

CSE 210

Final Project Plan Overview

The purpose of this assignment is for you to develop a project plan for your final project.

Final Project Options

There are two versions of the final project. One that is more open ended, and another one that is designed to provide more detailed practice on the concepts we have discussed.

If you have completed the the assignments for the previous units and feel comfortable with those topics, then you are prepared for the open-ended option.

However, if you were not able to complete all of the assignments from the previous units or do not feel that you have understood them very well, then it is important for you to "firm up your foundation" a little more to ensure that you are prepared for follow-up courses and employment that will make use of the principles of Programming with Classes. In this case, you should complete the second option for the final project called, the "Foundation 4."

In the *Foundation 4* option, you will write four separate smaller programs to help you practice the topics of the course. These projects will be more concrete and will help you strengthen your understanding of the core principles and the mechanics of using them in programming.

You can earn full points with either option.

Submit your final project plan

After reviewing the project options below, return to I-Learn and submit your plan. Your plan should include:

1. The project option are you choosing ("Open-ended project" or "Foundation 4").
2. A brief description of the project.

- If you are choosing the open-ended project, write a 1-2 paragraph description of the project you will create.
- If you are choosing the Foundation 4 version, write a 1-2 sentences description *of each of the four programs*, describing generally what each program should do.

Open-ended Project Option

If you have completed all of the previous projects and feel comfortable with the topics, you are eligible for the open-ended project option. Click below to see the details of this project.

► Open-ended Project Description (Click to expand)

Foundation 4 Project Option

If you have not completed all of the previous projects or are feeling a little nervous about the topics, you should complete the Foundation 4 project option.

In this project, you will write four separate, smaller programs. There is one program for each of the principles of Programming with Classes:

1. Abstraction
2. Encapsulation
3. Inheritance
4. Polymorphism

See the details of each project below.

User Interaction

The focus of these programs is to help you design and build the classes and work with the relationships among these classes. With that in mind, you do not need to create a menu system or a user interface. Instead, your Program.cs file can create the required objects, set their values, and display them as specified, without any user interaction.

Program 1: Abstraction with YouTube Videos

► Description (Click to expand)

Program 2: Encapsulation with Online Ordering

► Description (Click to expand)

Program 3: Inheritance with Event Planning

► Description (Click to expand)

Program 4: Polymorphism with Exercise Tracking

► Description (Click to expand)

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