Technical Design Document Template

Name: Deemanuel Faustin

Date Created: 05/23/2025

Program Description:

Program for selling a limited number of movie tickets. Tickets are limited to 4 per customer and the program will continue selling tickets until it has sold all in stock. Once sold out the program will end and display the number of buyers.

Functions used in the Program (list in order as they are called):

1. Function Name: purchase\_function

Description: Function used to return the new amount of tickets that will be available after the user makes their purchase.

Parameters: int tickets, int purchases

Variables: None

Logical Steps: takes the tickets parameter and subtracts the purchases parameter from it.

Returns: Returns the difference of the amount of tickets before completing the purchase and the amount of tickets being purchased.

2. Function Name: main

Description: The main function of the program where the user input output and accumulator is present.

Parameters: None

Variables:

* amountOfBuyers(int) - used to keep track of buyers
* ticketCount(int) - used to keep track of tickets still available to be purchased
* answer(str) - holds the user's answer as long as the answer is ‘yes’ the program will continue to offer tickets.

Logical Steps:

* Asks if the user would like to purchase tickets if yes start while loop that continues to sell tickets until answer is otherwise
* Take in user input for how many tickets they would like to purchase (a maximum of 4)
* Remove the amount of tickets purchased from the amount of tickets in stock
* Ask if the user would like to purchase more tickets if no exit while loop
* Display the amount of buyers

Returns: None

Logical Steps:

* main()
* purchase\_function()

Link to your repository: https://github.com/DFaustin175/COP2373

Output Screenshot: