

## CodeX Final Project

**UNIT 5**

**PROJECT: Final Project**

**Time: 2-4 weeks**

### PROJECT GOALS:

- Students will apply all concepts learned from this course to create a new program with all listed requirements.
- Students will earn a grade based on a combination of use of class time and productivity, presentation quality, and final product quality.

**Project Specifications:** You will write a new program. Look through your completed remix programs and select a project topic. Your program must include:

- Input from the user
- Output to the screen
- Local variable
- Global variable
- Function with a parameter
- List
- If, else statement
- Loop
- GUI

\*Please note: your program must have at least once instance of each element from this list, but you are not limited to these concepts. You can include any additional programming concepts you have learned. Also, you can have multiple uses of each requirement (ex: you can have more than one list or function, etc.)

## Project Instructions

### Planning:

1. Pick your project topic: what do you want your program to do?
2. Set a reasonable goal: what will you be able to accomplish within the available time?
3. Create a flowchart: map out your program flow.

You will need to select your project and define a clear goal to work towards. You will be responsible for delivering a final product and presenting it. Ensure that your goal is both reasonable and achievable.

Poor goal design often stems from being overly ambitious (choosing a project goal that requires significantly more time than available) or from lacking ambition or specificity (selecting a goal that is too simple or vague).

### Daily Classwork Reflection:

For each class day that you work on this project, you must complete a daily reflection and submit before the end of class. Answer these questions for each reflection:

1. What did you do/learn?
2. What did you accomplish?
3. What difficulties did you face? How did you overcome them?
4. What will you do next?

**Program:**

- Your program must include all requirements listed under Project Specifications.
- Your program must run and be free of all bugs.
- Your code must be organized, decomposed into problems and subproblems, making it easy to follow and read.
- Your comments must be clear and easy to understand.

**Final Presentation:**

You will create a slideshow that includes the following:

1. Your project topic
2. Your project goal
3. Flowchart pictures
4. One slide for each Programming Concept in your program (see list above under Project Specifications). Identify the concept and show a code snip for each mandatory concept.
5. What you learned throughout the given work time, focusing on overall key learning points, your biggest accomplishments, and biggest difficulties faced.
6. Reflection of your project and assessment of achieving your goal. Are you happy with the outcome? Would you recommend it to others to try? Why or why not?
7. A Live Demo of your completed program. This can include screenshots, videos, or a live demonstration.