GENESIS – Python Project 1

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Details

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Contents

The To-Do List App

Git hub link: https://github.com/99003155/todolist/blob/main/1_python.py

Code

```
# import the sys modules

import sys

# global variable declared to count each of the work to be done

count = 0


# create class with functions to be performed

class WorkToDo:

  # constructor

  def __init__(self):
    self.work = []

  # insert a new task

  def start_work(self, work_todo):
    self.work.append(Work(work_todo))

    # find the completed task

  def find(self, cnt):
    for work_todo in self.work:
      if str(work_todo.id) == str(work_todo.id):
        return work_todo
    return None

  # complete a task

  def end_work(self, cnt):
    task = self.find(cnt)


# create Work class

class Work:

  # constructor

  def __init__(self, work_todo):
    self.work_todo = work_todo
    global count
    count += 1
```

```
        self.id = count


# main class

class Main:

    # constructor

    def __init__(self):
        self.worktodo = WorkToDo()
        self.options = {'1': self.start, '2': self.end, '3': self.exit}

        # display the list

    def choose(self):
        print ("""
            WELCOME TO THE TO-DO LIST
            Please choose your option
            1. Work to do today
            2. Work completed
            3. Exit application
            """)

# run the functions

    def begin(self):

        while True:
            self.choose()
            number = input('Choose your option ')
            task = self.options.get(number)
            if task:
                task()
            else:
                print ('Invalid'.format(number))

                # add the work to be done

    def start(self):
        work_todo = input('What do you want to do today?\n >')
        self.worktodo.start_work(work_todo)
        print ('Task entered')

        # enter the completed task

    def end(self):
        id = input('Enter option number: ')
        print ('Hurray! Work done')

        # exit the application

    def exit(self):
        print ('Thank you. Have a great day')
        sys.exit(0)
```

```
if __name__ == '__main__':
    Main().begin()
```

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