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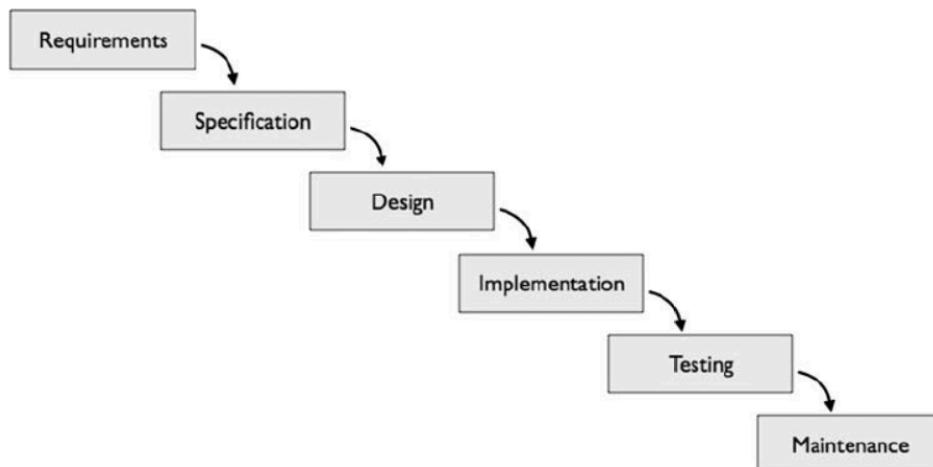
# Student information Kiosk

## Introduction:

For this assignment, we are assigned a project where we will be designing a Kiosk system as a group that allows students to access an electronic one stop service shop. The purpose of the student information kiosk is to provide up to date information to the students. The Information that will be provided will include events, student discounts, course details that are taking place on the university. It is essential that the university's system focuses on enabling the students from both overseas and home to gain access to the application and have capability of its using the it's functionalities.

## Software Development Lifecycle

### Waterfall Diagram:



In order to create a well performing student information system, we followed the steps in the following waterfall software development life cycle. This will allow us to effectively plan stages and move towards a common goal, it will force structure and will be simple to follow and arrange designated tasks.

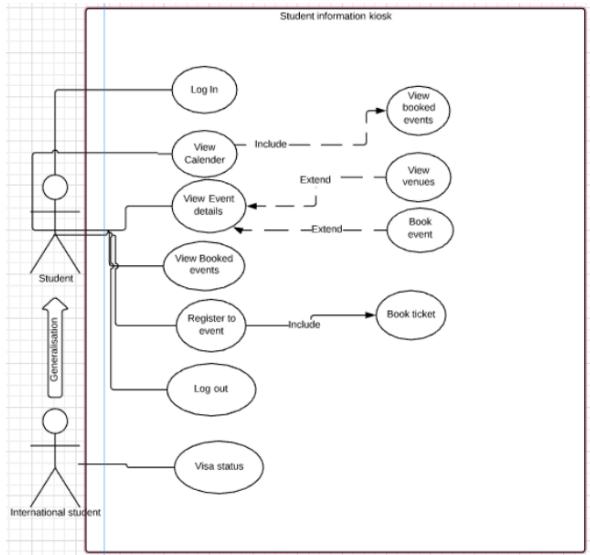
List of requirements (Non functional & Functional):

<b><u>Requirements summary</u></b>			
<u>Non-Functional-Requirements:</u>			
<b>ID:</b>	<b>Name:</b>	<b>P:</b>	<b>Owner:</b>
#NF201	Access permissions for the particular system information can only be changed by system admin.		A
#NF202	Application should be accessible on 3g/4g mobile connections.		A/S
#NF203	The response time should be no longer than 5 seconds on the time it takes to view a page.		A/S
#NF204	Modified data within the database should be updated for all of the users accessing it within 5 seconds.		A/S
#NF205	Ability of the system to be able to operate correctly/accordingly, if large number of users login.		A/S
#NF206	System returns error when user has entered wrong password/username		A/S
#NF207	System returns error when user has entered wrong data type within the field.		A/S
#NF208	System requires validation of fields (input) by student user		S
#NF209	System requires validation of fields (input) by admin user		A
#NF210	Users easily able to navigate by a navigation menu & buttons provided within the application		A/S
#NF211	Users able to access a service page, displaying various services within the University and outside.		A/S
#NF212	Layout and colour scheme must be user friendly and fully visible for the user in various lighting conditions		A/S

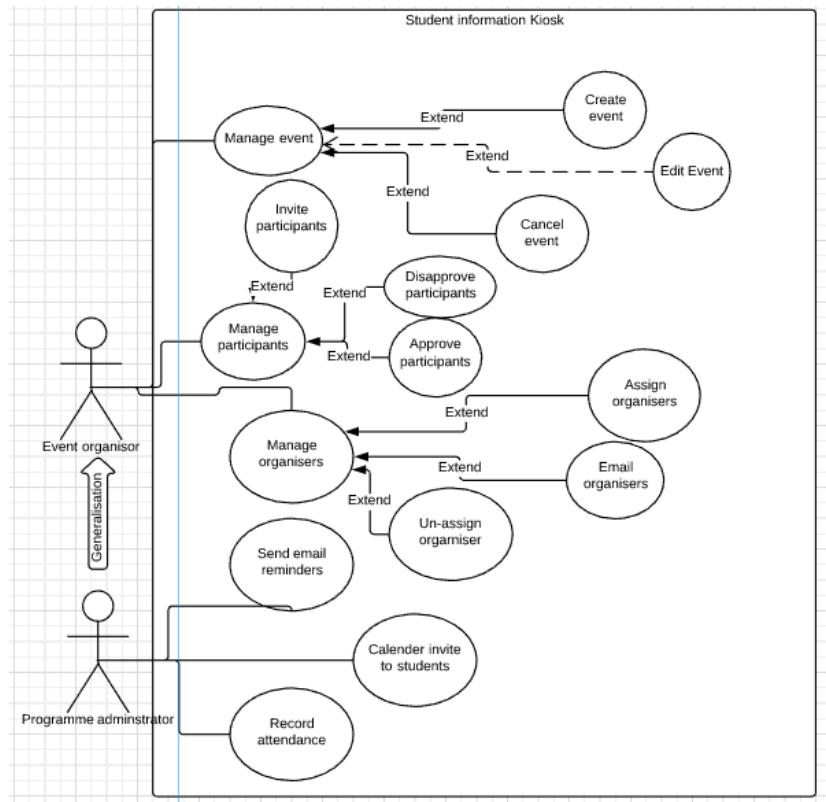
	<u>Functional Requirements:</u>		
#F301	Registered users must be able to log in to the application via the login page and be redirected.		A/S
#F302	A student user must be able book an available event		S
#F303	A student user must be able to see their own event booking		S
#F304	Users must be able to view the event venues		A/S
#F305	Student users should be able to delete their own event bookings		S
#F306	A student must be able to view their calendar with their booked events displayed		S
#F307	Users must be able log out of kiosk & be redirected back to login page.		A/S
#F308	Admin users must be able to delete zero to many users event bookings		A
#F309	Admin users must be able to have the option of functionality to modify all users event bookings		A
#F310	Admin users must be able to add an event/venue		A
#F311	Admin users must be able to create user accounts & modify		A

## UML Diagram

In the UML diagram i have shown below, I have presented a plan on the functions a student may have on student information kiosk. This includes the student being to look at their calendar for upcoming events. The student being able to view event details, register to event and check their booking status. International students will also be able to get forwarded information about their visa

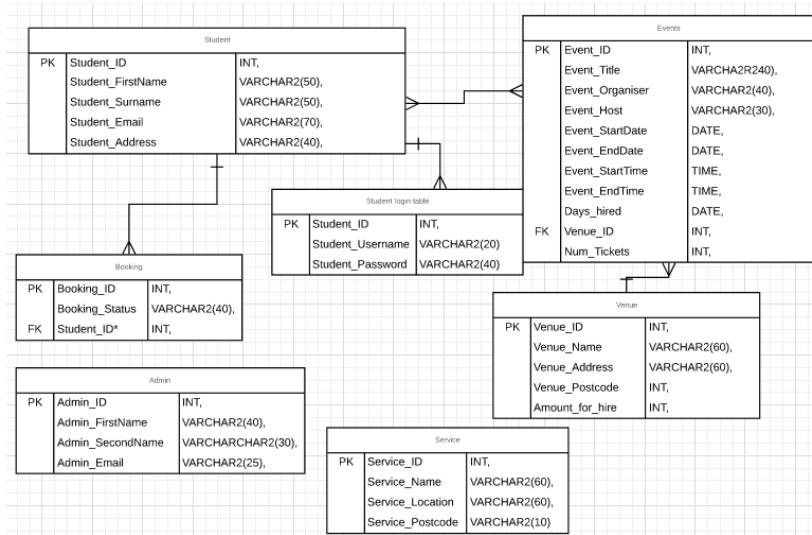


In the UML diagram i have shown below. I have presented how a plan on how it would look like management an event as an event organiser. In the use case diagram it shows that the event organiser is able to manage events and manage participants. A generalisation was also done to present the programme administrator who sends out emails to students and records attendance.



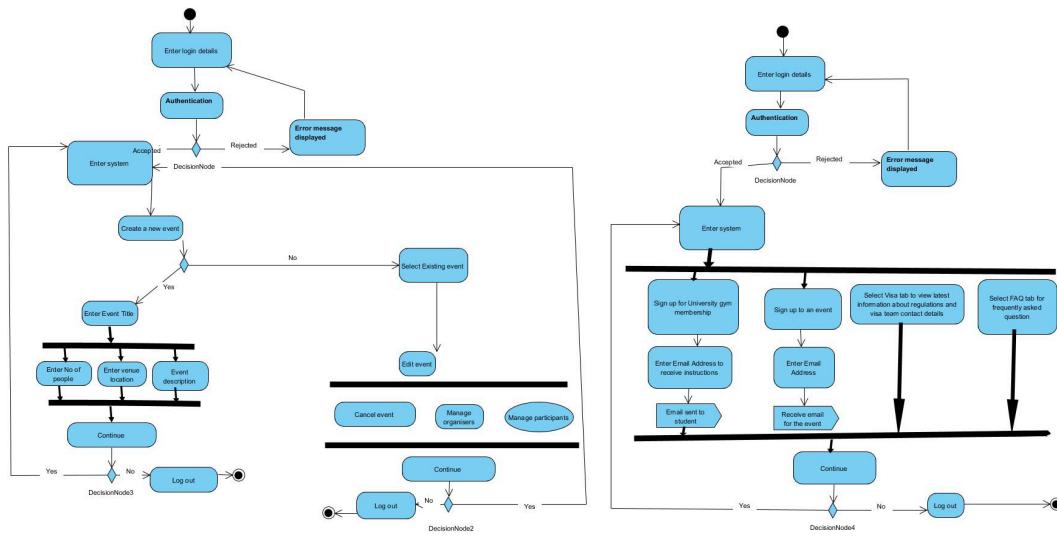
ERD

In the entity relationship diagram I have presented all the relationships in our kiosk database system. Student can join many events and vice versa. Data types have been chosen for the relevant columns and keys have also been implemented.



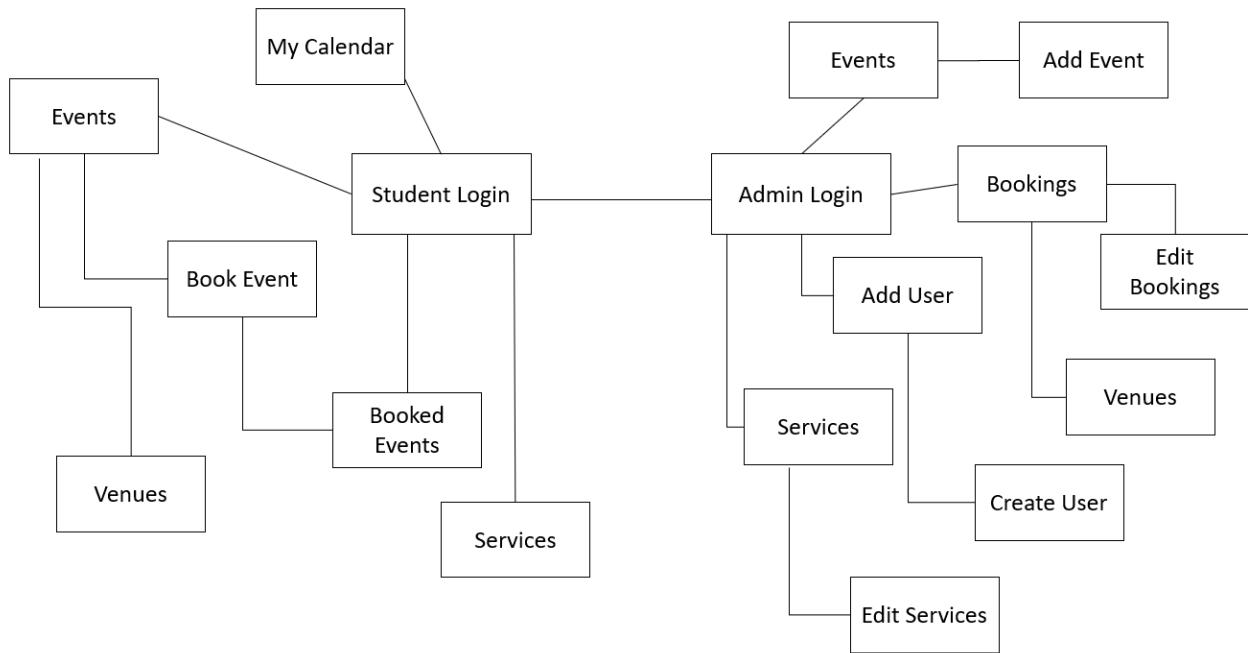
## Activity diagram

This activity diagram below provides further details following on from our use case diagram, on how we want the student information kiosk to work.



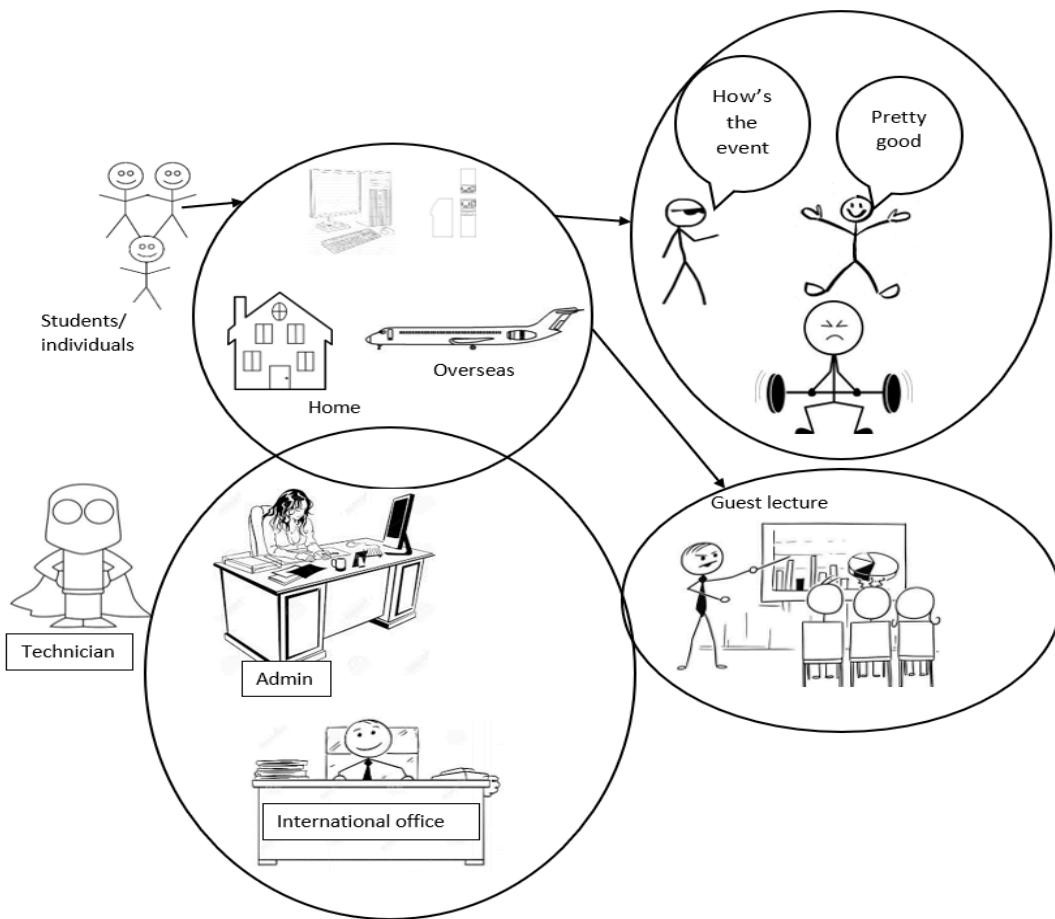
## Navigation mapping:

This is the navigation map for our Student Information System. It shows the pages that can be accessed by both the user and the admin. This navigation map also shows the privileges the students have compared to the admin.



### Rich picture:

We created this rich picture as a way to acknowledge, explore and define different situations and define them through a diagram. This rich picture shows that students/individuals are able to access the kiosk. This includes students both from home and overseas. The student kiosk will have events such as sports etc. The rich picture states that the admin is able to access the kiosk, but he will have more privileges than the students. The guests are also able to use the kiosk but they can only interact with it, they are unable to book. The technician is there in case of any technical failure about the Student Information System.



### **Root definition:**

A operated university-based system, to allow students to book & receive up to date information about all events on campus & to provide sources of information in regards to Luton & its opportunities, by the means of current students having the capability to have access to a one stop service shop. The purpose of this is to increase the awareness of the events/services, whilst allowing students to have easy access to them

### **Catwoe:**

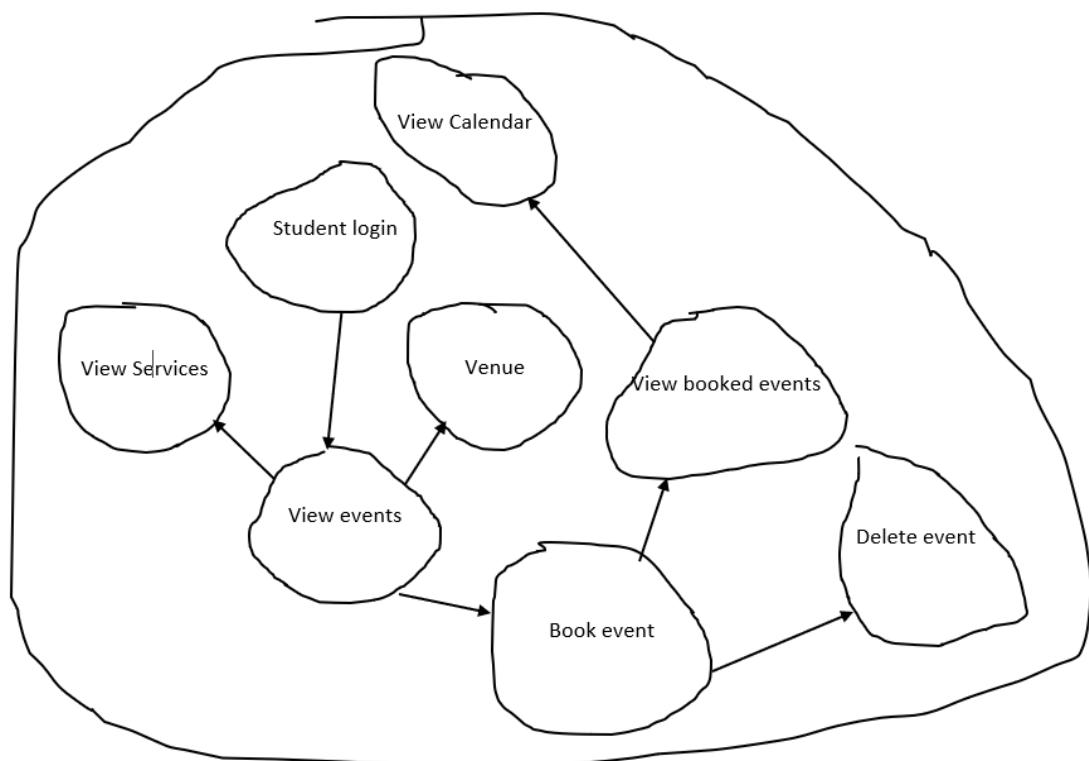
- C** Customers: Students
- A** Actors: University staff
- T** Transformations: Students -> awareness of events & services in regards to the relevancy of the campus and Luton as a whole.
- W** Worldview: Belief that providing up to date information of all events & services on campus & in the Luton community is a good way to get students to be aware of them, involved & to take part.
- O** Owners: The University
- E** Environmental Constraints: University (term periods)

### **Performance Measurements:**

- E1 – Efficacy  
The student information system performs very well and it meets the students' goals to update them about every new information that takes place at the university like events.
- E2 - Efficiency .  
students at the campus are satisfied with the services provided as it helps improve their university life and helped let them network with others
- E3 - Effectiveness  
The students at the campus find the student information system very useful. This is because the system helps to make harder activities easier for the students.

Monitor and control is vital, In which case we should establish performance measures, we should consider to use the three E'S, (efficacy, efficiency, effectiveness.) The purpose of this to understand our system and be able to evaluate the performance and to also regulate itself if performance is not met.

### Conceptual Model:



### Communication

Every Time before we met we had each other's contacts so we used social media as our means of communication. This helped us to make plans for our group meetings and whenever a member of our group came up with an idea they could message it to the rest of the group members if they were not in a group meeting.

**Week by week steps - Meeting log:****Week 1**

In the first week, we started by distributing different activities within the group. Each student was allocated a task to work on.

We then started working on the prototype for our student information system by planning our navigation and pages. We did this by using a powerpoint presentation and also creating a storyboard designs for our kiosk. One of the key tasks we did is identifying functional and non-functional requirements.

**Week 2**

In week 2 we started to focus on the planning of our application. We did this by using UML, the first model we worked on was a use case diagram we modelled this according to what we wanted on the application by identifying actors and functions. We identified entities and attributes which we then normalised to create an ERM which identifies the relationships of the kiosk system.

**Week 3:**

In week 3 we created an activity diagram presenting the flow of the kiosk system. We also created the rich picture to illustrate the structure, process, soft facts and the environment. We began started working on the report. Altogether we used a rich picture to express the situation. We also did triple E and Catwoe.

**Week 4:**

We started to create Oracle Apex accounts and started to follow the practicals in orders to gain a better understanding & knowledge of the web development tool. We then started to learn how to navigate through oracle apex and how the creation process of the database operates & connects with application side of Apex.

**Week 5:**

Since we completed our entity relationship diagrams and normalisation we prepared to make our tables through sql using sql commands & the object browser within oracle. The powerful web application development tool did the necessary jobs by having the capability to be able to select identifier keys and the relationships for us.

**Week 6:**

These are some of the ideas that we had for the student kiosk. Most of them went through and some did not. It is also where we did our brainstorming for the kiosk and the kiosk prototype.

**Week 7:**

We started implementing some of the ideas that we had during our brainstorm group sessions/meetings.

**Week 8:**

We then finally started to create our prototype application, we came to the conclusion to create two applications; one for the student user & for the admin user. We then back to our user requirements and identified which particular tables, functionalities and options, (permissions) are required in the student app and which ones are needed in the admin app. We first started to display the relevant information we wanted onto modal & non-modal; forms,interactive forms, interactive grids. We started by adding an event page by using sql query (SELECT STATEMENT) on the page designer to select our columns that we wanted to display on to the grid we, used a inner join to join two columns from two different tables together. We added a button region to our page allowing the student user to book an available event from a select list with a list of values saved from our shared components. The select list consists of the following sql query.

```
'select NAME as display,  
      EVENT_ID as return  
   from event  
order by 1'
```

This query generates data from the event table into the select list, allowing the user to select an event. We made other buttons in which redirect to another page we also made a submit button in which uses an insert statement in order to insert the data into the table.

**Week 8.1:**

After completing the booking page, we again used our functional requirements in order for us to identify what we need to create next. We started to create a 'booked events' page, we did this by displaying tables together into a interactive report. We used an inner join and made sure that the student that is logged in is only able to see his/her's events by using 'app\_user'. Below is the sql query that is used for the source.

```
select b.B_ID, b.EVENT_ID, e.NAME  
FROM BOOKING b  
inner join EVENT e  
on b.EVENT_ID = e.EVENT_ID  
where b.USERNAME = :APP_USER
```

We created a button on the side of the row to be accessible for student users to be able to delete there booking we did this by using a region button directly the page to a form where they can delete the select booking, this works by a delete statement.

**Week 8.2:**

Now we decided to create a calendar for student users to be able to view their booked events on the displayed calendar.we did this by creating a calendar form and then we linked the page to a booking table in our database. We then created the calendar in a way that when a user logs in they can only see their bookings that they made on the calendar. We did this by using the :APP\_USER query.

The last page we created for the student application side was a service page to allow students to be able to have information on relevant services. This was simply created using a report and to source it to display the data in our database tables.

**Week 8.3:**

We began making the admin application side. Then admin event page pretty much generalises off student event page however instead of being able to book an event they only having the two options of being able to delete any users booked event. We created the venue page by populating data from tables by the use of a sql select statement & a join. The venue ID will be used as the primary key however will be used as a foreign key in the events table. Admin can create a new venue ID so that they are able to create a new event.

Created a form page to allow Admins to create Student accounts, allowing the functionality for them to be able to add users and insert the data into our tables.

Added a service page giving the admin an selection to add a service.

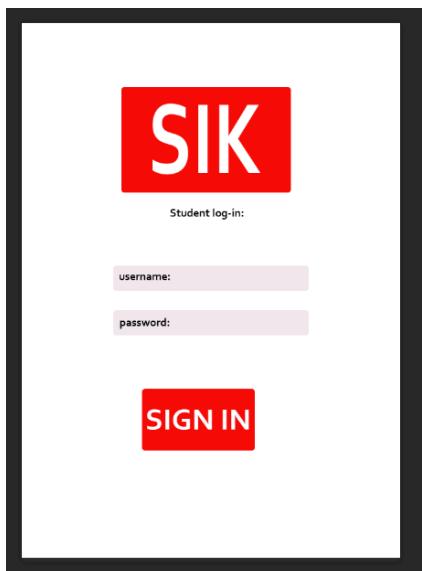
**Week 8.4:**

Ensuring Validation is checked on all relevant form fields, we did this by going in page designer and changing the setting.

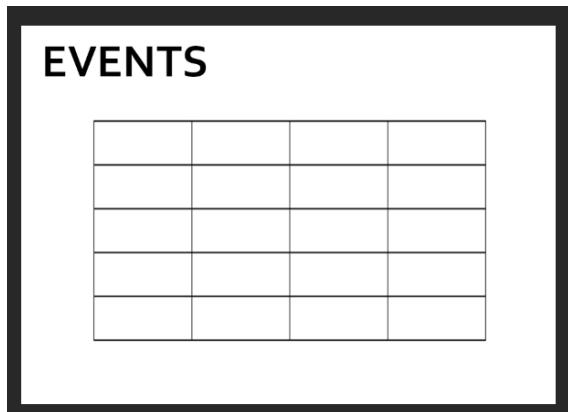
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**User Interface Design Storyboards**

This is a prototype model that we created to get an idea of how our student information system will look like. We made some major changes along the way and our system turned out looking different.



We used this page to hold the information for the students who make any bookings.



This calendar is used by student users. When they log in, they able to check upcoming events that are coming and see which ones they are booked too on which day. It is like a timetable.



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## **Requirement catalogue**

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#NF201
<b>Requirement name</b>	Access permissions
<b>Description</b>	Access permissions for the particular system information can only be changed by A system Admin, this should include various parts of tables, and the admin having the capability to add/modify events, user accounts and venues.
<b>Owner</b>	A
<b>Comments/suggested solutions</b>	Create two separate applications one for the student side & one for the Admin allowing particular functionalities.
<b>Benefits</b>	Will allow to add/edit via the front end instead of making changes via the back end, adding an Admin account with a particular granted set of permissions is vital and can be very beneficial to the application.
<b>Related requirements</b>	

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#NF202

<b>Requirement name</b>	Application accessibility
<b>Description</b>	Application should be accessible on 3g/4g mobile connections.
<b>Priority</b>	D
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	Oracle apex allows mobile UI and 3g/4g connectivity.
<b>Benefits</b>	Wider levels of access for users to be able to interactive with the application.
<b>Related requirements</b>	

Requirement catalogue
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<b>Requirement Id:</b>	#NF203
<b>Requirement name</b>	Response time (Page)
<b>Description</b>	The response time should be no longer than five seconds on the time it takes to view a page.
<b>Priority</b>	M
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	
<b>Benefits</b>	To allow a user to be able to view a page without having to wait a long time for the page to load.
<b>Related requirements</b>	#NF203.1 #NF203.2

Requirement catalogue
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<b>Requirement Id:</b>	#NF203.1
<b>Requirement name</b>	Response time (Data)
<b>Description</b>	Response time should take no longer than five seconds when displaying any particular data from a database onto a page
<b>Priority</b>	M
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	To use a powerful web development tool such as oracle that handle fast response time.
<b>Benefits</b>	Too allow the user to retrieve relevant information and data quickly
<b>Related requirements</b>	#NF203 #NF203.2

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#NF203.2
<b>Requirement name</b>	Update Time (Data)
<b>Description</b>	Modified data within the database should be updated for all of the users accessing it within five seconds.
<b>Priority</b>	M
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	To use a powerful web development tool such as oracle that handle fast update time.
<b>Benefits</b>	Users able to immediately be able to see updated data at least 5 seconds after it has been updated. This is beneficial as it is important users can see new data and not old data.
<b>Related requirements</b>	

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#NF205
<b>Requirement name</b>	Ensuring user maintainability
<b>Description</b>	Ability of the system to be able to operate correctly/accordingly, if large number of users login or are trying to login.
<b>Priority</b>	D
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	
<b>Benefits</b>	Too allow many users to correctly be able to operate without any issues.
<b>Related requirements</b>	

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#NF206
<b>Requirement name</b>	Wrong password/username

<b>Description</b>	System returns error when user has entered wrong password/username
<b>Priority</b>	
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	SQL commands shall be used to in order to check users login details. The authentication scheme will be changed and i function could be used.
<b>Benefits</b>	User is able to identify their mistake, from the response of the return error.
<b>Related requirements</b>	

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#NF207
<b>Requirement name</b>	Wrong data type

<b>Description</b>	System returns error when user has entered wrong data type in a field.
<b>Priority</b>	M
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	Set column data types to particular ones, ensuring a user has to enter that particular one to proceed.
<b>Benefits</b>	To inform user that they have entered a wrong data type value so that they can easily understand their mistake.
<b>Related Requirements</b>	

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#NF208/9

<b>Requirement name</b>	Require validation
<b>Description</b>	System requires validation of fields (input) by student user/admin user.
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	Use page designer to ensure validation is checked on relevant columns
<b>Benefits</b>	Before submitting page, the system will check for any field that require validation, the benefit of this that a user will not be able to pursue to the next page.
<b>Related requirements</b>	

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#NF210

<b>Requirement name</b>	An easy accessibility friendly navigation
<b>Description</b>	Users easily able to navigate by a navigation menu & buttons provided within the application
<b>Priority</b>	M
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	Use the shared components option and access 'user attributes' & the 'navigation menu' to enhance the navigation. We should also adjust the sequence to order the pages appropriately.
<b>Benefits</b>	To allow users to easily & effectively navigate through the application, without having issues finding pages.
<b>Related requirements</b>	

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#NF211

<b>Requirement name</b>	Include service page
<b>Description</b>	Users able to access a service page, displaying various services within the University and outside.
<b>Priority</b>	M
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	Include various sources of services within Luton that are relevant to students. Display information into a interactive grid/form.
<b>Benefits</b>	To give users up to date, relevant information about services within the University and outside.
<b>Related requirements</b>	

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#NF212

<b>Requirement name</b>	Layout and colour scheme
<b>Description</b>	Layout and colour scheme must be user friendly and fully visible for the user in various lighting conditions.
<b>Priority</b>	M
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	Use clear colours on the design on the pages including the colour of the font & the size.
<b>Benefits</b>	To allow users to easily see the display without mis-reading and being able to clearly visualise everything.
<b>Related requirements</b>	

Requirement catalogue
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<b>Requirement Id:</b>	#F301
<b>Requirement name</b>	Logging into the application
<b>Description</b>	Registered users must be able to log in to the application via the login page and be redirected.
<b>Priority</b>	M
<b>Owner</b>	A/S
<b>Comments/suggested solutions</b>	A forgot password function is provided if the student is unable to log in
<b>Benefits</b>	Users can log in and be redirected to the main side of the application if which they can have particular access to.
<b>Related requirements</b>	

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#F302
<b>Requirement name</b>	Booking event
<b>Description</b>	A student user must be able book an available event
<b>Priority</b>	D
<b>Owner</b>	S
<b>Comments/suggested solutions</b>	Create tables in-regards to event information and replicate it on the application itself.
<b>Benefits</b>	Students can book themselves into available events.
<b>Related requirements</b>	

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#F303

<b>Requirement name</b>	Viewing Booking
<b>Description</b>	A student user must be able to see their own event booking
<b>Priority</b>	M
<b>Owner</b>	S
<b>Comments/suggested solutions</b>	SQL query should be used to select only 'app users' id from login and show only their bookings.
<b>Benefits</b>	Students are able to see there booked events for reference.
<b>Related requirements</b>	

<b>Requirement Id:</b>	#F304
<b>Requirement name</b>	Viewing Venues
<b>Description</b>	Users must be able to view the event venues
<b>Priority</b>	M
<b>Owner</b>	S
<b>Comments/suggested solutions</b>	Each event shall have an event ID and Venue ID attached. Use a form to display venue the table from parts of the database.
<b>Related requirements</b>	

<b>Requirement Id:</b>	#F305
<b>Requirement name</b>	Deleting own bookings
<b>Description</b>	Student users should be able to delete their own event bookings
<b>Priority</b>	M
<b>Owner</b>	S
<b>Comments/suggested solutions</b>	Use a region button to direct the report to a form in which Students users can choose to delete their booked event. An SQL delete command will be used.
<b>Benefits</b>	If student user decides he wants to cancel they can have the functionality to delete their booked event.

<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#F306
<b>Requirement name</b>	View calendar
<b>Description</b>	A student must be able to view their calendar with their own booked events displayed
<b>Priority</b>	D
<b>Owner</b>	S
<b>Comments/suggested solutions</b>	SQL code shall be used to display only app users, so that only that particular user signed in is able to see only their booked events on their calendar.
<b>Benefits</b>	They are able to see upcoming events they are booked too in a calendar format.
<b>Related requirements</b>	

Requirement catalogue	
Requirement Id:	#F307
Requirement name	Log in & Log out
Description	Users must be able log out of kiosk & be redirected back to login page.
Priority	M
Owner	A/S
Comments/suggested solutions	
Benefits	Keeps the kiosk looking consistent and relevant to user needs. For example if sessions times out, you will be directed to home page
Related requirements	

Requirement catalogue	
<b>Requirement Id:</b>	#F308
<b>Requirement name</b>	Deleting user event bookings
<b>Description</b>	Admin users must be able to delete zero to many users event bookings
<b>Owner</b>	A
<b>Comments/suggested solutions</b>	Unlike student users, admins shall have a report with a form on their side application to allow them to modify the report and data inside it.
<b>Benefits</b>	To remove redundant user accounts for example past students who have graduated
<b>Related requirements</b>	

Requirement catalogue	
Requirement Id:	#F309
Requirement name	Modify all users event bookings
Description	Admin users must be able to have the option of functionality to modify all users event bookings
Priority	M
Owner	A
Comments/suggested solutions	
Benefits	Give up to date information for student to participate and be satisfied with the ease of use on the service
Related requirements	

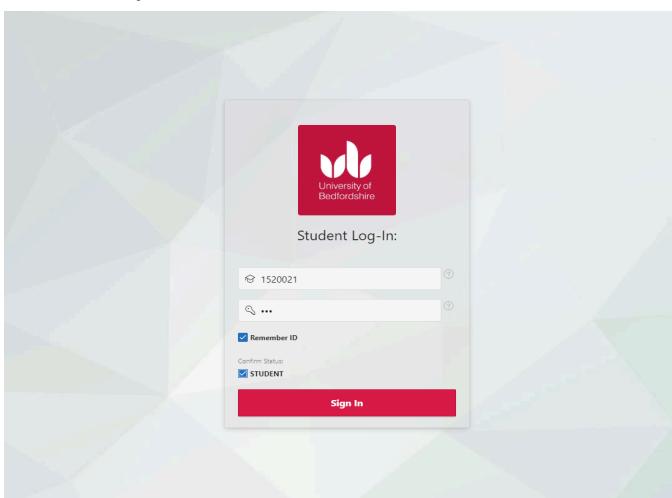
<b>Requirement catalogue</b>	
<b>Requirement Id:</b>	#F310
<b>Requirement name</b>	Add an event/venue
<b>Description</b>	Admin users must be able to add an event/venue.
<b>Priority</b>	M
<b>Owner</b>	A
<b>Comments/suggested solutions</b>	A button can be used to redirect the Admin to form page in order to add an Event. The Admin should fill in the event details and click the submit button in order for a 'SQL insert command' to proceed, allow the data to be inserted into the relevant tables.
<b>Benefits</b>	Give up to date information so students are able to participate in events.
<b>Related requirements</b>	

Requirement catalogue	
Requirement Id:	#F311
Requirement name	Create user accounts & modify
Description	Admin users must be able to create user accounts & modify.
Priority	M
Owner	A
Comments/suggested solutions	Admins shall have access to an additional page & table which should include users details.
Benefits	To help manage student accounts for example if students forget their password or if any faults or human errors occur due to incorrect information.
Related requirements	

## Student Information System test

### Student login:

The student login is can only be used by the students to access the student information system. The information that they get to see or modify is set appropriately. The student details are stored in a table in which therefore once the user click signs in the system will run a particular function to check details entered.



Authentication Scheme

Show All	Name	Subscription	Settings	Source
Name				
<input type="text" value="otentikasi"/> * Name <input type="text" value="Custom"/> * Scheme Type				
<pre> 1 FUNCTION cek_otentikasi (p_username IN VARCHAR2, p_password IN VARCHAR2) 2 RETURN BOOLEAN 3 AS 4 hasil NUMBER := 0; 5 BEGIN 6 SELECT 1 INTO hasil FROM TLOGIN 7 WHERE UPPER(USERNAME) = UPPER(p_username) 8 AND PASSWORD = p_password 9 AND STATUS= :P101_STATUS 10 AND KET= 'AKTIF'; 11 RETURN TRUE; 12 EXCEPTION 13 WHEN NO_DATA_FOUND THEN 14 RETURN FALSE; 15 END cek_otentikasi; 16 </pre>				

## My calendar:

This is the calendar. The calendar is used to show which bookings have been made by the students, it also shows the date on which the booking has been made.

The screenshot shows a monthly calendar for May 2019. The days of the week are labeled from Sunday to Saturday. Blue horizontal bars are overlaid on the calendar grid, representing bookings for 'Community Youth'. The bars are located on the following dates: Monday, May 3; Tuesday, May 4; Wednesday, May 5; Thursday, May 6; Friday, May 7; Saturday, May 11; Saturday, May 18; Saturday, May 25; and Sunday, May 26. The rest of the month is shown as empty calendar cells.

## Events:

The events page shows the events that are available for the student user.

Event ID	Name of Event	Venue ID	Event Date
9909	Sports Day	998	03-DEC-19
665	Budgeting Work Shop	997	06-DEC-19
2	Python Work Shop	2	01-DEC-19
1000	Java Work Shop	2	01-DEC-19
23	Religious Views	10	01-DEC-19
156	Community Youth	128	03-MAY-19

Total 6

**Book An Event**

## Venues

The venus page is opened by the student user when they click on any event on the events page. This works by the use of the interactive grid having the capability to be able to source a particular column to another page, such as this modal dialog, when it is opened, the user can see the location of the event he booked, the address and the postcode this is populated from the tables data in our DB and presented into a report type.

The screenshot shows a web-based kiosk system interface. On the left, there's a sidebar with icons for 'My Calendar', 'Events' (which is currently selected), 'Booked Events', and 'Services'. Below the sidebar is a button labeled 'Book An Event'. The main content area displays a table of events:

Event ID	Name of Event	Venue ID	Event Date
9989	Sports Day	998	03-DEC-19
665	Budgeting Work Shop	997	06-DEC-19
2	Python Work Shop	2	01-DEC-19
1000		2	01-DEC-19
23		10	01-DEC-19
156		128	03-MAY-19

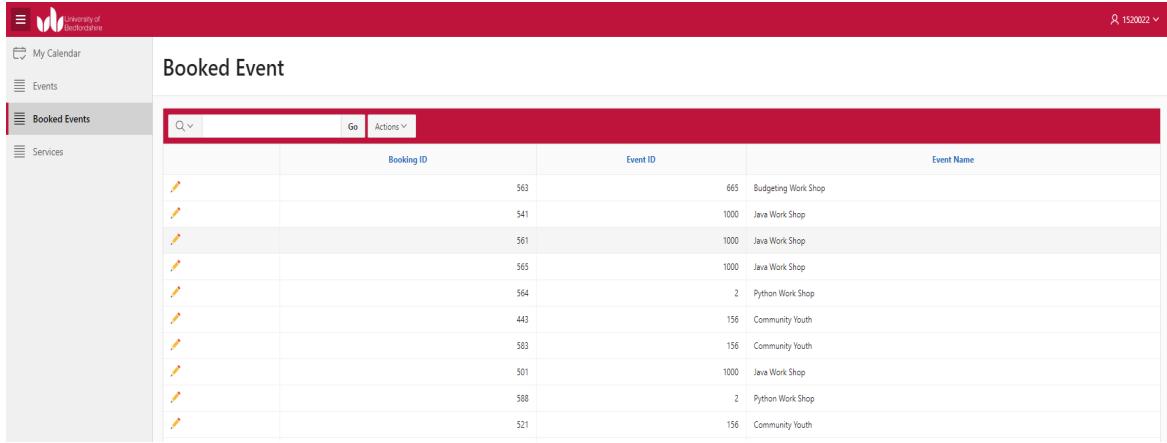
A modal dialog box titled 'Venues' is overlaid on the table. It contains a search bar with placeholder 'Q', a 'Go' button, and a 'Actions' dropdown menu. Below the search bar is a table showing venue details:

Venue ID	Venue Location	Address	Postcode
998	University Of Bedfordshire Campus	Vicarage Street	LU1 3JU
10	Bedford University	Polhill Avenue	B41 9EA
128	Tolko Youth Space	7 Gordon Street	LU12QP
2	Galaxy	Bridge Street	LU1 3JD
997	Venue 360	20 Gipsy Lane	LU1 3JD

At the bottom right of the modal, there's a page number '1 - 5'.

## Booked Events

This page shows the events that the student user has booked, this done based on the student user that has logged in. So that means if the user that has logged in has no bookings, there will be no bookings displayed on this page

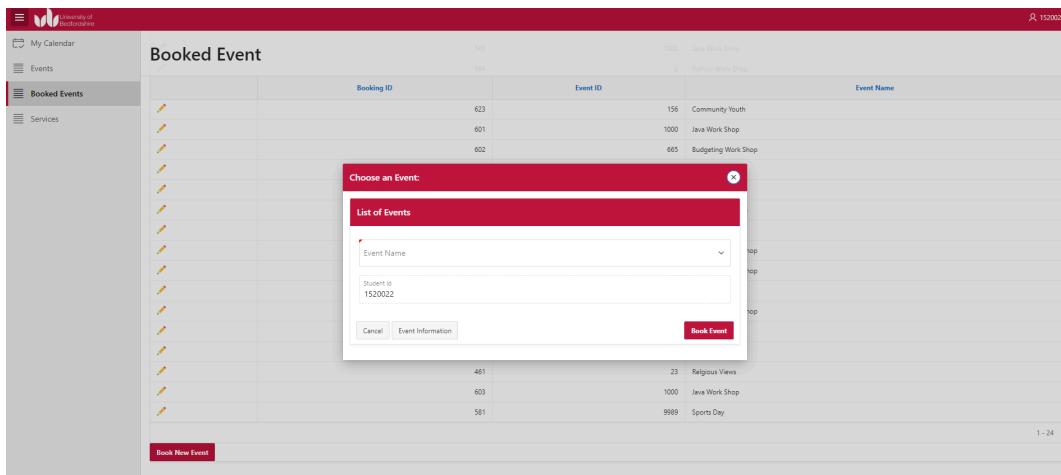


The screenshot shows a web-based application interface titled "Booked Event". The left sidebar contains navigation links: "My Calendar", "Events", "Booked Events" (which is selected and highlighted in red), and "Services". The main content area has a search bar with placeholder "Q v" and a "Go" button, followed by a "Actions" dropdown menu. A table displays a list of events with columns: "Booking ID", "Event ID", and "Event Name". The data in the table is as follows:

Booking ID	Event ID	Event Name
	665	Budgeting Work Shop
	541	1000 Java Work Shop
	561	1000 Java Work Shop
	563	
	564	1000 Java Work Shop
	443	2 Python Work Shop
	583	156 Community Youth
	501	156 Community Youth
	588	2 Python Work Shop
	521	1000 Java Work Shop

## Book Event:

The book event page is opened by the student users when they click the key about 'Book New Event' to book an activity which is appear the list of events. Then a window will be come because it is about they can click the 'event name' to picking which event do they want to book and make sure they are student number. If they want to book the event which they choosing, they can click the red key that is 'book event'. If they no sure, they can click 'cancel' or 'event information' to look over events again.



**Delete Event:**

When the student user logs in, he is given the option to delete any events that he has created. The user can do this by pressing the yellow pencil on the booked events page.

The screenshot shows a 'Booked Event' page from a university kiosk system. A modal window titled 'Delete Event' is open, prompting the user to confirm the deletion of an event with Booking ID 563 and Event ID 665. The event name is 'Budgeting Work Shop'. The background table lists other events, including 'Community Youth' and 'Java Work Shop'. The navigation bar at the bottom includes links for Home, Application 120248, Edit Page 2, Session, View Debug, Debug, Page Info, Quick Edit, Theme Roller, and a gear icon.

Booking ID	Event ID	Event Name
563	665	Budgeting Work Shop
541	1000	Java Work Shop
585	665	Budgeting Work Shop
586	156	Community Youth
587	665	Budgeting Work Shop
589	156	Community Youth
590	1000	Java Work Shop
461	23	Religious Views
581	9989	Sports Day

## Services

The page can be used to show the student user any service that the university can provide the students but the students are not given the permission to interact with the services.

The screenshot shows a 'Services' page from the university kiosk system. A table displays the following information:

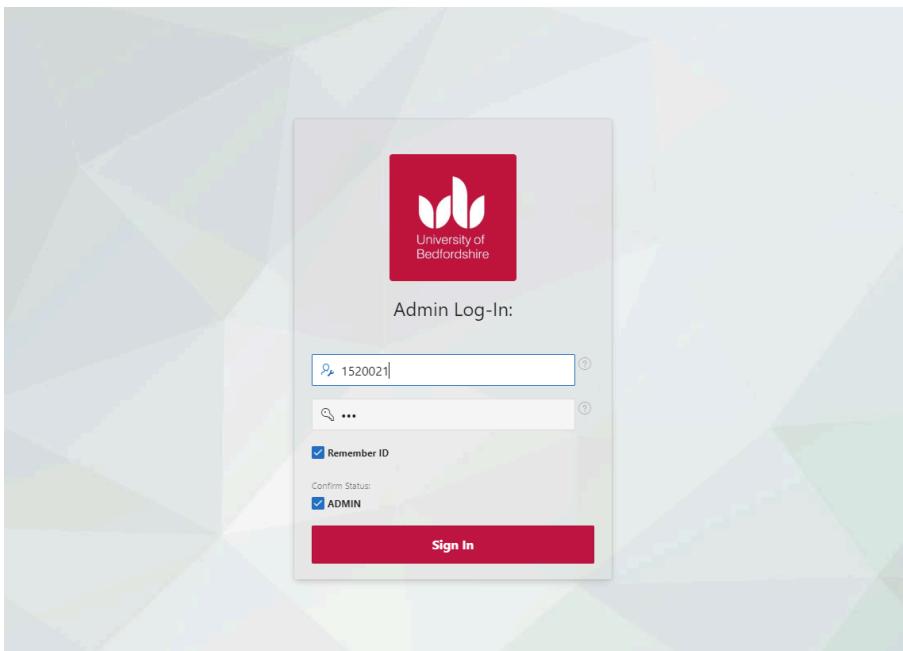
Service Name	Location
University Square	LU1 3JU
St Ann's Road	LU1 3HZ

The navigation bar at the bottom includes links for Home, Application 120248, Edit Page 12, Session, View Debug, Debug, Page Info, Quick Edit, Theme Roller, and a gear icon.

## Admin Test:

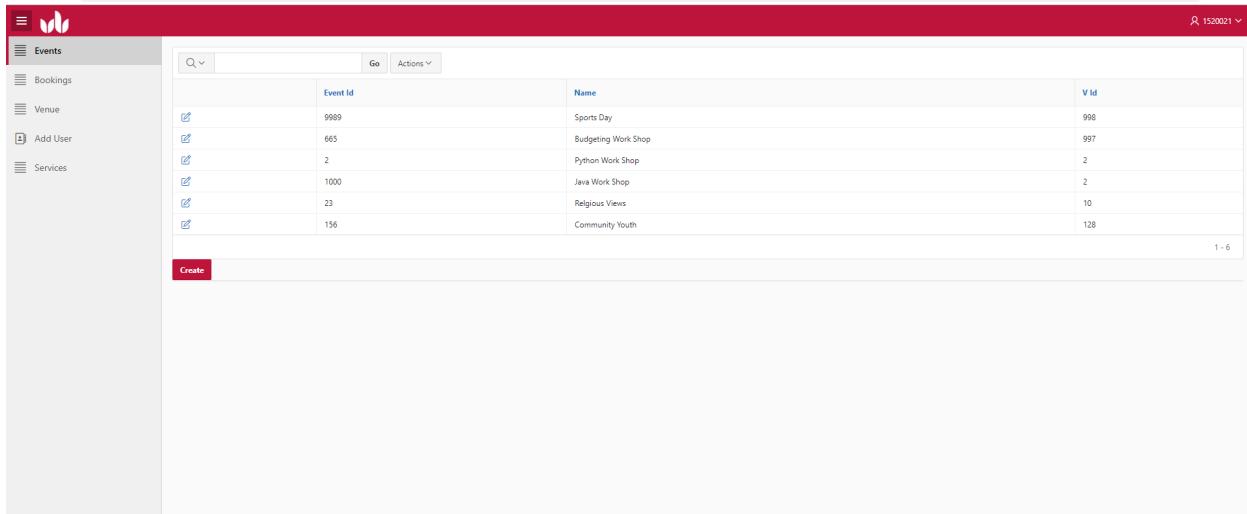
## Admin Login

Just like the student login, the admin login works as the same but when the administrator logs in he is given more permission over the student information system when compared to the student.



## Events

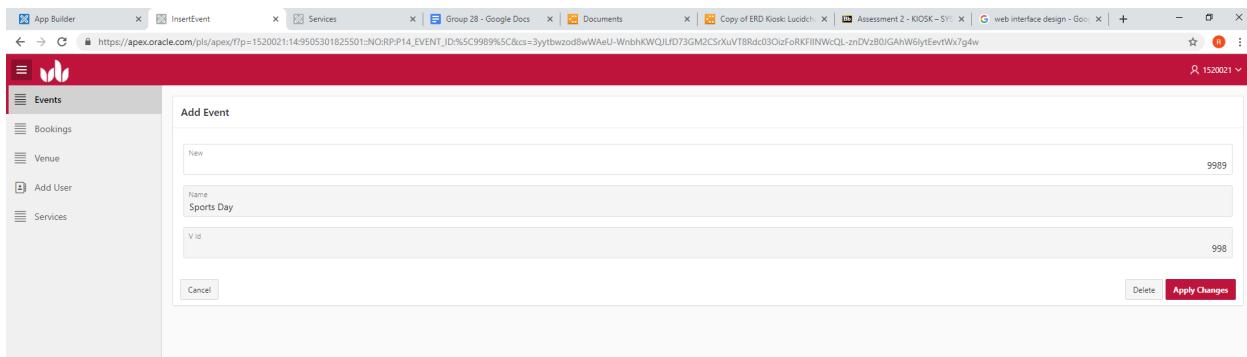
The administrator can use this page to view any events that have been created either by him or any other administrator.



Event Id	Name	V Id
9989	Sports Day	998
665	Budgeting Work Shop	997
2	Python Work Shop	2
1000	Java Work Shop	2
23	Religious Views	10
156	Community Youth	128

## Add Event

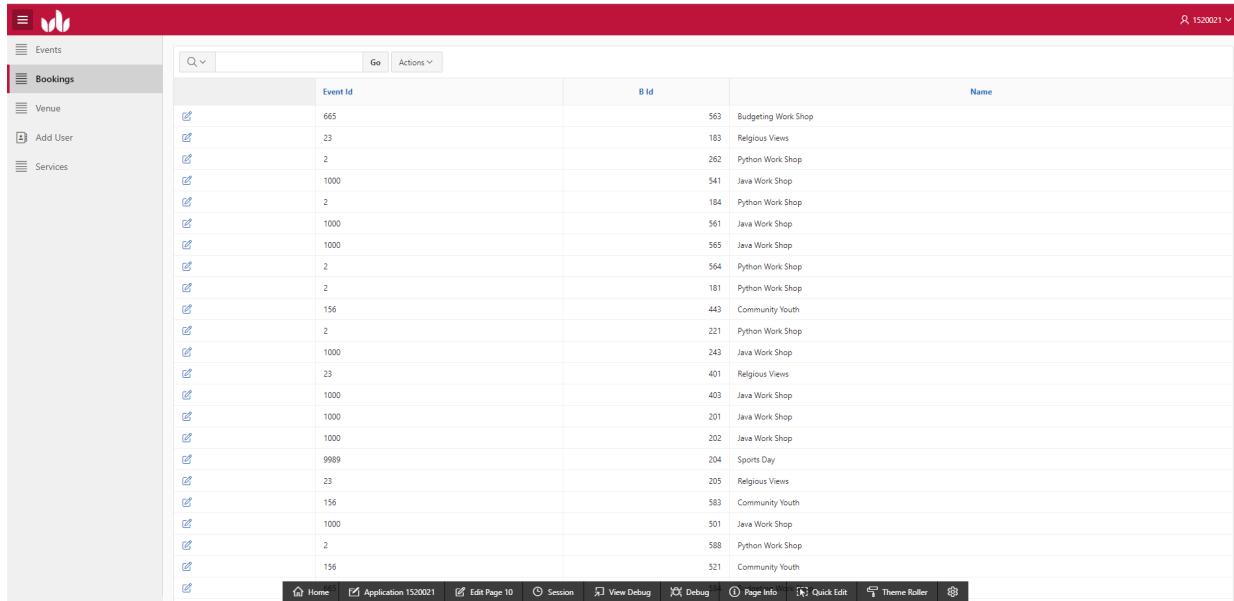
Since the admin has more permission over the student information system than the student user, he can create an event. He can do this by clicking on the create button and the add event page will come up. The admin can add an event by creating a new event ID, adding an event name and the venue ID. After an event is added, it is viewed by both the user and the admin.



New	9989
Name	Sports Day
V id	998

## Bookings

The page which is booking is opened by the administrator. It is showed information about event id, booking id and event name. And the total number of booking is appeared on bottom right corner.



The screenshot shows a web-based application interface for a kiosk system. The left sidebar contains navigation links: Events, Bookings (which is selected and highlighted in red), Venue, Add User, and Services. The main content area displays a table titled 'Bookings' with columns: Event Id, B Id, and Name. The table lists numerous entries, each with a small icon and a delete button. The 'Name' column includes entries like 'Budgeting Work Shop', 'Religious Views', 'Python Work Shop', etc. At the bottom of the table, there are several navigation and configuration buttons: Home, Application 1520021, Edit Page 10, Session, View Debug, Debug, Page Info, Quick Edit, Theme Roller, and a gear icon. In the top right corner, there is a user profile icon and the text '1520021'.

Event Id	B Id	Name
665	563	Budgeting Work Shop
23	183	Religious Views
2	262	Python Work Shop
1000	541	Java Work Shop
2	184	Python Work Shop
1000	561	Java Work Shop
1000	565	Java Work Shop
2	564	Python Work Shop
2	181	Python Work Shop
156	443	Community Youth
2	221	Python Work Shop
1000	243	Java Work Shop
23	401	Religious View
1000	403	Java Work Shop
1000	201	Java Work Shop
1000	202	Java Work Shop
9989	204	Sports Day
23	205	Religious Views
156	583	Community Youth
1000	501	Java Work Shop
2	588	Python Work Shop
156	521	Community Youth

## Edit Bookings

The edit booking page is opened by the administrator when they click the blue icon in booking page. There are a lot of details in here, which are about the student users booking such as booking id, event id and username. And the administrator has the right to change the all details, if any student users want to be fixed. And the administrator can delete the booking too.

Event Id	B Id	Name
665	563	Budgeting Work Shop
23	183	Religious Views
2	262	Python Work Shop
1000	541	Java Work Shop
2		
1000		
2		
156		
2		
1000		
23		
1000		
23		
9989		
23		

## Venue

The page of venue is showed the information of location. For example, there are venue id, name, address postcode and amount in this page. The administrator can use the search bar to search keywords for the accurate information and make sure it right. If no, they can click the blue button to fix it.

V Id	Name	Address	Postcode	Amount
998	University Of Bedfordshire Campus	Vicarage Street	LU1 3JU	12
10	Bedford University	Polhill Avenue	BS1 9EA	5235
128	Tolko Youth Space	7 Gordon Street	LU12QD	1
2	Galaxy	Bridge Street	LU1 3JD	1200
997	Venue 360	20 Gipsy Lane	LU1 3JD	100

## Create Venue

In order for the admin to create a venue, they have to add a venue ID, the name of the venue, the address and the postcode. This information will then be displayed on the venues page for both the user and the admin.

Venue ID	998
Name	University Of Bedfordshire Campus
Address	Vicarage Street
Postcode	LU1 3JU
Amount	12

Cancel      Delete      Apply Changes

## Add User

The admin is also given the permission to see the users accounts as well as the information that they have such as their passwords, usernames and their status.

Q	Go	Actions

Create

## Create User

The administrator is also given permission to create new accounts both student user and admin. he can also deactivate and activate the same accounts and activate them too.

ID 41	USERNAME 1520021
Password 123	
Status ADMIN	
Ket AKTIF	
<input type="button" value="Cancel"/> <input type="button" value="Delete"/> <input type="button" value="Apply Changes"/>	

## Services

The admin uses this page to see the services that he has added.

Service Id	Service Name	Location	Postcode
121	SID	University Square	LU1 3JU
122	Library Book Service	St Ann's Road	LU1 3HZ

1 - 2

## Add services

The admin is given the permission to add services, in order to do this the admin must enter the service ID, the service Name, location and the postcode.

The screenshot shows a web-based application interface for managing services. On the left, a sidebar menu includes options like Events, Bookings, Venue, Add User, and Services, with Services currently selected. The main content area displays a table of services with columns for Service Id, Service Name, Location, and Postcode. Two rows are visible: one for SID at University Square and another for Library Book Service at St Ann's Road. A modal window titled 'Edit Services' is overlaid on the page, containing fields for Service ID (set to 122), Service Name (Library Book Service), Location (St Ann's Road), and Postcode (LU1 3HZ). Buttons for Cancel and Create are present in the modal.

Service Id	Service Name	Location	Postcode
121	SID	University Square	LU1 3JU
122	Library Book Service	St Ann's Road	LU1 3HZ

## Delete Services

when the administrator clicks on the delete services page he will be able to edit the events by deleting them this is done by clicking the blue edit button on the right. They can also update the services like name, location and postcode in this.

This screenshot shows the same application interface after changes have been applied. The 'Edit Services' modal now displays the updated information: Service ID 122, Service Name Library Book Service, Location St Ann's Road, and Postcode LU1 3HZ. The 'Apply Changes' button has been clicked, and the modal is closing. The main table in the background remains the same, showing the two service entries.

Service Id	Service Name	Location	Postcode
121	SID	University Square	LU1 3JU
122	Library Book Service	St Ann's Road	LU1 3HZ

## **Customisation:**

The student information system will be laid out in a way that when there is a student user with an account, he will have to first login before he sees his information. This is because all the information that the user has will be based on his login details. The login page will have a logo, confirmation check box to make sure that it is the student logging in and a sign in button. This page will have a red colour scheme.

After logging in, the student user will be able to access the pages. The first page will be the calendar and it will display the user's bookings, the bookings displayed will be displayed according to the student user's calendar.

Another means of customization was the option of the student users to click on the event when they see it, everytime they see it they will see the venue of the event.

In the booked events page, we customize the pages by giving the student users an option to view and delete their events to add more to our customisation, we added a logo to both the student user and administrator's account.

## **Page by page information:**

### **Page 1**

#### Log in

The first page in our student information system is the login. The login has two types. These include student and admin. Admin has all the features a student has however they are able to manage user accounts. The admin is also able to make changes to events such as the venue of the event

### **Page 2**

#### Calendar

Whenever a user logs in the student information system, this is the first page that they will see. This page displays the events that the student user has booked as well as the current date, time and year.

### **Page 3**

#### Events

The events page is where the information about the name of the event, the name of the venue, the address and postcode are displayed it is where the students get to find out more information about the event that they would like to book.

### **Page 4**

#### Venue

This page shows the information from the venue like the Venue ID, Venue Location, Address and the postcodet. As the administrator, you have the option you give all the venue details for your students. When the venue is created, the information entered will be displayed on the student information system.

### **Page 5**

#### Booked Events

After the user books an event, their events booked will be displayed on this page. The page shows the booking ID , event ID and the name of the event that was booked. The student user also has the option to delete any events on this page if they want to, this is incase they book the wrong event.

## **Additional Administrator Pages**

### **Page 6**

Event information

As an administrator, you have the permission to add an event to the student information system. Adding an event to the student information system can only be done by the administrator, this means that the student will not be allowed to use or access this page.

### **Page 7**

Add User

The add user page holds sensitive data about the students. It holds data such as their passwords, username etc. Because of this, it can only be accessed by the administrator. The administrator can also create/add a new user/student to the student information system through this page.

## **Meetings & feedback:**

To enable us to identify & gather user requirements from a real potential client perspective and a student perspective by carrying out formal meetings

<b>Meeting</b>	<b>Client/User</b>	<b>Feedback</b>
1	Ashraf (CLIENT)	Requirement to allow students to view their bookings
2	Student (USER)	Requirement for a list of services to be added and a better layout/colour scheme.

Normalisation:

UNF	1NF	2NF	3NF
<u>Student table</u> Student_Name Student_Surname Student_Email Student_Address Student_login Student_Username Student_Password	<u>Student Table</u> <b>Student_ID</b> Student_Name Student_Surname Student_Email Student_Address Student_Username Student_Password	<u>Student table</u> <b>Student_ID</b> Student_Name Student_Surname Student_Email Student_Address	<u>Student Table</u> <b>Student_ID</b> Student_FirstName Student_Surname Student_Email Student_Address
<u>Admin table</u> Admin_Name Admin_email	<u>Admin table</u> <b>Admin_ID</b> Admin_Name Admin_email	<u>Admin table</u> <b>Admin_ID</b> Admin_Name Admin_Email	<u>Admin Table</u> <b>Admin_ID</b> Admin_FirstName Admin_Surname Admin_email
<u>Event table</u> Booking_status Event_Title Event_Orgasiner Event_StartDate Event_EndDate Event_StartTime Event_EndTime Num_Tickets Days_hired Venue table: Venue_Name Venue_Address Venue_Postcode Amount_for_hire	<u>Booking table</u> <b>Booking_ID</b> Booking_Status <b>Event_ID</b> Event_Title Event_Orgasiner Event_StartDate Event_EndDate Event_StartTime Event_EndTime Num_Tickets Days_hired <b>Venue_ID</b> Venue_Name Venue_Address Venue_Postcode	<u>Booking table</u> <b>Booking_ID</b> Booking_Status <u>Event table</u> <b>Event_ID</b> Event_Title Event_Orgasiner Event_StartDate Event_EndDate Event_StartTime Event_EndTime Num_Tickets Days_hired <u>Junction table</u> <b>Event_ID</b> <b>Venue_ID</b>	<u>Booking Table</u> <b>Booking_ID</b> Student_ID* Booking_Status <u>Events Table</u> <b>Event_ID</b> Event_Title Event_Orgasiner Event_StartDate Event_EndDate Event_StartTime Event_EndTime Event_EndTime Event_StartTime Event_EndTime Event_EndTime Event_StartTime Event_EndTime Num_Tickets Days_hired Venue_ID* <u>Venue Table</u> <b>Venue_ID</b> Venue_Name Venue_Address Venue_Postcode Amount_for_hire <u>Service Table</u> <b>Service_ID</b> Service_Name Service_Location
	<u>Service table</u> <b>Service_ID</b> Service_Name Service_Location Service_Postcode	<u>Venue table</u> <b>Venue_ID</b> Venue_Name Venue_Address Venue_Postcode Amount_for_hire <u>Service table</u> <b>Service_ID</b>	

		Service_Name Service_Location Service_Postcode  <u>Student_login_table</u> <b>Student_ID</b> Student_Username Student_Password	Service_Postcode  <u>Student_login_Table</u> <b>Student_ID</b> Student_Username Student_Password
--	--	---	---

## Future plans

During our planning a lot of changes were made upon our diagrams and many things we did include did not make it to the final project due to us running out of time. Whilst this system is put in place we would look to add the following into the kiosk system. A section for clubs which is similar to how to can create and join events. Include communities such as the student union Have an estate team who manages events. Different faculties. Bigger event format which can handle events such as careers or charity events which is where the estate team will come into play. With bigger events we may have provided information on catering companies.

Allocated tasks

	Nadim Uddin	Junjie Shao	Deon Shah	Ronald Bukenya
<b>UML</b>				
<b>ERD</b>				
<b>CATWOE</b>				
<b>REQ CAT</b>				
<b>Rich picture</b>				
<b>Normalisation</b>				
<b>SQL</b>				
<b>App builder</b>				
<b>Page by page</b>				

<b>information</b>				
<b>Week by week steps</b>				

## **Conclusion**

To conclude we planned how we were going to look to create our student information kiosk. This was done by identifying what functional and non requirements requirements the system may have. Following up diagrams such as UML, ERD with normalisation and activity diagrams were made. Further research and designs were made through storyboards and SSM. Using all the data we gathered we were able to create a kiosk system which fits the students needs when it comes to be accomodating the students with all the university has to offer and give the students all the tools needed to achieve

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