Background:

ABC Corporation is a private company based in Ottawa, Canada, specializing in technology solutions for healthcare providers. The company owns a sizable parking lot adjacent to its main office building, which is primarily used by employees during weekdays from 9 AM to 5 PM. Due to recent changes in remote work policies and an increasing trend of employees opting for public transportation, ABC Corporation has identified an opportunity to monetize its parking space by opening it to the public during non-peak hours and weekends.

Objectives:

The objectives of this project are as follows:

- Monetization: Develop a plan to effectively monetize the parking space by making it accessible to the public during specified times.
- Operational Efficiency: Ensure smooth operations and minimize disruptions to the company's daily activities while managing the public parking initiative.
- Customer Experience: Enhance the customer experience by providing convenient and safe parking facilities with clear guidelines and user-friendly procedures.

Current Situation of the parking lot:

Presently, the parking lot is an open ground guarded by a Parking Agent who allows employees to park after checking their Employee ID card. Some additional information about the parking lot is as follows:

- The parking lot is equipped with basic lighting to ensure accessibility after dark.
- The parking lot is leveled with asphalt. However, there are no markings on the ground.
- There are no CCTV cameras.
- The parking lot has a capacity to accommodate up to 50 cars simultaneously.

Desired outcome:

The desired outcome for the renovated parking lot should have the following:

- Total 50 parking spaces marked with numbers.
- 5 Accessible parking spaces marked accordingly.
- 15 parking spaces should have electric car charger. Also, these spaces should be marked accordingly.
- Automated check-in and check-out system that includes payment system.
- As the check-in and check-out is automated, there is no need of a Parking Agent. However, if there any emergency then customers should be able to call a help-desk number.
- Parking for public should be charged on hourly basis. Parking for employees should be always free.
- CCTV cameras throughout the parking lot, especially at the entrance to capture the license plate.

Task:

As a Business Analyst, you are tasked to make the project proposal presentation to the management to help them decide if this project is economically feasible or not. The management expects you to do detailed analysis and submit your deliverables which should cover the following questions:

- What will be the project timeline? Please share what will be tentative start and end date for the project.
- How many resources are required? What are the hourly charges for those resources?
- What all material is required?
- What will be the total cost of the project?
- What is the hourly rate you are planning to charge the customers once the parking lot is renovated and open for public?
- How will you make sure that employees are NOT charged?
- What will happen when the parking lot is full?
- How you will tackle when a customer doesn't park properly or if a combustion engine car is parking in electric car parking?
- Other similar questions related to the project.

Deliverables:

1. Presentation in the class
    a. You will showcase your analysis and project proposal by presenting the PowerPoint presentation including other deliverables (Parking lot floor plan, BPMN diagram, and MS Project file containing Gantt chart) in one of the upcoming classes.
2. PowerPoint presentation
    a. Create a PowerPoint presentation as mentioned in the task.
    b. Your PowerPoint presentation should cover many of the questions listed in the Task section.
3. Parking floor plan
    a. Parking floor plan should show the arrangement of different type of parking spaces along with markings, position of automated check-in and check-out system, placement of CCTV cameras, entry and exit gate, etc.
4. Process to park the car and check-out the car after making the payment.
    a. BPMN diagram should include at least 2 pools.
    b. It should show the process of parking (including check-out) for an employee and an outsider (public).
    c. It should show the sub-process of contacting the help desk for reporting power failure at one of the electric parking spaces. The sub-process should be detailed out on a separate page.
5. Gantt chart to implement this project.
    a. Develop a Gantt chart by showing various activities (tasks) required to be done to renovate the parking lot and achieve the desired outcome.
    b. Show at least 5 summary and at least 50 tasks in total.

c. Due to an internal work policy, no work can be performed on alternate Fridays. Hence, every second Friday is a holiday, and no work can be performed. So, adjust your calendar to reflect the same.
d. Consider statuary holidays.
e. Add resources and material that will be required to complete this project.
f. Assign resources and material to the activities (tasks). All activities (tasks) should have at least one resource or material assigned.
g. Use different type of task dependencies with lead/lag for at least 10 activities (tasks).

Instructions for submission:

1. You must submit (upload) the following files:
    a. 1 PowerPoint presentation – This PowerPoint presentation will be used to present the project during one of the upcoming classes. (Tentatively July 26, 2024)
    b. 1 Visio file – The file should contain floor plan and BPMN diagrams.
    c. 1 Microsoft project file
2. There should be only 1 submission per group.

Criteria of evaluation:

a) Delivery of presentation in the class.
b) Answering the follow up questions after the presentation.
c) Explaining all the deliverables in the presentation.
d) Completion of all the conditions listed out.
e) Correctness of your submission.
f) Timely submission. Late submissions will result in deduction of marks.
g) Formatting and presentation of the diagrams, PowerPoint presentation, and Microsoft Project file.
h) Features/formulas used in Visio and Microsoft Project. For example, layering, grouping, using containers, etc. in Visio and formatting Gantt chart, updating calendar, highlight relevant text on Gantt chart, using lead and lag formulas, etc. in Microsoft Project.
i) Plagiarism will result in deduction of marks.

Note: Randomly anyone in the group will be selected to do the presentation. Similarly, different follow-up questions will be asked to anyone in the group.

Everyone will score the same marks in the group.

Marks distribution:

1. Class presentation – 15 marks
2. Microsoft Powerpoint file – 5 marks
3. Visio file – 10 marks
4. Microsoft Project file – 10 marks