Requirements Document

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Requirements Document

This weeks’ assignment involves our team creating a short requirements document that will serve as an outline for what is required for the rest of the program to be functional and complete. This will include designating the proper input, output and validation rules to follow through the application.

The program must be a Win32 console application written in C++. The purpose of the program is to track the sale of tickets for a movie theater that has 90 chairs. The seats are arranged with ten rows of nine seats.

The outputs will come in the form of cout and printf functions and will be the direct result of user input most of the time. Outputs for the program will include: number of seats available, the total number of tickets being sold, the total cost of the tickets, sale confirmation, and a visual display of the seats available. In addition, there will need to be output errors associated with a user not inputing the correct data type for the field in question.

The validation rules for the application will be that of the following:

string = first name and last name

int = tickets sold, ticket cost, tickets available

If these rules are not followed the program will return an error and ask the user to input an appropriate value.

User Commands

The list outlines the case-insensitive commands defined by the program and their output:

1. total – displays the total number of tickets sold and the total amount of money collected.

Total Tickets Sold: ##

Total Sales: $##.##

1. seats – displays the total number seats available

Seats Available: ##

1. seatchart – displays available seats in a matrix with a “\*” character representing an occupied seat and a “#” character representing an open seat.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| R 1 | \* | \* | # | # | # | \* | \* | # | # |
| R 2 | \* | \* | # | # | # | \* | \* | # | # |
| R 3 | \* | \* | # | # | # | \* | \* | # | # |
| R4 | \* | \* | # | # | # | \* | \* | # | # |
| R5 | \* | \* | # | # | # | \* | \* | # | # |
| R 6 | \* | \* | # | # | # | \* | \* | # | # |
| R 7 | \* | \* | # | # | # | \* | \* | # | # |
| R 8 | \* | \* | # | # | # | \* | \* | # | # |
| R 9 | \* | \* | # | # | # | \* | \* | # | # |
| R 10 | \* | \* | # | # | # | \* | \* | # | # |