An explanation of the purpose of each file in your repository

A. **terpplanner.py**: This is the main script that our team collaboratively worked on to run our program. The stack of code in this file includes 3 classes: User, Event, and Budget. Each of these classes have multiple methods defined in them.
B. **locations.txt**: This file contains all of the locations on campus along with their corresponding hourly rental price. When the user enters their budget and wants to pick a location on campus based on the budget, we can provide them with a list of places on campus with their prices that they can pick from. We also use this list to calculate the amount of budget that will go towards the location rental.
C. **organizations.txt**: This file contains the list of organizations on UMD campus. The purpose of this file is to provide a set of organizations that exist at UMD as of now. When the user inputs the organization name in our program, we check whether the organization they entered exists or matches with any organization in this file.
D. README.pdf: This file contains instructions on how to use the program and information about who wrote what part.

Clear instructions on how to run your program from the command line

A. Type:
    a. python3 (or python if on windows) final.py first name last name umd email address "organization name" (Ex: Khushboo Rathore krathore@umd.edu "PSA-Preventing Sexual Assault")
B. You will be prompted to answer the following questions:
    a. Do you want to plan an event? (yes/no):
    b. Please provide the name of the event:
    c. Please provide the budget for your event:
    d. How long is your event going to be? (in hours):
    e. How much do you want to spend on the location?
C. You will then get a list of affordable locations on campus based on your location budget and you will be prompted with the following questions:
    a. Following are the available locations within your location budget. You can enter the location based on its corresponding number.
D. You will be prompted to answer the following questions, some of which will only show up if the user says yes:
    a. Do you want food in your event? (yes/no):
    b. How much do you want to spend on food?
    c. Do you need equipments for your event? (yes/no):
    d. How much do you want to spend on equipment?
    e. Do you need supplies for your event? (yes/no):

    f. How much do you want to spend on supplies?
E. A graph will pop up and the user will be asked if they want to plan another event.

Clear instructions on how to use your program and/or interpret the output of the program.

A. In order to initialize the program, the user enters the command line arguments in the terminal consisting of their first name, last name, email and organization.
B. After the user answers the questions from the command line, and fills in the corresponding information for their event such as:
    a. The initial budget
    b. The different budget categories
    c. The Location where the event will be held
    d. The program will write all the user inputted event information into a text file as a confirmation. The user will also be able to visualize the breakdown of the budget that they will spend on the different budget categories from a bar graph using pyplot.

Attribution*

class User

__init__() - Palrika

email_check() - Khushboo [regular expressions]

org_check() - Rabindra [list comprehension]

class Event

__init__() - Sandra

budget_tracker() - Palrika [f-string]

confirmation() - Rabindra [with statement]

bud_vis() - Khushboo [pyplot]

class Budget

__init__() - Khushboo

__sub__() - Palrika [magic method]

loc_checker() - Kabindra [custom list sorting; lambda expression]

main() - Kabindra [conditional expressions]

parse_args() - Sandra [the ArgumentParser class, sequence unpacking]

*For further details on what each program does, please refer to the doctrings.

An annotated bibliography of all sources you used to develop your project. For each source, explain how you used the source.

A. "Capacities & Rates." *Adele H. Stamp Student Union*, https://stamp.umd.edu/events/event_guest_services/capacities_rates.

We utilized this source to get all the locations available for rent in the Stamp Student Union along with their corresponding hourly rental price. We compiled the locations for Stamp in the Locations text file to be used in the organization check method.

B. "Organization List- Terplink." *TerpLink*, https://terplink.umd.edu/.

We utilized this source to get all the active student organizations at the University of Maryland. We compiled all the student organizations in the organization text file. Since our program is mainly for student organizations, we wanted to check if the user is utilizing the program for an active student organization on campus.

C. "Rental Rates: 2022-2023." The Clarice - University of Maryland, 2022. https://theclarice.umd.edu/sites/default/files/files/The%20Clarice%202022-2023%20Rental%20Rates.pdf

We utilized this source to get all the locations available for rent in the Clarice Smith Performing Arts Center along with their corresponding rental price. We compiled the locations for the Clarice in the Locations text file to be used in the location check method.

D. "Rooms." *Riggs Alumni Center*, University of Maryland, https://riggs.umd.edu/rooms.

We utilized this source to get all the locations available for rent in the Samuel Riggs IV Alumni Center along with their corresponding hourly rental price. We compiled the locations for the Riggs in the Locations text file to be used in the location check method.