IT 140 Module Two Assignment Guidelines and Rubric

Overview

PyCharm is an integrated development environment (IDE) used in computer programming, specifically for the Python language. It makes it easier for programmers to write various web applications in Python. In this assignment, to give you some experience with working in PyCharm, you will write a simple program that prompts a user for their name and age.

Note: The next coding assignment you will be *required* to develop in PyCharm is the Module Six Milestone. Learning how to develop in PyCharm now will help prepare you for the other coding assignments later in the course.

Prompt

For this project, you will be developing a PY file that contains your code in PyCharm and evaluating a few of the features of PyCharm. If you haven't already, be sure to install the PyCharm IDE and Python on your computer. Review the tutorials in the Module Two resources to help you install and get started with PyCharm.

Part A

In PyCharm, write a program that prompts the user for their name and age. Your program should then tell the user the year they were born. Here is a sample execution of the program with the user input **in bold**:

```
What is your name? Amanda
How old are you? 15


Hello Amanda! You were born in 2005.
```

1. Write the program. **Format your code using best practices**. Refer to the zyBooks style guide, if needed, to use proper naming conventions for variables and methods. **Use the most appropriate statements** with minimal extraneous elements, steps, or procedures.
2. Run the program.
3. Debug the program. **Be sure your code produces the correct results**.
4. Save and submit your file.

Part B

While you don't need an IDE to write a program, there are some features that make it desirable. What did you notice when using PyCharm to develop a simple program? For instance, you might have noticed how color is used. **Identify two to three features that could make coding easier for programmers, and briefly explain why**.

What to Submit

For this assignment, you will be developing and submitting the **NameAge.py** file. Develop your program in small steps, as outlined in the directions. When you have built the program and checked it for errors, save your file and submit it. You may resubmit the assignment if you need to make changes, but if your last submission is after the due date, you may not be able to receive full credit.

In addition, submit a Microsoft Word document of 2 to 3 paragraphs explaining some of the features of PyCharm and why they can be useful.

Module Two Assignment Rubric

Criteria	Proficient (100%)	Needs Improvement (70%)	Not Evident (0%)	Value
PyCharm: Industry Standard Best Practices	Formats code according to best practices, including in-line comments, white space, and variable and method naming conventions according to the zyBooks style guide	Attempts to format code according to best practices, with minor errors such as inadequate in-line comments, lack of white space, or inconsistent naming conventions	Does not attempt criterion	25
PyCharm: Efficiency	Writes source code using the most appropriate statements, functions, or methods and contains minimal extraneous elements, steps, or procedures	Writes code that is mostly efficient, with minor errors such as convoluted code or choice of a less efficient element	Does not attempt criterion	25
PyCharm: Functionality	Code produces correct results for all test cases in the given problem	Code produces incorrect results for the given problem or does not pass all tests for the given problem	Does not attempt criterion	40
PyCharm: Features	Identifies three features of the PyCharm environment and explains how the features could simplify programming	Identifies one or two features of the PyCharm environment and explains how the features could simplify programming, or identifies three features but does not explain why they were helpful	Does not attempt criterion	10
			Total:	100%