

# Prototype

UNDER CONSTRUCTION BOOKING SYSTEM

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# PROTOTYPE

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The purpose of having a prototype allows an early demonstration of how the program should work. I will hopefully be able to show and explain how easy-to-use and intuitive the system is. The prototype will also give some guidance on how to use the system for users who are new to using computer systems. It should be a great aid alongside the user manual. I will attempt to cover all bases of the program and all functions so that the customer is happy that the system fulfils the requirements. The prototype should also cover the core concepts of the program so that it stands the test of time and is able to provide users with help even after improvements have been made.

In the prototype, I will showcase:

- The main menu and form navigation
- Customer & staff manipulation – registration and modification
- Booking practice rooms, checking bookings and creating a booking report.

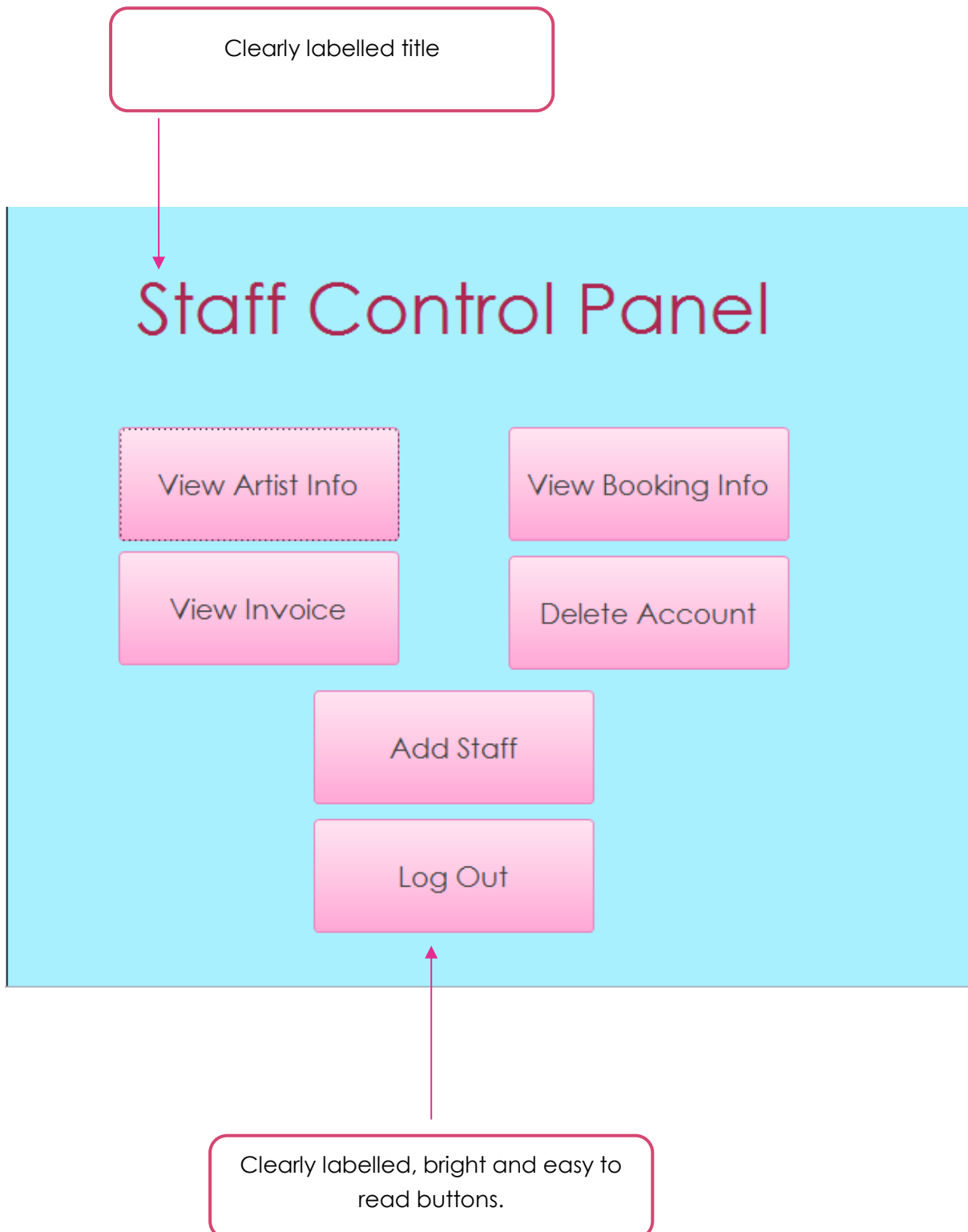
At an early stage, it is important for staff and customers to be able to understand all of these parts of the system. A detailed explanation of each will give the user a very good basis to use the whole system and all its aspects – any specific extra details can be referenced in the user manual. The main menu will allow the user to navigate to all parts of the system, so understanding what each button does will be vital to carry out any operations. Customer and staff manipulation is an important part of my system, as the system will appear different to both customer and staff. This will also allow me to manage permissions – which increases security. Users should know how to make a new account, modify their information and remove their accounts from the system. This will also allow the system to keep in accordance with the data protection act. Lastly in the prototype, information on booking should be readily available. A huge functionality of the system is to be able to book practice rooms, however the system is also able to check on bookings, delete bookings and create a report on bookings in-case users want an invoice.

I have decided to omit the login system as it is very straightforward and easy to use. However, the behind-the-scenes workings of the login system is complex due to a separation between staff and users (which the system will automatically arrange).

I will also leave out validations for each field and any similar sections, simply because this would make the prototype repetitive as any problems showing up in the main pages will be like any other problems on similar pages.

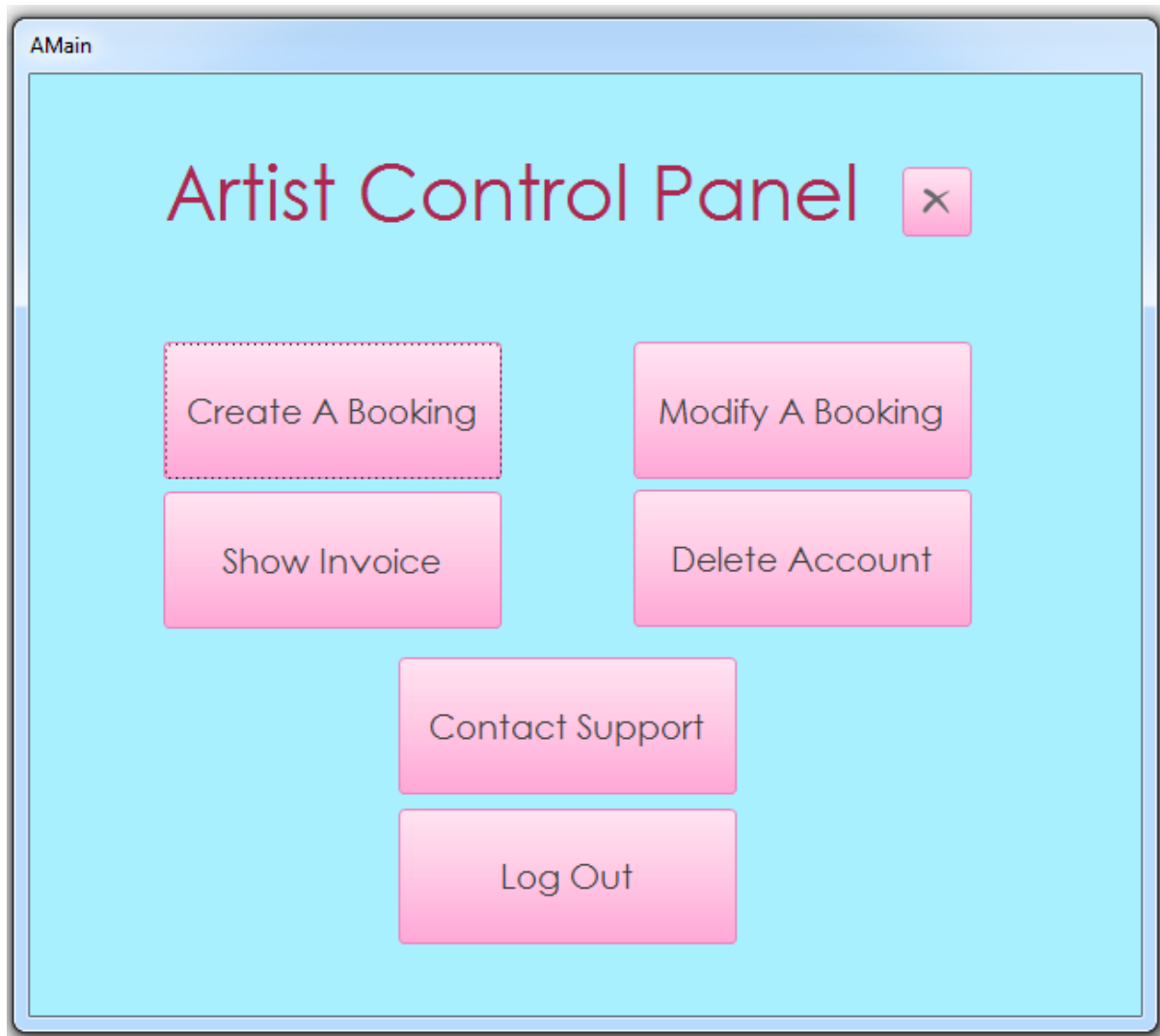
## Main Menu – Staff

The purpose of this menu is for the staff to have a control panel where they can navigate restricted parts of the system after logging in. The menu has a big, obvious title to describe its purpose as well as big, obvious buttons with clear labels so that the user can understand where they are being led and will understand how to do what they wish to do.



### Main Menu – Artists

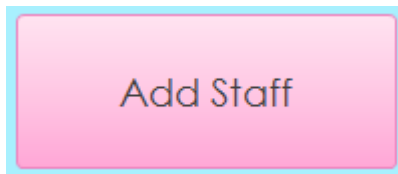
This menu is accessible when an Artist's login details are used to enter the system. It is designed to be intuitive from the get-go, as it is important that customers (artists) can navigate the system with ease. The menu is laid-out in a similar manner to the staff login menu, in that it is brightly coloured, clearly labelled and extremely simple and self-explanatory.



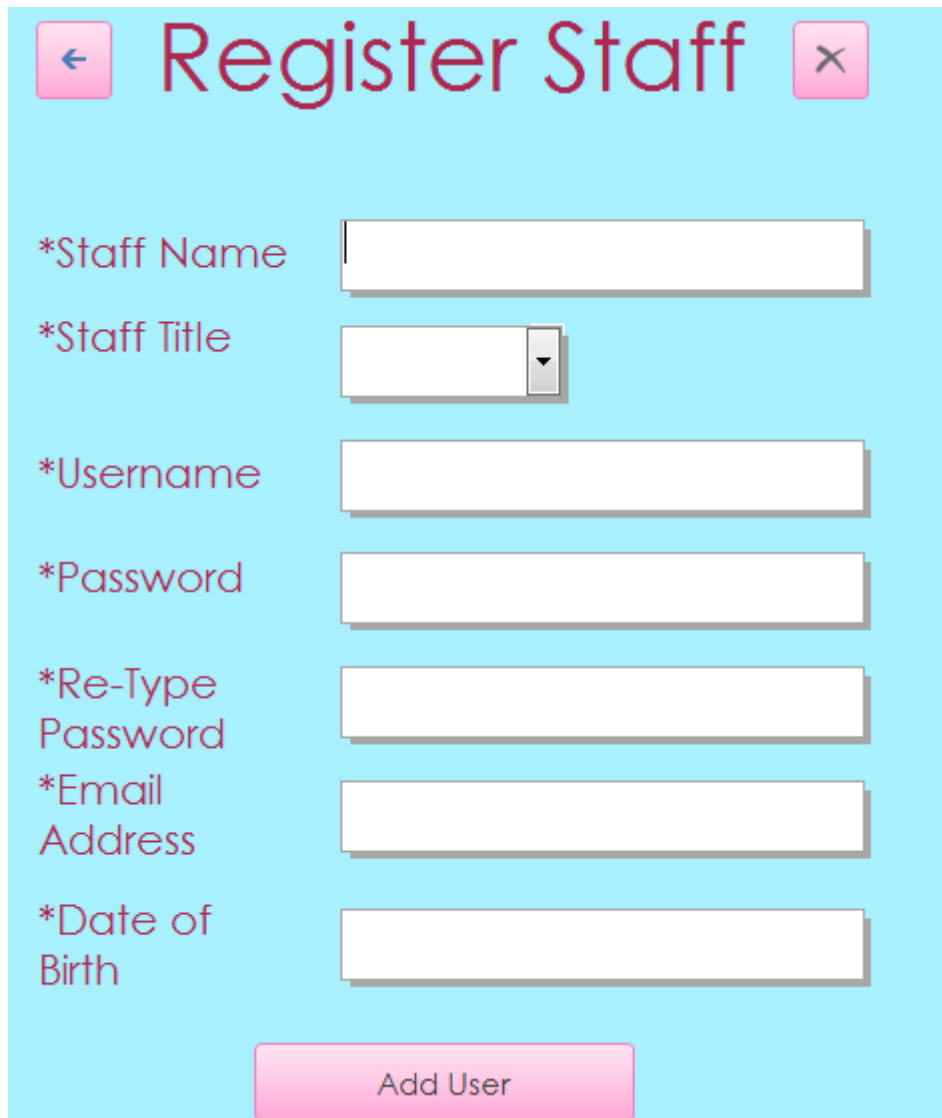
I will now showcase how users can be added to the system as well as modified and deleted.

### Registering a New Staff Member

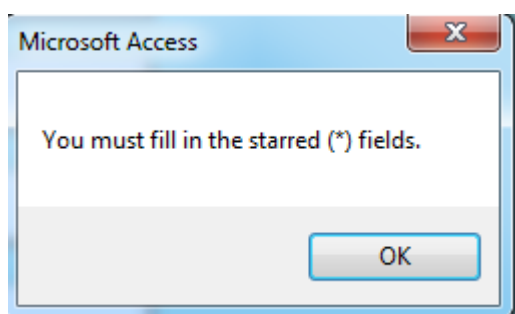
- 1) **Login as a staff member to access the staff control panel.**
- 2) **Click the clearly labelled 'Add Staff' Button.**



- 3) **User will be taken to a form where they can input all relevant staff details.**

A screenshot of a web form titled "Register Staff" in a large, dark blue font. The form has a light blue background. At the top left is a back arrow icon, and at the top right is a close 'X' icon. The form contains several input fields, each preceded by a red asterisk indicating it is required: "\*Staff Name" (text box), "\*Staff Title" (drop-down menu), "\*Username" (text box), "\*Password" (text box), "\*Re-Type Password" (text box), "\*Email Address" (text box), and "\*Date of Birth" (text box). At the bottom of the form is a pink button labeled "Add User".

- 4) **Most of these boxes are plain text boxes however there is an intuitive drop-down menu for ease-of-use. The password and Date of Birth boxes contain input masks which show \* and \_\_/\_\_/\_\_ respectively (shown below).**
- 5) **The system will deny the staff addition if the boxes aren't filled in, showing an error message.**



- 6) The system will deny the staff addition if the passwords do not match, showing an error message (this is a verification step.)

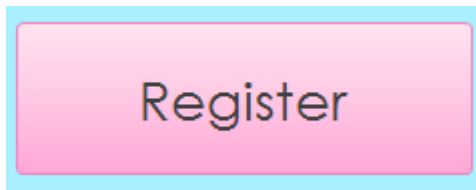
The screenshot shows a web form titled "Register Staff" with a light blue background. The form contains the following fields: "\*Staff Full Name" (text input with "Jim"), "\*Staff Title" (dropdown menu with "Mr."), "\*Username" (text input with "Jimms"), "\*Password" (text input with "\*\*\*\*\*"), "\*Re-Type Password" (text input with "\*\*\*\*"), "\*Email Address" (text input with "Jim@googlemail.com"), and "\*Date of Birth" (text input with "12/12/1990"). A pink "Add User" button is at the bottom. A "Microsoft Access" error dialog box is overlaid on the form, displaying the message "The two passwords typed do not match." with an "OK" button.

- 7) If all is successful, a new user will be created successfully. A success message will be shown, and the user will be returned to the control panel.


The screenshot shows the same "Register Staff" form as in the previous image, but with the following changes: the "\*Staff Full Name" field now contains "Jim Mans", the "\*Re-Type Password" field now contains "\*\*\*\*\*", and the "Add User" button is highlighted. A "Microsoft Access" success dialog box is overlaid on the form, displaying the message "New staff member created with ID 5." with an "OK" button.

## Registration of Artists


- 1) Click the clearly labelled 'Register' button shown on the login page.



- 2) User will be taken to a form where they can input all their relevant details.




# Register User



\*Act Name

\*Manager Title



\*Manager Name

\*Username

\*Password

\*Re-Type Password

\*Email Address

\*# Of Members

\*Under 18?

☐

Card Details

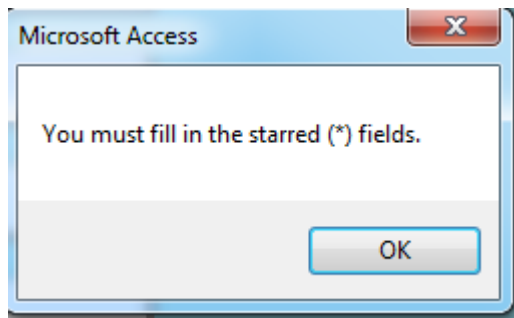
Card Number

CCV

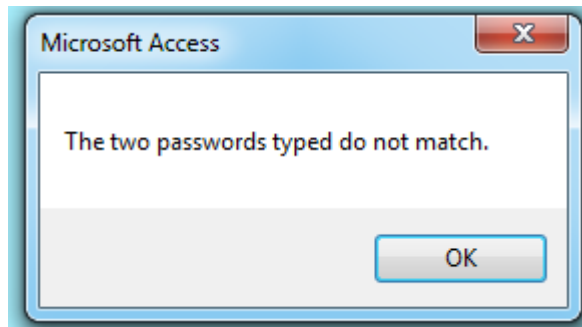
Expiry Date

Add User

- 3) Most of these boxes are plain text boxes. However, there is an intuitive drop-down menu for the 'title' selection for ease-of-use. The password, card number and expiry date boxes have input masks to show \*\*\*\*\*, (\_\_\_\_ \_\_ \_\_ \_\_) and \_\_/\_\_/\_\_\_\_ respectively.
- 4) The system will deny the user registration if the boxes aren't filled in, showing an error message.



- 5) The system will deny the user registration if the passwords do not match, showing an error message (this is a verification step).



- 8) If all is successful, a new artist will be created successfully. A success message will be shown, and the user will be returned to the login page.

←

## Register User

×

\*Act Name

\*Manager Title  ▼

\*Manager Name

\*Username

\*Password

\*Re-Type Password

\*Email Address

\*# Of Members

\*Under 18? ☐

Card Details

Card Number

CCV

Expiry Date

Microsoft Access

New act created with ID 10.



## Modifying Customer Information

- 1) Staff are currently able to modify customer data. Customers will soon be able to modify their own data; however, this functionality is not yet available.
- 2) A staff member must login then click the 'View Artist Info' button, which will lead to another form.



CustomerForm

←

Customers

×

ArtistID	ActName	ManagerName	Username	EmailAddress	U18
1	John Mayer	John Mayer	JMan12	John@gmail.com	No
2	Childish Gambino	Donald Glover	DoGlover2	Donald@gmail.com	Yes
3	Oasis	Liam Gallagher	Lgal9	Liam@gmail.com	No
4	Nirvana	Kurt Cobain	KKB12	Kurt@gmail.com	Yes
5	Trent Reznor	Trent Reznor	TReznor5	Trent@gmail.com	No
6	Rush	Alex Lifeson	Alife	Alex@gmail.com	No
8	Led Zeppelin	Jimmy Page	JPage8	Jimmy@gmail.com	Yes
9	†	†	†	†@†.†	No
10	The Beatles	Jon Lemmon	Jonnlon	Beatles@gmail.com	No

Add New Customer

Search For A Customer

Modify A Customer

- 3) Staff are then greeted by a form in which they can choose which user to modify via a point-and-click menu.

←

Modify User

×

\*ID

Find

\*Act Name

\*Manager Title

\*Manager Name

\*Username

\*Password

\*Email Address

\*# Of Members

\*Under 18?

☐

Card Details

Card Number

CCV

Expiry Date

ActName	Username
John Mayer	JMan12
Childish Gambino	DoGlover2
Oasis	Lgal9
Nirvana	KKB12
Trent Reznor	TReznor5
Rush	Alife
Led Zeppelin	JPage8
The Beatles	Jonnlon
†	†

Modify User

- 4) With the ID taken from the list, the Staff member shall click 'Find'. This will fill in the form with the chosen customer details.

**Modify User**

\*ID: 10 **Find**

\*Act Name: The Beatles

\*Manager Title: Mr.

\*Manager Name: Jon Lemmon

\*Username: Jonnlon

\*Password: \*\*\*\*\*

\*Email Address: Beatles@gmail.com

\*# Of Members: 4

\*Under 18?: ☐

Card Details

Card Number: 1122 1221 1221 1222

CCV: 111

Expiry Date: 08/2020

**Modify User**

ActName	Username
John Mayer	JMan12
Childish Gambino	DoGlover2
Oasis	Lgal9
Nirvana	KKB12
Trent Reznor	TReznor5
Rush	Allfe
Led Zeppelin	JPage8
<b>The Beatles</b>	<b>Jonnlon</b>

- 5) The Staff member can then change something, then press 'Modify User'. This will save the changes. A success message will be prevented if all is well.

**Modify User**

\*ID: 4 **Find**

\*Act Name: Nirvana

\*Manager Title: Dr.

\*Manager Name: Kurt Cobain

\*Username: KKB12

\*Password: \*\*\*\*\*

\*Email Address: Kurt@gmail.com

\*# Of Members: 3

\*Under 18?: ☒

Card Details

Card Number:

CCV: 879

Expiry Date:

**Modify User**

Microsoft Access

User Modified Successfully.

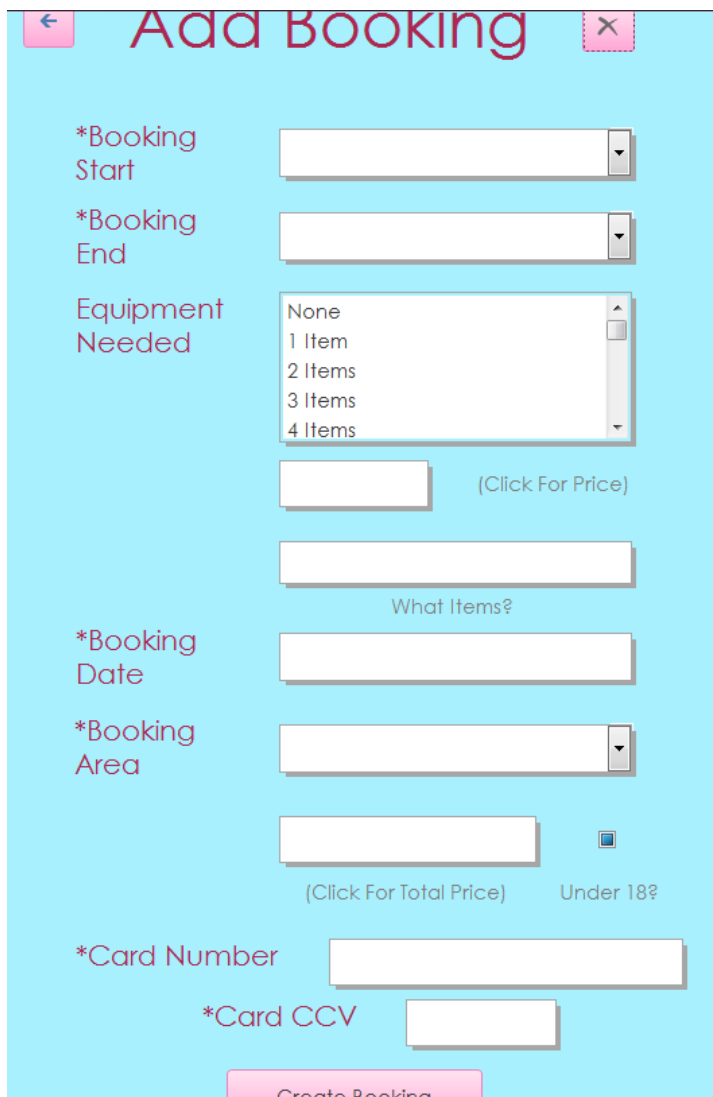
OK

## Creating a Booking

- 1) I will show this from the customer point of view as this is fully implemented into the system currently. Firstly, the artist must log in and select the 'Create A Booking' button on their control panel.



- 2) They will be greeted with a form in which they must fill in all the necessary info for their booking. Price will be automatically calculated based on the given info. All details must be entered correctly, or error messages will be shown (i.e. fill in all starred fields and use correct card details.)



The 'Add Booking' form is displayed on a light blue background. It features several input fields and a dropdown menu. The fields are labeled with asterisks to indicate required information. The 'Equipment Needed' dropdown menu is open, showing options from 'None' to '4 Items'. A 'Create Booking' button is at the bottom.

← Add Booking ×

\*Booking Start

\*Booking End

Equipment Needed

- None
- 1 Item
- 2 Items
- 3 Items
- 4 Items

(Click For Price)

What Items?

\*Booking Date

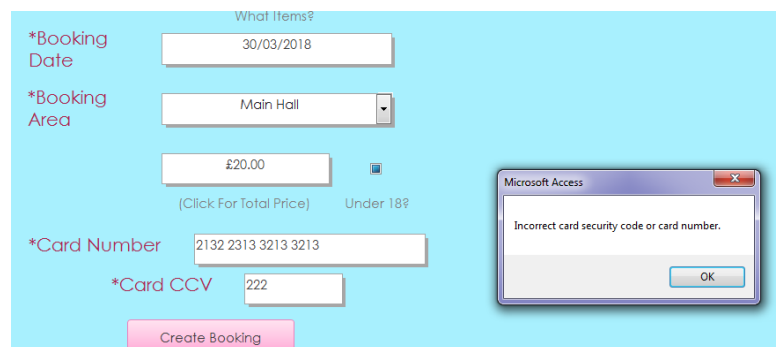
\*Booking Area

(Click For Total Price) Under 18? ☐

\*Card Number

\*Card CCV

Create Booking



This screenshot shows the booking form with some fields filled out. An error message is displayed in a Microsoft Access dialog box, indicating an incorrect card security code or card number.

What Items?

\*Booking Date

\*Booking Area

(Click For Total Price) Under 18? ☐

\*Card Number

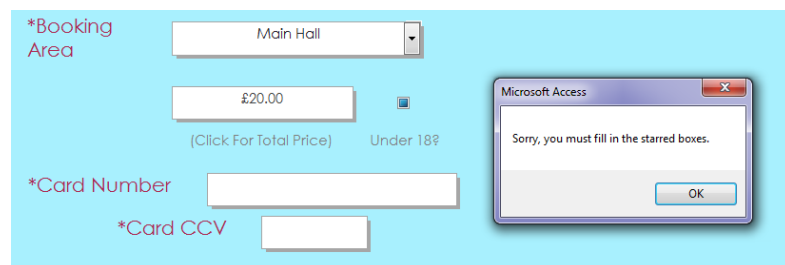
\*Card CCV

Create Booking

Microsoft Access

Incorrect card security code or card number.

OK



This screenshot shows the booking form with some fields filled out. A validation error message is displayed in a Microsoft Access dialog box, indicating that starred fields must be filled in.

\*Booking Area

(Click For Total Price) Under 18? ☐

\*Card Number

\*Card CCV

Microsoft Access

Sorry, you must fill in the starred boxes.

OK

### 3) There is also a function to prevent double bookings:

(Already Booked)

78 | 06:00:00 | 09:00:00 | 09/03/2018 | Main Hall

\*Booking Start: 07:00:00

\*Booking End: 10:00:00

Equipment Needed: None, 1 Item, 2 Items, 3 Items, 4 Items

£2.00 (Click For Price)

1 Guitar

What Items?

\*Booking Date: 09/03/2018

\*Booking Area: Main Hall

£14.00 (Click For Total Price) Under 18?

\*Card Number: 1111 1111 1111 1111

\*Card CCV: 111

Create Booking

Microsoft Access

Sorry, that time or area is already booked. Please try another time or area.

OK

### 4) Bookings are added straight to the invoice list for that user and staff.

BookingInfo

Booking Information

BookingID	BookingStart	BookingEnd	BookingDate	EquipmentLend	Area
76	08:00:00	00:00:00	09/03/2018		Practice Room 2
77	10:00:00	14:00:00	17/03/2018		Practice Room 1
78	06:00:00	09:00:00	09/03/2018		Main Hall

(Booking ID) Show

BookingInfoStaff

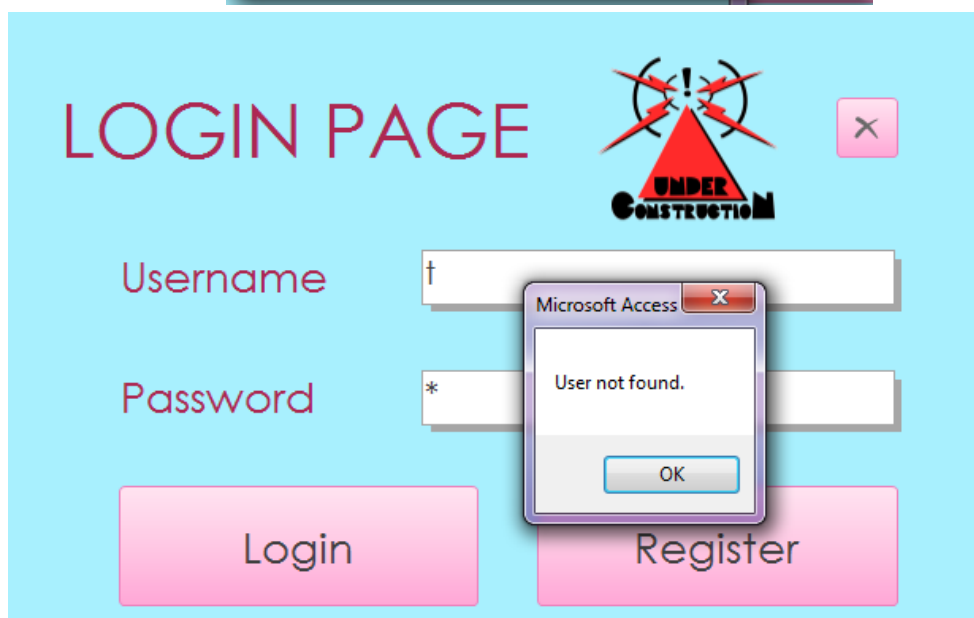
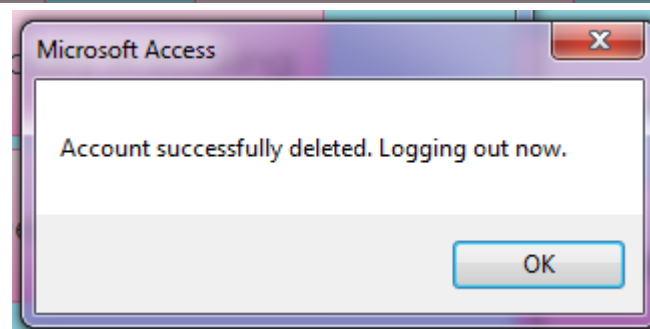
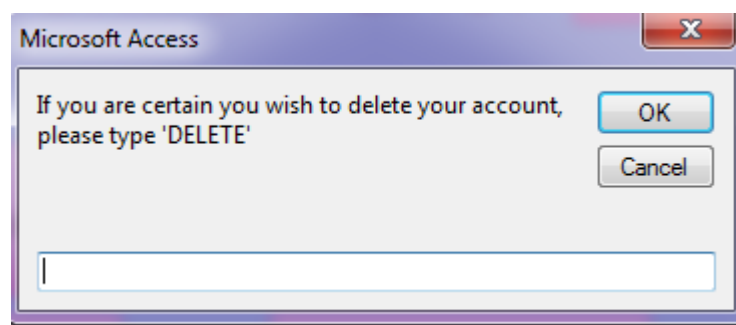
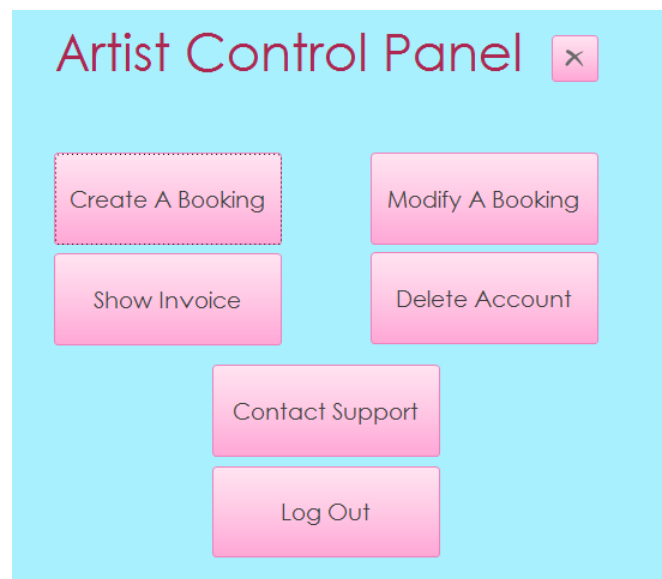
Booking Information

ArtistID	ActName	Username	BookingID	BookingStart	BookingEnd	BookingDate	TotalCost
2	Childish Gambi	DoGlover2	42	08:00:00	10:00:00	18/01/2018	£14.00
3	Oasis	Lgal9	2	07:00:00	10:00:00	13/10/2017	£26.00
3	Oasis	Lgal9	45	09:00:00	12:00:00	20/01/2018	£12.00
3	Oasis	Lgal9	69	08:00:00	11:00:00	07/02/2018	£16.00
3	Oasis	Lgal9	71	08:00:00	11:00:00	17/03/2018	£20.00
3	Oasis	Lgal9	72	07:00:00	10:00:00	02/03/2018	£20.00
4	Nirvana	KKB12	3	03:00:00	06:00:00	13/10/2017	£9.00
5	Trent Reznor	TReznor5	43	11:00:00	15:00:00	13/01/2018	£22.00
11	t	t	76	08:00:00	00:00:00	09/03/2018	£6.00
11	t	t	77	10:00:00	14:00:00	17/03/2018	£16.00
11	t	t	78	06:00:00	09:00:00	09/03/2018	£12.00

(Booking ID) Show Invoice

## Deleting a User

- 1) Both staff and users delete their accounts in the same way. They click a delete button, and then must confirm this deletion.



# Evaluation

A lot went well in the prototype of the system. The navigation is mainly simple in that all of the buttons are clearly labelled and forms close when they are not in use to provide a clear focus for the user. A pitfall of the UI is that in some cases (e.g. where the user has to select a booking from a list box) it may not be obvious that user is supposed to click on a specific booking before they press 'generate invoice'. While this is combatted by an error message asking the user to choose a booking, it may prove to be a slight inconvenience to a user.

The system adequately saves all of the data the user wishes to save. It checks for issues such as double bookings and deals with this using error messages. Again, the extra clicks needed may prove to be an inconvenience – I could possibly show the already booked times and remove these from the list of times, however this may further confuse users.

Users and bookings can easily be modified and a lot of automation is involved, making this an easy process. For security and data protection reasons, only staff are able to modify user information. I could make a less extensive version of the modify user form for the users in order for them to be able to modify their own data. This will prevent the hassle of them having to contact staff members to change smaller data for them, such as the number of members in their act.