CST 8288 Object Oriented Programming

Lab #3

Purpose Explore passive-MVP (MVC) design pattern

Activity Implement a GUI application:

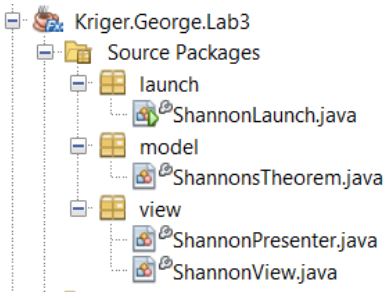
- that calculates Shannon's Theorem.
- that implements the passive MVP design pattern.
- using the **NetBeans** IDE

Coding requirements:

- Be sure to include **Javadoc** comments and other comments in your code.
- For the "*model*", you must use the class `ShannonTheorem` (provided)
- **You must provide the code for:**
  - the "*view*" (e.g. `ShannonView`)
  - the "*presenter*" (e.g. `ShannonPresenter`)
  - the `main()` (e.g. `ShannonLaunch`)
- Hints:
  - See the example discussed in class:
    `SimplerLearnJavaFX-passiveMVP`
  - See the sample **NetBeans** project layout and the sample GUI pictured below.
- Notes:
  - Project layout must make use of multiple packages.
  - Your solution does not have to match the sample GUI exactly. But it should have the following features:
    - A title in the titlebar,
    - 2 input fields, a read-only output field and a button for calculations.
    - Process incorrect input using exception handling and a popup dialog (e.g. `Alert` window)
  - Your solution can use either:
    - Non-private access to attributes in the "model" or
    - `Properties` and bindings …
      - in which case, you will have to add the `Properties` to the "model"

- export your **NetBeans** project as a .zip
    - name your file: Lastname.Firstname.Lab3.zip
    - name your project and corresponding folder: Lastname.Firstname.Lab3
    - (use your own names, of course)

Sample Project Layout:



Sample GUI: