

- Problem definition

This project is inspired by an event manager application wherein users can efficiently organize, prioritize, and manage their events and schedules. This project allows individuals to set and schedule events, assign priority levels, and filter events based on their importance within a date range. The application combines logical sorting, filtering, and input validation to provide a seamless and user-friendly tracking. Users can keep their plans organized whether it's an all day event or a specific time booked schedule.

- Algorithm and data structure

The algorithm used a sorting and input validation algorithm that lets users sort their booked events in any order they want. This also ensures that the user has input correct information about the dates and times of an event. The application used a Tkinter GUI for a seamless interface that allows users to input the event data. It also used Heap Operations (heapq) to maintain and sort events based on their date, time, and priority. This heap operation ensures a quick access to the most exciting events while also allowing adding and removing of events.

- Challenges faced

One of the challenges we faced was using different coding platforms. We tried using three different platforms: Google Colab, Jupyter Notebook, and Visual Studio Code. However, the Tkinter GUI did not work with the first two platforms, which required us to use the Visual Studio Code for the project execution. The runtime can also have an impact, as it varies from user to user. If more events are placed, the runtime can take a little while to respond.

- Learnings and conclusions

This project enhanced and gained our knowledge about the problem that we encountered by exploring and using different coding platforms like Visual Studio Code. Due to the Tkinter GUI not working on Google Colab, which is the usual coding platform we used on the past assessments. We came up with using the VSCode as a better supporting tool for Tkinter. Also, the understanding of the value of good sorting platforms such as event manager or tracker, which really helps to easily plan and schedule important events to avoid forgetting the actual day or dates on a daily basis.