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CS 472

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## Requirements Description Document

Project Title: "Los Portales" Stage 1

### **A) Introduction/Background**

The project titled "Los Portales" stage 1 is composed of multiple diagrams.

- Phase 1 – Pert Diagram
  - Is a more visual representation of the tasks.
- Phase 2 – Critical Path Diagram
  - The critical path diagram shows the "critical" activities that need to be completed to finish the project.
- Phase 3 – Gantt Diagram
  - Shows the activities that need to be completed and the time they need to be completed by.
- Phase 4 – Tentative Cost
  - This is an estimate of the total cost to complete the project. However, there is no way of knowing this exactly prior to the completion of the project.

In this project, we are going to create a system used to select seating for a movie theater. This system will display which seats have been selected and which seats are still available. This project is a multistage project. In this SOW we will discuss stage 1.

### **B) Objectives**

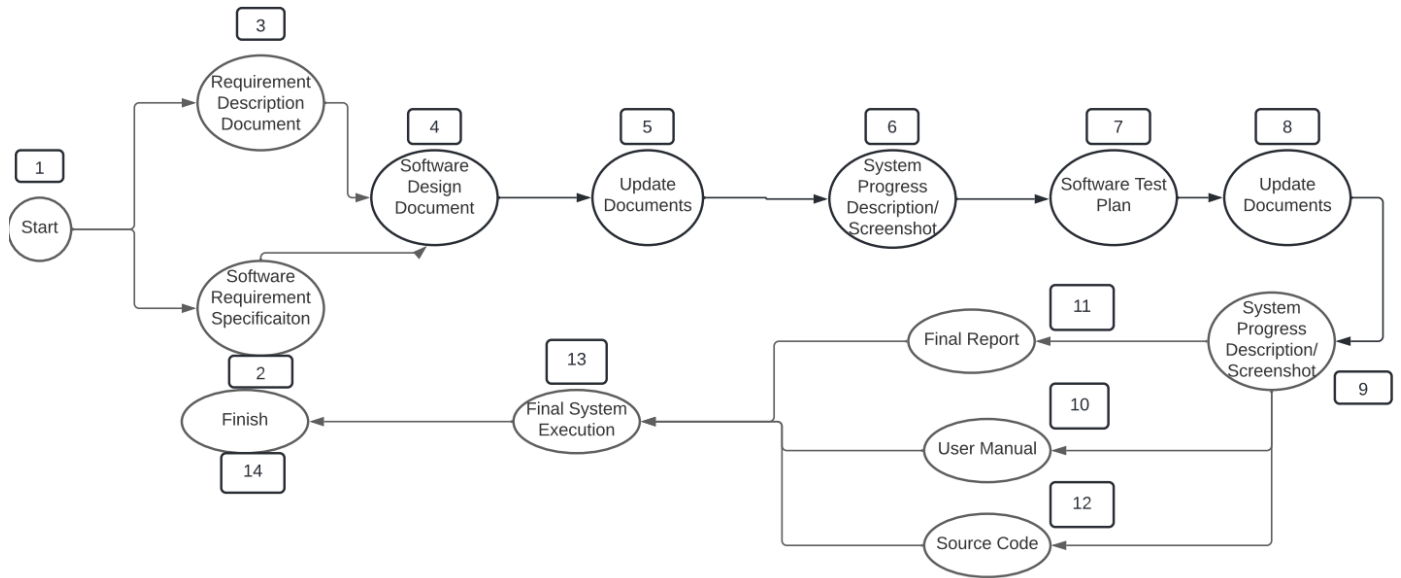
This project in Stage 1, is used to develop diagrams that assist with the completion and organization of the theater software. This will aid in making sure the project is moving forward swiftly and efficiently. This stage is an important part of developing the necessary theater software.

### **C) Scope of Work**

The goal of this project is to create a system to select seats for a movie theater. To accomplish this project, we must complete a series of stages. Stage 1 involves creating diagrams, Stage 2 is software design, Stage 3 is Software testing, and Stage 4 is the final report. By the end of this project, we will have a fully functioning theater system.

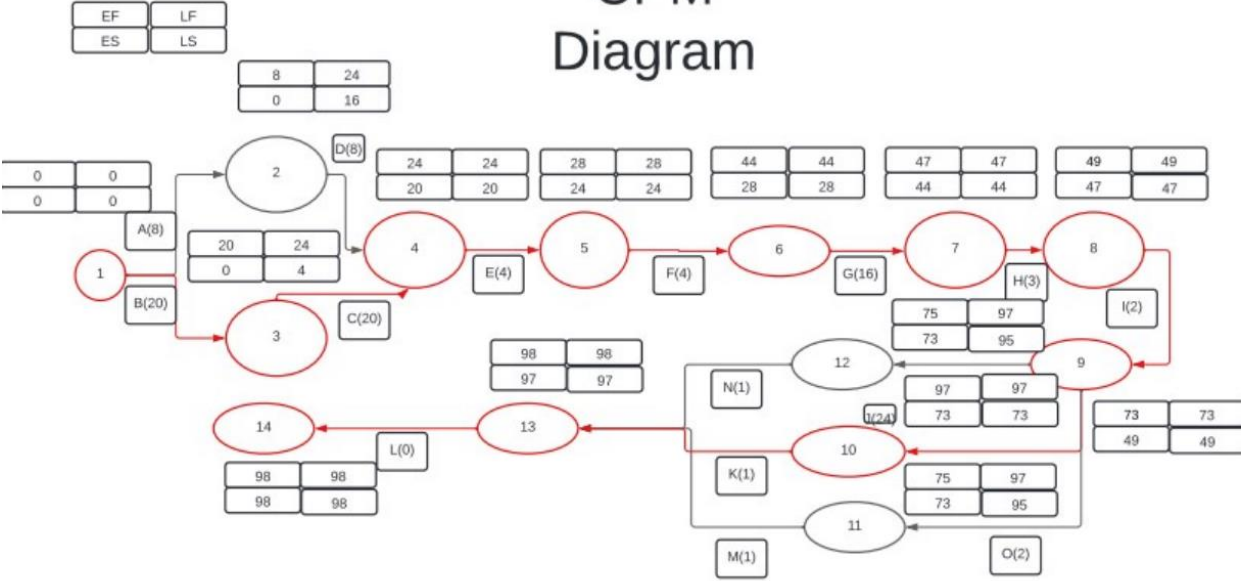
Pert)

# PERT Diagram

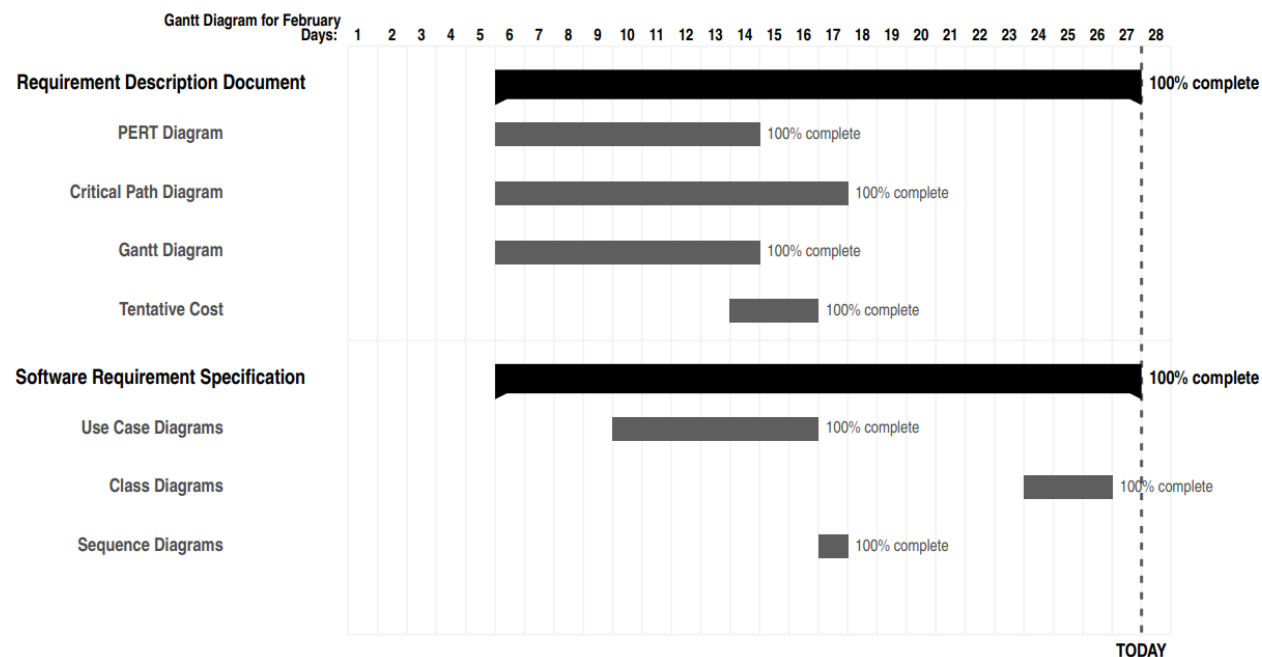
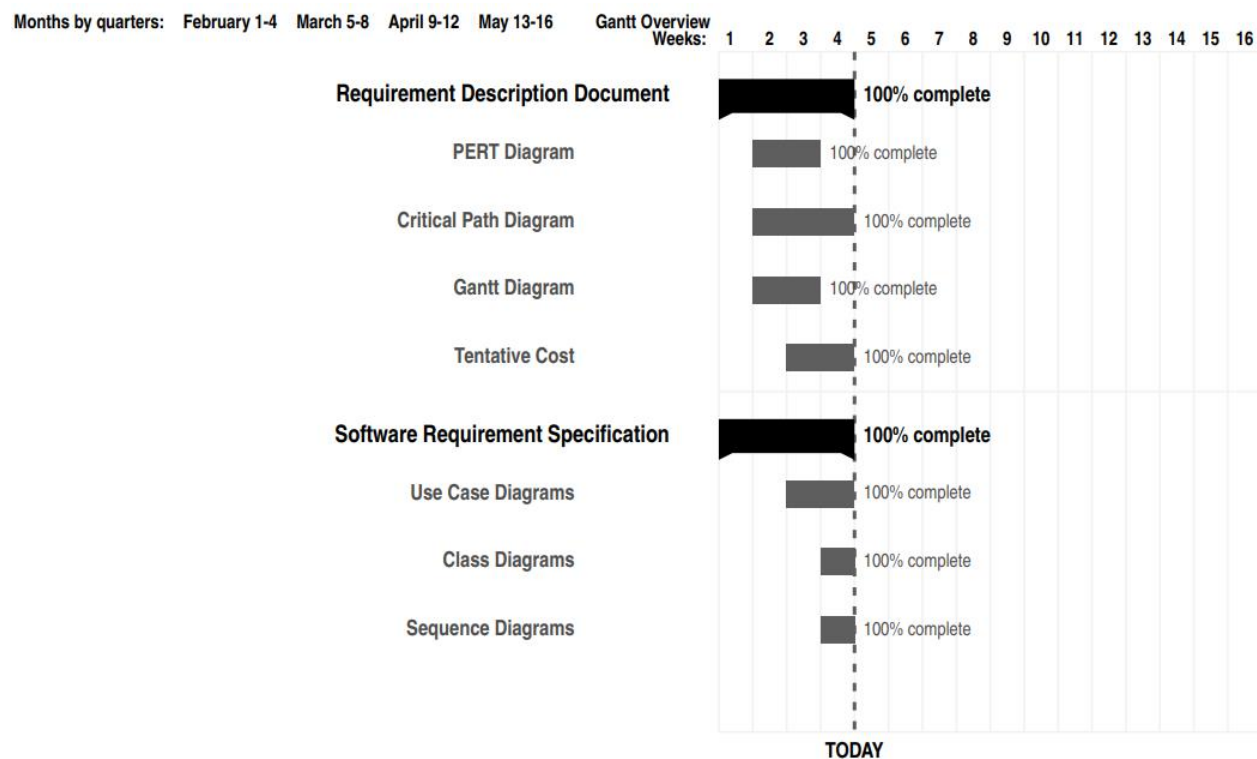


Critical path diagram)

# CPM Diagram



Gantt Diagram)



Tentative Cost)

Function types	Costs	
Internal Logical File	10	
External Interface File	7	
External Input	4	
External Output	5	
External Inquiry	4	
The system will keep a list of usernames and passwords required to enter the management area.	Internal Logical File	10
The system will store all showing and seat information to prevent double buying tickets.	Internal Logical File	10
The operator will provide a username and password to enter the management area.	External Inquiry	4
The operator will be able to add and remove shows.	External Input	4
The operator will be able to customize the dates, number of seats, and price for each seat per show.	External Inquiry	4
The operator will be able to view a report showing all sale info.	External Output	5
The customer will be able to view the upcoming shows and available seating.	External Output	5
The customer can select multiple seats and add them to their cart.	External Inquiry	4
The customer can enter their name, age, address, phone, email, and card info to purchase the seats at checkout.	External Input	4
The system will reserve the seat and confirm the sale to the user on screen.	External Output	5
UFP:		55
Value adjustment factors:		
Data communications	3	
Distributed data processing	3	
Performance	2	
Heavily used configuration	0	
Transaction rate	1	
Online data entry	4	
End-user efficiency	4	
Online update	3	
Complex processing	0	
Reusability	0	
Installation ease	3	
Operational ease	3	
Multiple sites	0	
Facilitate changes	1	
VAF:	0.92	
AFP:	50.6	
5th gen language avg FP hours:	8	
Javascript avg code lines for fp:	47	
Estimated lines of code:	2378.2	
a	2.4	
b	1.05	
c	2.5	
d	0.38	
Effort:	5,960,353,738	person months
Time:	4,926,555,527	months
Average staff size:	1,209,641,989	persons
Productivity:	399,003,164	LOC per person month
Programmer avg monthly cost:	\$3,600.00	
Setup costs	\$21,457.27	
Monthly server fees	\$6.90	monthly