

TESTER CLASSES

CS302 – Introduction to Programming
University of Wisconsin – Madison
Lecture 21

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Testing a Class

- In the long run, your class may become a part of a larger complex program that may interact with users, the internet, files, etc.
- Before integrating your class into such a program it is a good idea to test your class in isolation
- This process is called **Unit Testing**

Creating a Tester Class

- In order to isolate and test a class, we create a separate class called a **Tester Class** that we will use to test our class
- This tester class will contain a main method. Inside this main method, we will instantiate the class we are testing and test its various methods

Tester Class

- It is good practice to create a method for each piece of functionality of the target class you would like to test.
- Each of these methods would correspond to a single test
- Then, your main method can call each test

Multiple main methods

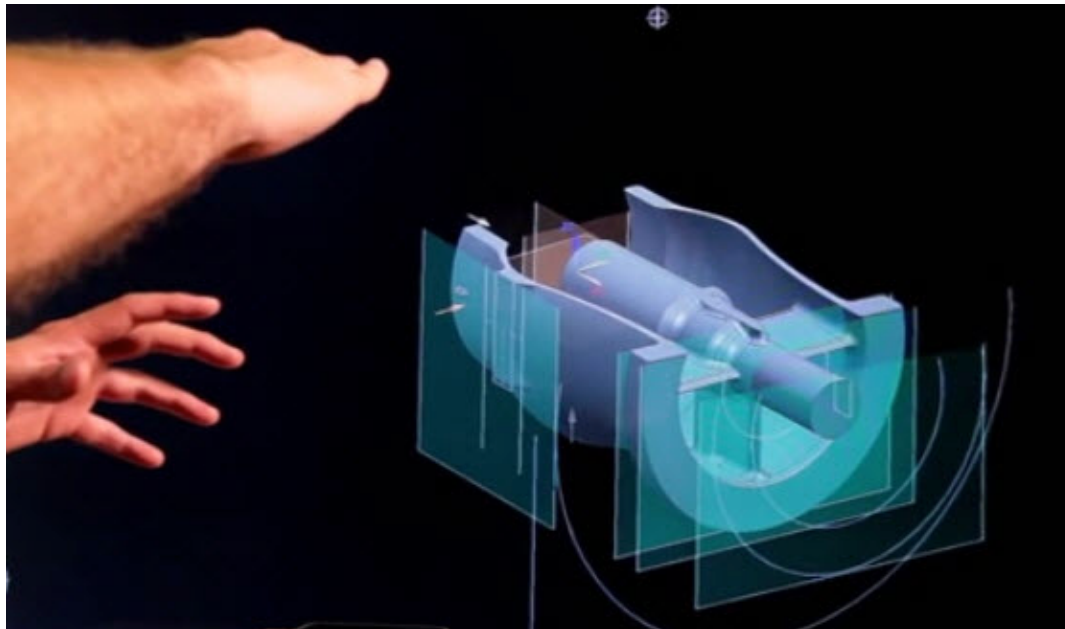
- You can have multiple main methods in your program. That is, multiple classes may contain a main method.
- For example, each one of your tester classes will have a main method.

Multiple main methods?

- How will your program know which main method to call when the program begins?
- Answer: You explicitly tell the computer which main method will be called when the program starts
- How? In Eclipse, simply right click on the class with the main method you want to use and click the “Run As -> Java Application”
- Outside of Eclipse, you would specify the main method in a **manifest** file (don't worry about this detail)

Cool CS Link of the Day

- Elon Musk shows off new 3D Modeling Setup inspired by Iron Man movie:
- <http://techcrunch.com/2013/09/05/elon-musk-shows-off-his-crazy-iron-man-inspired-3d-modeling-setup/#!>



Cool CS Link of the Day

- Not really a CS link, but a definitely a cool link about seeing Earth from space
- <http://vimeo.com/55073825>

