

# CIS 2531: Introduction to Python Programming

## Final Project Assignment

**Name:** \_\_\_\_\_

## Final Project Course Concept Weighting and Possible Points

CONCEPT	POSSIBLE POINTS	GRADED POINTS**
Event Driven Graphical User Interface (i.e. Button, Canvas, Checkbutton, Entry, Frame, Label, Listbox, Menu, MenuButton, Message, Radiobutton, Scale, Scrollbar, Text, Toplevel)	40	
Classes and Object Oriented Programming (i.e. Creation and use of custom classes with private data, public accessor/mutator, and calculation methods)	30	
Containers: Lists, Tuples, Dictionaries, Sets	10	
Files: Input, Output	10	
Other: Exceptions, Functions, Recursion, Repetition, Decision	10	
<b>Total</b>	<b>100</b>	

**\*\*FlipGrid video required for any project grading points.**

## **Final Project Assignment Requirements**

1. On your own (*i.e. do not ‘**borrow**’ a program from the Internet*), design and implement an algorithm to solve a **real-world** problem **of your choice** that includes the above course concepts. Include a brief description of this problem and your approach to solve it below:

[illegible]

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2. Briefly describe **how** the following course concepts are implemented in your design:

a) Event Driven Graphical User Interface

b) Classes and Object Oriented Programming

c) Containers: Lists, Tuples, Dictionaries, Sets

d) Files: Input, Output

e) Other: Exceptions, Functions, Recursion, Repetition, Decision

<p style="text-align: center;"><b>CIS 2531: Introduction to Python Programming</b> <b>Final Project Assignment</b></p>
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3. Create a **FlipGrid** video (< 5 minutes) to demonstrate your application. Include a description of the application (see 1 above), how the course concepts are implemented in your application (see 2 above), and a sample run of your application. **This video is required prior to grading of submitted projects.**

- Getting Started for Students: <https://help.flipgrid.com/hc/en-us/articles/360051542894>
- Flipgrid Help Center: <https://help.flipgrid.com/hc/en-us>
- Link to Flipgrid Topic: <https://flipgrid.com/130aa746> (use your @dupage.edu email; Join Code is 130aa746)

Include the link to your FlipGrid video below (select 'Share' button to identify):

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4. Bundle this final project assignment form (*verify it is readable and grading comments can be saved within Adobe Reader*), **all Python** code files, data files, and other resources needed to run and test the program into a **single .zip file**. Upload the **single .zip file** to Blackboard under the given assignment.