

HCI FACILITIES BOOKING WRITTEN REPORT

Team Members

(Name, Register number and Class):

Team Leader:

Huang Sikai (13) 2O3

Group Members:

Heah Rong Sheng (12) 2O3

Tristan Ng Chong Xu (29) 2O3

Target Audience :

Teachers

Description of ideas & Issues :

Although the current booking websites for teachers is easily accessible, the design of the booking website is dull and plain and lacking colour. Moreover, it is somewhat complicated.

Rationale of Project:

Our project is meant to make the booking experience much more pleasant and implement cool features to make the booking procedure easier and attract more teachers to use this website, making it much simpler at the same time.

Focus and Significance of Project :

Teachers would enjoy more features and have an easier time booking the facilities around Hwa Chong which takes some stress off them when they consider the ideal learning spots for

students as with the click of a button, the slots that have been booked previously can easily be deleted.

Scope of Project:

A user-friendly and attractive design to make booking facilities much simpler and interesting. Teachers first have to login. When booking, time slots that have already been booked will not be allowed to be booked again and reasons may be given. If in the unlikely case that the teacher is unable to make it for his/her booking, the teacher can cancel the booking. If there are any glitches or issues, they can report it to us in the website.

Usefulness of project:

It allows teachers to book facilities in school easily with a user friendly experience.

Similar Website

ISP also allows teachers to book facilities in school.

Literature Review

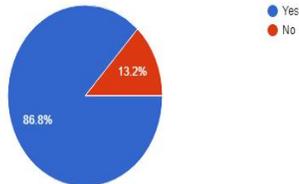
Currently, the school allows teachers to book facilities through the Intelligent School Portal (ISP). This has already been proven to be rather useful, as teachers use it to book facilities. However, our design offers a more user friendly interface. In a August 2012 study by Google, it was proven that the simpler a design of a website, the more people preferred it. This is due to cognitive fluency, which means that the brain prefers to think about things that are easier. Hence, a simpler design, like in our project, would be more suitable and appealing to teachers. Moreover, according to a KISSMetrics report, 93% of consumers placed appearance and colour ahead of all other factors. This also supports our project's purpose, by making a appealing design, teachers would be more interested to take lessons out of the classrooms and into other facilities in school.

Pilot Test :

On 11 August, we conducted our pilot test on a few teachers, asking them to try out our website. Overall, the feedback that we had gotten was favourable, with all the teachers preferring to book from our website compared to booking through ISP. However, due to some technical errors, our checkbox was not fitted correctly, and the teachers commented on this aspect, saying that our website would be better if it was aligned better. We also asked a few students to try out our website, and all of them felt that the website was nicely designed, but also suggested to allow them to book facilities. This compelled us to add this function for **future developments**. We also asked these teachers and students to fill up a google form, and 86.8% of them felt that the website was user-friendly and 92.1% felt that the functions were useful. All responses also showed that everyone preferred using our website compared to ISP, and we achieved a whopping rating of 7 to 9 points out of 10, with the majority voting 8 points for it.

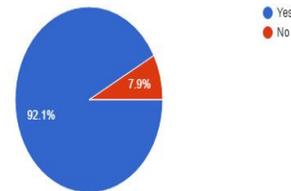
Was the website user-friendly?

38 responses



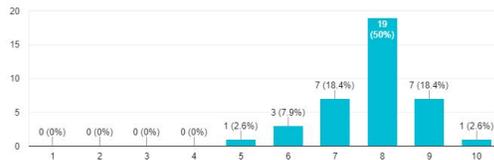
Were the functions useful? (ie. cancel button, report function, etc.)

38 responses



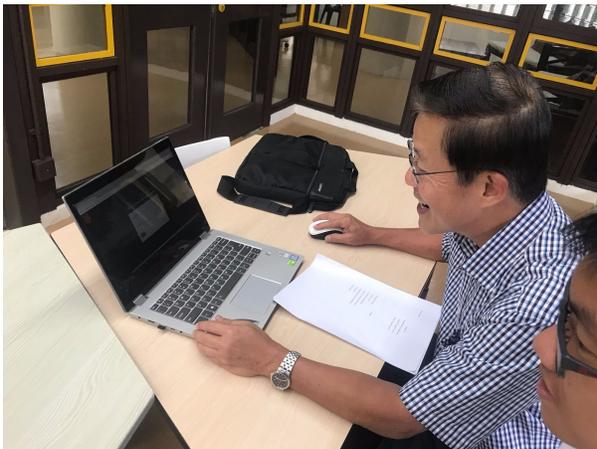
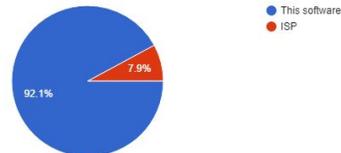
From a scale of 1 to 10, what is your rating for this website?

38 responses



Will you rather book with this software or the school's ISP facility booking software given that the rooms and func...hat they have the same accessibility)

38 responses



Splitting of Work :

All work is done equally, be it for the coding, written report or slides. Work is assigned, and completed work is sent to the group leader, Sikai, to save all the work into his computer, allowing all the codes to come together and form our website.

Timeline :

3rd April
Proposal Evaluation

June Holidays
Complete the
time slots page

10 July
Allow users to
cancel bookings



10th April
Complete the
login page

1 July
Complete report
button

14 July
Complete the main
logistics, allowing a
smooth experience

5 August
Improve website
based on judges
feedback

13 August
Complete written
report



25th July
Work on other
special features
such as reason for
booking, ensure the
security of the
website and
beautification

11 August
Pilot test

17 August
Final Evaluation

4) Flowchart of features of the website:

Registration System: takes in the user's username, email and their password and stores it in the database used for logging in. It also checks whether the username and email is already stored in the database and whether the user's email is valid and also prevents SQL injections. The registration system only accepts password that have 8 characters, a number, an uppercase and lowercase letter for security.

Register for HCI Facilities Booking	Register for HCI Facilities Booking
<p data-bbox="233 716 337 741">Username</p> <input data-bbox="233 747 716 800" type="text"/> <p data-bbox="233 814 297 840">Email</p> <input data-bbox="233 846 716 898" type="text"/> <p data-bbox="233 913 331 938">Password</p> <input data-bbox="233 945 716 997" type="text"/> <p data-bbox="233 1012 418 1037">Confirm password</p> <input data-bbox="233 1043 716 1096" type="text"/> <p data-bbox="233 1119 321 1144"><input data-bbox="233 1108 326 1161" type="button" value="Register"/></p> <p data-bbox="233 1171 496 1197">Already a member? Sign in</p>	<p data-bbox="777 684 875 709">Username</p> <input data-bbox="777 716 1312 768" type="text" value="Tristanng"/> <p data-bbox="777 783 841 808">Email</p> <input data-bbox="777 814 1312 867" type="text" value="tristanng2004@gmail.com"/> <p data-bbox="777 882 875 907">Password</p> <input data-bbox="777 913 1312 966" type="password" value="••••"/> <p data-bbox="777 980 946 1005">Confirm password</p> <input data-bbox="777 1012 1312 1064" type="password" value="••••"/> <p data-bbox="777 1087 865 1113"><input data-bbox="777 1056 870 1108" type="button" value="Register"/></p> <p data-bbox="777 1140 1024 1165">Already a member? Sign in</p>

Register for HCI Facilities Booking

Username already exists
Email already exists

Username
Tristanng

Email
tristanng2004@gmail.com

Password

Confirm password

Register

Already a member? [Sign in](#)



Login Page: Checks whether the username and password provided matches the one in the database. If it does not match, an error message would be displayed.

<p>HCI Facilities Booking Login</p> <p>Username</p> <input type="text"/>	<p>HCI Facilities Booking Login</p> <p>Wrong username/password combination</p> <p>Username</p> <input type="text"/>
<p>Password</p> <input type="password"/>	<p>Password</p> <input type="password"/>
<p>Login</p>	<p>Login</p>
<p>Not yet a member? Sign up</p>	<p>Not yet a member? Sign up</p>



Report/Suggest Button and Page : This feature is used when bugs occur or when teachers feel that they can provide feedback to improve the website further.

Report

Problem Title:

Post details

[Report/Suggest](#)



Logout button : For the teachers to log out of the system anytime they feel like leaving the website. Once logout, teachers cannot log back in and would have to sign in again. This also prevents people from hacking into teachers' accounts.

[Logout](#)



Selection of Facilities Page: For the teachers to choose the facility they would like to book.

Welcome **Huang Sikai**

Select the facility you would like to book:

Lecture Theaters
Computer Labs
Special Rooms



Selection of Date for the Facility chosen : For the teachers to choose the specific time they would like to book.



Display available time slots & Inputs reason for booking : Allows users to check whether the slot is booked by other users (Can also display the user who booked the slot and his/her purpose upon hover) and makes sure the booking has a valid reason and not used for spamming purposes.



Delete Booking button: Users can easily delete the booked time slot for others to use should they change their minds.

5) Implications & Recommendations

Our website cannot/does not have:

1. Forget Password System; users may spam the email.
2. Prevent spamming of reports/suggestions but we can still check if the reasons provided are useful and valid to our website.



Further improvements to the website:

1. Include help and search features.
2. Ban users from the website after typing the wrong username/password combination for a certain number of times.
3. Allow students to book
4. Prevent spamming of bookings
5. Implement the software into the school's booking system

6) Conclusion/Reflection

Through the course of the project, teamwork was the most important aspect of this project as we did badly for Mid Term Evaluation as we did not coordinate our schedules properly which resulted in very little time to finish the work we were supposed to do. Consequently, we seldom met with our mentor to listen to his advice and make improvements to our website. It was heartbreaking to see our poor result but it was a good wake up call for us and we knew changes had to be made to better facilitate the improvement of our website. We sped up the process of the project and we worked harder into the night, making sure our features of our website worked 100%. We also learnt extract information accurately from the web for help. This project also helped all of us improve our knowledge of HTML, CSS and PHP as the more

we searched, the better we became and we went from almost zero knowledge to being able to code a booking website successfully

Tristan: Although we did not do well in Mid Term Evaluation, we did not give up and persevered on by increasing the time spent on the project and meeting up more frequently and we managed to see productive results as a result of our hard work and it was worth it. Teamwork was also crucial and we had to set aside some unimportant commitments to improve the website further. I am also proud of the work we completed over the course of the project.

Rong Sheng: At the start, we were not that experienced in programming. However, over the year, I learnt more about programming using CSS, HTML, et cetera. I also learnt how to be independent, as we had to rely on ourselves to create the whole code. The project has truly been enriching. Looking back, the multiple days we have spent on the code has been worth it, and we know that our efforts have not gone down the drain. We have also built stronger relationships with each other, and although the year of coding was tiring and difficult, the outcome was beautiful, and I am proud of what we have created.

Sikai: As the leader of this group, I learnt to see the strengths of my team members, and utilise that to our advantage, allowing us to complete our software more efficiently. Originally, due to our different time commitments, we could not really meet up for IS meetings. However, our Mid-term results made us pull up our socks, and we met several times a week, sometimes even skipping lunch in order to do so. Moreover, because of this project, my interest for Infocomm has grown, and I look forward to continue programming, be it for HTML, CSS, Python or other programming language. I also learnt more in terms of leadership and time management.

Resources

<https://www.w3schools.com/html/>

<https://stackoverflow.com/>

<http://codewithawa.com/>

<https://htmlcolorcodes.com/>

