should have a class level comment that includes your student details.

Input Errors

- Testing will assume the correct number and type of inputs, but not range.

Questions Answered

Discussions

- Magic Numbers
- Don’t just open each file individually
- Recursion
- Invalid Inputs
  - We will only be testing with valid inputs unless specified i.e. ranges
  - We will not be testing for invalid data i.e. typing a word when a number is required.

Chapter 3 & 4

Assignment in Focus

Chapter 3

- User Input for the Temperature & Lotto programs
- Scanner bug when getting user input.
- Formatting the output for display on the console
- Generating Random numbers (Ex 4)

Chapter 4

- Understanding methods
- Writing methods
- Returning values from methods
- Implementing algorithmic steps

Chapter 3 - Input / Output

- Input
- Output
- Scanner
- Package
- Class
- Method
- Statement
- Expression
- Token
- Literals & Constants
- Formatting output
- print, println, printf
- Learning from error messages
- Casting
- Modulus operator
- Scanner Bug
- Integer.parse / Double.parse

Chapter 4 - Methods

- Defining methods
- “Invoked”, “Called”
- Reduces code repetition
- Makes code easier to read
- Makes code easier to test
- Makes code easier to maintain
- Makes code easier to debug
- Linear execution
- Parameters / Arguments
- In Built Methods
- Methods steps in an algorithm
- Learning from error messages
- Returning values
- Temp variables make debugging easier
- Incremental development

Code example

- Writing simple programs with best practice code.