

Python workshop - Build2Learn Project ideas

1. Expense tracker

An expense tracker is an application that lets you keep track of your expenses, and even analyze the expenses.

The app can have the following features:

1. Create a category
2. Add expenses and specify a category
3. List expenses by category
4. Display total expenses

2. Quiz application

A simple quiz application with the following features:

1. Ask questions to the users and give them options for answers.
2. The questions, answer choices and the correct answer can be stored in a text file. These can be stored as comma(or any other special character of your choice) separated values in the file. A sample file is given below.

```
input.txt
What is the capital of India?, Chennai, Delhi, Mumbai, Delhi
What is the national bird of India?, Peacock, Pigeon, Parrot, Peacock|
```

3. Read a line from the file and split it based on comma to get the questions, options and the correct answer.
4. The app should be able to evaluate the answers given by the users and provide a final score.

3. Contact book

Everyone uses a contact book to save contact details, including name, address, phone number, and even email address. In this project, you will design a contact book application that can have the following features.

1. users can create new contact and save contact details.
2. The users should be able to search for a contact with name, email or phone number.
3. The application should also allow users to update contact information, delete contacts, and list saved contacts.

4. Rock, Paper, Scissors

This is a simple game that you usually play. These are the rules:

- a. Paper wins over rock
- b. Rock wins over scissors

c. Scissors win over paper

You can use a random function here. You make a move first and then the program makes one. To indicate the move, you can either use a single alphabet or input an entire string. A function will have to be set up to check the validity of the move. Using another function, the winner of that round is decided. You can then either give an option of playing again or decide a pre-determined number of moves in advance.

A scorekeeping function will also have to be created which will return the winner at the end.

5. Hangman game

In this game, the program will think of a random word and the user will have to guess the word. Users can start by guessing the alphabets in the word.

Few features that the game should have:

- Your player needs to be able to input their guesses.
- You need to set a maximum limit for guesses.
- The player needs to be notified about the remaining number of guesses.

You can store a set of words in a file and display a random word from that to the user.