

# theater.c File Reference

---

File containing program for a theater seating chart. [More...](#)

```
#include <stdio.h>
```

## Functions

---

int **initializeTheater** ()

Creates a 2D array to represent the theater. [More...](#)

---

int **priceInput** ()

Takes in the price for each row and stores them in an array. [More...](#)

---

int **displayTheater** ()

Prints out the current theaters display. [More...](#)

---

int **purchaseTickets** ()

Lets the user select a seat to buy or a group of seats in a row. [More...](#)

---

int **seatsOpenPerRow** ()

Displays the number of seats available per row. [More...](#)

---

int **seatsAvailbleAuditorium** ()

Displays total seats available. [More...](#)

---

int **displayTotalSales** ()

Displays total sales. [More...](#)

---

int **validSeat** (int r, int c)

int **mainMenu** ()

The main program that calls other methods. [More...](#)

---

int **totalSeatsSold** ()

Displays total number of seats sold. [More...](#)

---

int **main** ()

The main program to execute the program. [More...](#)

---

## Variables

---

double **seatPrices** [15]

char **theater** [15][30]

double **ticketSalesTotal** = 0

int **soldSeats** = 0

int **row**

int **column**

int **columnTwo**

int **loop** = 1

---

int **wasValid** = 0

---

## Detailed Description

---

File containing program for a theater seating chart.

### Author

Ethan Balderas

### Date

12 April 2019

## Function Documentation

---

### ◆ displayTheater()

int displayTheater ( )

Prints out the current theaters display.

#### Returns

default 0

### ◆ displayTotalSales()

int displayTotalSales ( )

Displays total sales.

#### Returns

default 0

### ◆ initializeTheater()

```
int initializeTheater ( )
```

Creates a 2D array to represent the theater.

**Returns**

default 0

◆ **main()**

```
int main ( )
```

The main program to execute the program.

**Returns**

Terminates Program

◆ **mainMenu()**

```
int mainMenu ( )
```

The main program that calls other methods.

**Returns**

Terminated program

◆ **priceInput()**

```
int priceInput ( )
```

Takes in the price for each row and stores them in an array.

**Returns**

default 0

◆ **purchaseTickets()**

int purchaseTickets ( )

Lets the user select a seat to buy or a group of seats in a row.

**Returns**

default value

◆ seatsAvailbleAuditorium()

int seatsAvailbleAuditorium ( )

Displays total seats available.

**Returns**

default 0

◆ seatsOpenPerRow()

int seatsOpenPerRow ( )

Displays the number of seats available per row.

**Returns**

default 0

◆ totalSeatsSold()

int totalSeatsSold ( )

Displays total number of seats sold.

**Returns**

default 0

◆ validSeat()

```
int validSeat ( int r,  
               int c  
               )
```

returns 0 if it isn't a valid seat returns 1 if it is a valid seat

#### Parameters

**r** Row of the seat

**c** Col of the seat

#### Returns

1 if valid seat, 0 if not

## Variable Documentation

---

### ◆ column

```
int column
```

Holds value for col

### ◆ columnTwo

```
int columnTwo
```

Holds a 2nd col val

### ◆ loop

```
int loop = 1
```

Variable for main loop

### ◆ row

`int row`

Holds value for row

### ◆ `seatPrices`

`double seatPrices[15]`

An array to hold the seat prices per row

### ◆ `soldSeats`

`int soldSeats = 0`

Number of seats sold

### ◆ `theater`

`char theater[15][30]`

An array to represent the theater

### ◆ `ticketSalesTotal`

`double ticketSalesTotal = 0`

Total sales from all tickets

### ◆ `wasValid`

`int wasValid = 0`

Used to return valid seat

---

