Python Project: Create your own Application Coding in Python!

# Purpose:

You are a computer programmer working for Awesome Applications. You have been given the project to create the next great application your company will promote and sell using the Python programming language.

Open an account on the Python online program

# Directions:

1. Talk to the teacher as soon as possible about your application idea to get approval before you begin.

2. Make sure you include the following:

1. An application **title** (place as comment and print to console for user)
2. **Your name** as the creator (place as comment and print to console for user)
3. An application **description** (place as comment and print to console for user)
4. Application **directions** (print to console for user)
5. **Question** that you ask the user of your application for input
6. **Variables** (a minimum of two) and setting them to an initial value if variable is of integer data type
7. A minimum of two **functions**
8. The use of a **list** or **dictionary** in at least one function
9. **Strings**
10. **Console output** (print)
11. At least one **math operation** (+, -, \*,? , %)
12. At least one **if** statement
13. At least one **for** statement
14. **Boolean operator** (and, or, not) or **comparative operators** (<=, >, etc.)
15. You provide the user back **information** (result of your application running) at the end of the application
16. Use **comments** throughout your program - the more comments that tell me what each block of code is doing, the better!

3. **Test and debug** your program.

4. **Proofread** **your strings** for spelling, capitalization, punctuation or grammar errors.

5. **Ask peers** to test your program. Gather feedback from them to improve your application

6. **Submit the link** of your program to the Python Project: Create your own application in the Assignments link on itslearning.

Ideas of problems to solve:

* Calculate total cost of travelling in the city including metro & bus fares
* Calculate total cost of field trip you plan for a HS course you are taking
* Search for phone numbers of your friends and family
* Create an action plan with steps for success given user priorities & plans
* Create an itinerary in your favorite city
* Create a student schedule

|  |  |  |
| --- | --- | --- |
| Python Project: Create Your Own Application Rubric | | |
| Criteria | **Possible Points** | **Points Earned** |
| Included and appropriate *title*, *your* *name* as the creator and an easy-to-understand *description* for your Application as *comments* (programmer will see) and as well as *print* *to* *console* for user (user will see). | 5 |  |
| Included application *directions* for your user that were complete and easy to understand. | 3 |  |
| Asks the user a *question* that provides the application with information to carry out the problem solving. | 3 |  |
| Used appropriately-named *variables* (at least two) and set them to initial values if integers | 4 |  |
| Included a minimum of two working *functions* that are appropriately named. (5 points each) | 10 |  |
| Included a working *if* statement | 5 |  |
| Included a working *for* statement | 5 |  |
| Included a *list* or *dictionary* and the use of a *list* or *dictionary* in one of the functions | 5 |  |
| Used one math operation | 2 |  |
| Used on *Boolean* or *comparative* | 2 |  |
| Included *strings* | 5 |  |
| Included *console* *print* at the *beginning* and *end* of your application | 6 |  |
| Used *comments* throughout your program explaining *all* blocks of code | 5 |  |
| *Correct* *spelling*, *punctuation*, *grammar* and *capitalization* | 5 |  |
| *Completed* the *project* on *time* by *due* *date* | 5 |  |
| *The application solved a valid problem.* | 5 |  |
| The application was *user*-*friendly*. Users of the program know what it does, how to enter data and understand to output. | 5 |  |
| The *application* *runs* with *correct* *results*. | 5 |  |
| Total Points |  | 85 |