



# BOWEN THEATRE COMPANY

Documentation

Jeff Shapiro  
[jeff@shapirohousehold.com](mailto:jeff@shapirohousehold.com)

## Contents

Contents.....	1
Description.....	2
User interface requirements.....	2
Design.....	3
Original Design .....	3
Final Design – Select Seat Empty .....	4
Final Design – Select Seat with entry .....	5
Final Design – Select Seat showing ‘Available’ tool tip.....	6
Final Design – Ticket Details popup -with details .....	7
Final Design – Ticket Details popup -available.....	7
Functionality .....	8
4 rows x 6 columns of dynamically generated seat selection buttons .....	8
Clear form button to remove and reset all fields .....	8
Field entry validation .....	8
Ticket Type amended based on date of birth. ....	8
Seat status is displayed on hover.....	8
On left click of seat.....	8
On right click of seat. ....	8
Details are stored in dynamic structure array. ....	8
Data storage.....	8
Algorithm .....	9

## Description


Bowen Theatre Company is a custom made application for the Bowen Theatre Company to enable electronic bookings. Targeting the general public, the application has been designed to do as much of the work for you as possible making the program useable on a very simple skill level. Seat options are dynamically generated with status updates displayed on change.

## User interface requirements

The application can run on any hardware which supports windows 7 or later. The system must have at least 100MB of free disk space to install the program and recommended minimum of 1GB of memory to load the application.

[illegible]

3 | Page



First Name

Surname

Date Of Birth

Ticket Type


Thursday , 18 August 2016

Clear

Select your seat.

A1	A2	A3	A4	A5	A6
B1	B2	B3	B4	B5	B6
C1	C2	C3	C4	C5	C6
D1	D2	D3	D4	D5	D6

Final Design – Select Seat Empty



First Name

Surname

Date Of Birth

Ticket Type

Thursday , 18 August 2016

Clear

Select your seat.

A1	A2	A3	A4 N/A	A5	A6
B1	B2	B3	B4	B5	B6
C1	C2	C3	C4	C5	C6
D1	D2	D3	D4	D5	D6

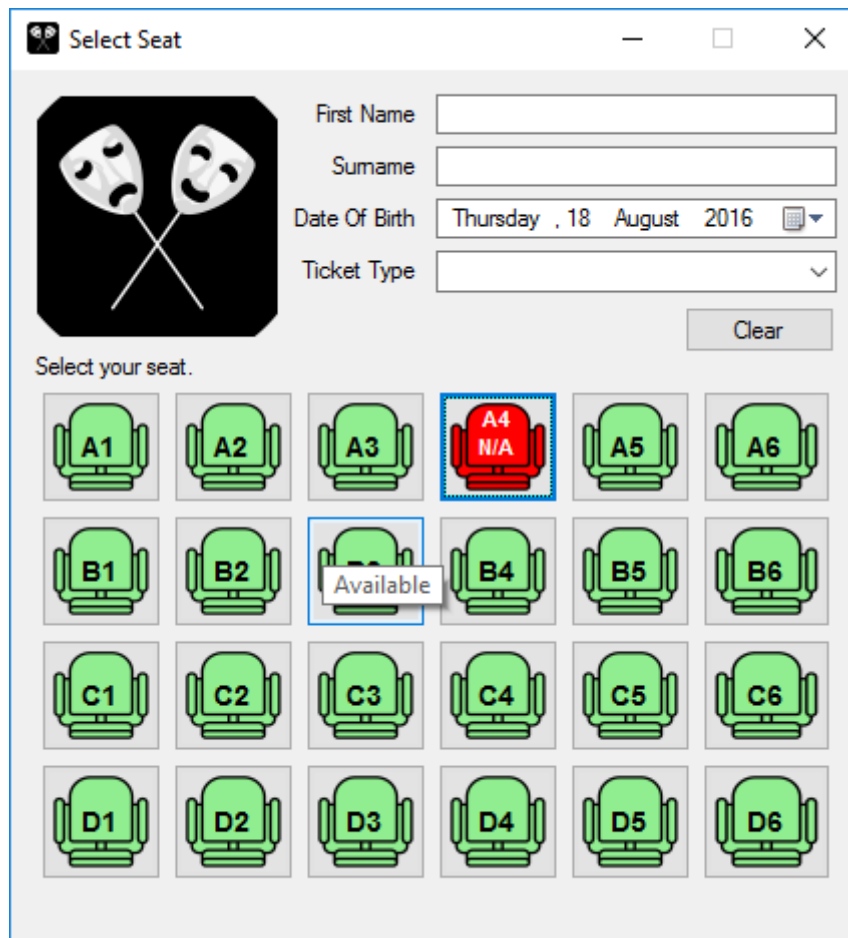
Booking Information

Name - Billy Bob

Date Of Birth - 18/08/1990

Ticket Type - Adult

Final Design – Select Seat with entry



The 'Select Seat' window features a header with a theater mask icon and the title 'Select Seat'. On the left is a large black square containing two crossed white theater masks. To the right of this icon are four input fields: 'First Name', 'Surname', 'Date Of Birth' (set to 'Thursday , 18 August 2016'), and 'Ticket Type' (a dropdown menu). A 'Clear' button is positioned below these fields. Below the input fields, the text 'Select your seat.' is displayed. The seating chart consists of a 4x6 grid of seats, each represented by a green chair icon with a label. Row A contains seats A1 through A6, with A4 highlighted in red and labeled 'A4 N/A'. Row B contains seats B1 through B6, with B3 highlighted in blue and having a white 'Available' tooltip. Rows C and D contain seats C1 through C6 and D1 through D6 respectively, all in green.

First Name

Surname

Date Of Birth Thursday , 18 August 2016

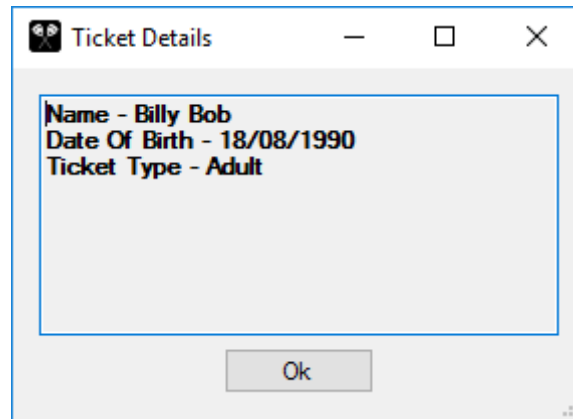
Ticket Type

Clear

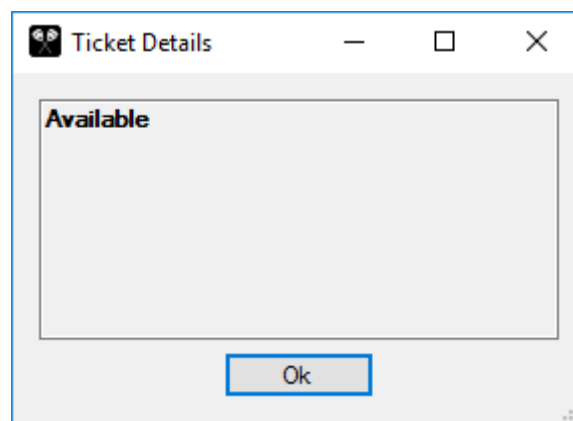
Select your seat.

A1	A2	A3	A4 N/A	A5	A6
B1	B2	B3 Available	B4	B5	B6
C1	C2	C3	C4	C5	C6
D1	D2	D3	D4	D5	D6

Final Design – Select Seat showing 'Available' tool tip



Final Design – Ticket Details popup -with details



Final Design – Ticket Details popup -available



## Functionality

4 rows x 6 columns of dynamically generated seat selection buttons

Clear form button to remove and reset all fields

Field entry validation

- First Name must be 2 or more letters
- Surname must be 2 or more letters
- Date of Birth cannot be today
- Ticket Type cannot be blank

Ticket Type amended based on date of birth.

- Child must be less than 14
- If over 14 Child ticket cannot be selected
- If date of birth is put above 14 years Child ticket type will be removed. If then reduced to less than 14 years Child ticket type will be restored.

Seat status is displayed on hover.

- If seat is available, the tooltip will display – Available
- If seat has been reserved, the tooltip will display – Booking details will be displayed

On left click of seat.

- If fields are all filled in and valid. Will store information and clear all fields
- If fields are filled in and invalid. Message will display advising which fields are invalid
- If fields are all filled in and valid, and selected seat is reserved. Message will be displayed advising of the situation.

On right click of seat.

- If seat is available, popup form will display – Available
- If seat has been reserved, popup form will display – Booking details will be displayed

Details are stored in dynamic structure array.

- First Name
- Surname
- Date of Birth
- Ticket Type
- Seat Status

Data storage

- Automatic save on close
- Automatic retrieve on open
- Clear seat data

## Algorithm

