

## **Epic Event**

Algorithm and Solving Problem (15B17Cl471)

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# <u>ACKNOWLEDGMENT</u>

We are filled with gratitude and appreciation for the unwavering support, guidance, and encouragement provided by our esteemed lab coordinator and teachers throughout our Algorithm and Problem-Solving mini project.

Their expert knowledge, insightful feedback, and constructive criticism were invaluable in honing our problem-solving skills and delivering a high-quality project. Their dedication to creating a conducive learning environment was evident in their willingness to engage in meaningful discussions and provide answers to our queries.

They created an inclusive atmosphere that enabled us to learn from each other and exchange ideas. We acknowledge and appreciate the time and effort that they invested in reviewing our project progress and providing constructive feedback and suggestions that enabled us to refine our approach and exceed our expectations.

We look forward to continuing to learn from their mentorship and guidance in future endeavours, and we express our heartfelt thanks to our lab coordinator and teachers for their invaluable contributions to our project.

#### **Introduction:**

Event management code is a software program designed to help manage events. One aspect of event management is scheduling, which can be a complex task when dealing with events that have varying levels of footfall.

In this specific scenario, the event management code is designed to handle events with a high degree of footfall and limited availability of free time slots. The software would need to account for the number of attendees expected.

The code also deals with the placement of Vending Machine at the places where the footfall would be high and people will have to travel less to get to the vending machine.

The code may also need to handle conflicts between different activities. It will help the event organizers to manage the event efficiently and effectively.

Overall, the event management code is designed to make the planning and execution of events more streamlined, efficient, and enjoyable for all involved

#### **Problem Statement:**

Organizing and managing events that are based on footfall and free time slots can be a challenging task. Event organizers need to ensure that attendees have a positive experience while also maximizing the utilization of available resources such as speakers, venues, and equipment.

However, without a reliable event management code, it can be challenging to allocate resources and schedule activities efficiently, leading to conflicts and delays that can negatively impact the attendee experience and the success of the event.

Therefore, there is a need for an event management code that can handle events based on footfall and free time slots effectively. The code would also need to be user-friendly, accessible, and customizable to the needs of the event organizer.

By implementing an event management code that can handle events based on footfall and free time slots, event organizers can ensure a smooth and successful event that meets the needs of both attendees and sponsors.

#### **Problem Solutions:**

To address the challenges of managing events based on footfall and free time slots, an event management code can be developed that incorporates advanced algorithms. The code would need to be designed to handle complex scheduling scenarios while also being user-friendly and accessible to event organizers with varying levels of technical expertise.

To manage conflicts between different activities, the code can include prioritization algorithms that allocate venues based on the importance of the activity and the availability of resources.

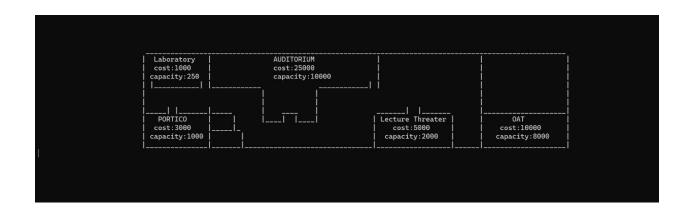
Also placing of Vending Machine at the minimum distances possible would help the attendees And also help the management in gaining profits.

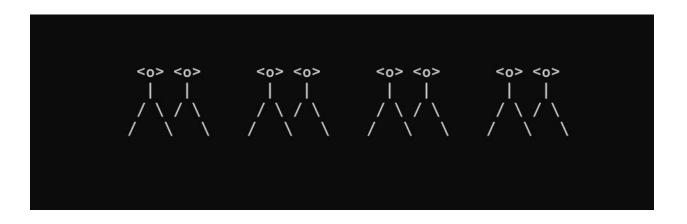
The event management code can also be designed to allow for customization to the specific needs of the event organizer. This can include the ability to adjust scheduling and venue allocation preferences based on the event's goals and objectives.

By implementing an event management code that can handle events based on footfall and free time slots effectively, event organizers can ensure a smooth and successful event that meets the needs of both attendees and sponsors.

### **Output Screens:**







Want something from the Vending Machine so what ar Drinks available in vending machines are :-		m ice(in rupees)
	1.COCA COLA	57
	2.PEPSI	48
	3.STING	35
	4.MINERAL WATER	25
	5.THANDAI	89
Enter your choice :2		
Enter the amount(more than 100) 250		
Amount accepted :) Coins to be returned: 2 100 100 Wish to buy Another Drink ? (press a to continue	.)	

```
Enter Your Name: Rohit
Contact Number of the Organizer: 9823740115
The Program Should Start on (Day of Month): 3
Duration Of Event (Number of Days) :2
Your Event has been booked!! :)
Enter the Number of events on Day-1: 1
Name of SubEvent: Dance
Estimated Footfall of the Subevent = 10000
Starting Time of the SubEvent (acc. to 24Hr. Time Schedule) - Dance : 11
Ending Time of the SubEvent (acc. to 24Hr. Time Schedule) - Dance : 15
Auditorium : Dance
OAT:
LectureThereater :
Portico :
Laboratory :
Total Day cost = 25000
Enter the Number of events on Day-2: 2
Name of SubEvent: Quiz
Estimated Footfall of the Subevent = 100
Starting Time of the SubEvent (acc. to 24Hr. Time Schedule) - Quiz : 10
Ending Time of the SubEvent (acc. to 24Hr. Time Schedule) - Quiz : 11
Name of SubEvent: FashionShow
Estimated Footfall of the Subevent = 8000
Starting Time of the SubEvent (acc. to 24Hr. Time Schedule) - FashionShow : 15
Ending Time of the SubEvent (acc. to 24Hr. Time Schedule) - FashionShow: 17
Auditorium :
OAT : FashionShow
LectureThereater :
Portico :
Laboratory : Quiz
Total Day cost = 11000
```

#### **References:**

https://www.geeksforgeeks.org/greedy-approximate-algorithm-for-k-c enters-problem/ (as referred on 25<sup>th</sup> April,2023)

https://www.tutorialspoint.com/cplusplus/cpp\_files\_streams.htm (as referred on 17th April,2023)

https://www.geeksforgeeks.org/file-handling-c-classes/ (as referred on 17th April,2023)

https://www.edureka.co/blog/file-handling-in-cpp/ (as referred on 17th April,2023)

https://swiftdigital.com.au/blog/role-event-manager/ (as referred on 8th April,2023)

https://www.geeksforgeeks.org/job-sequencing-problem/ (as referred on 13<sup>th</sup> April,2023)

https://github.com/ArthurSonzogni/FTXUI (as referred on 9<sup>th</sup> April,2023)

https://www.simplilearn.com/tutorials/cpp-tutorial/setw-cpp (as referred on 27<sup>th</sup> April,2023)