



Designing and Implementing Final Year Project *- with Success*

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Editors

Kasthuri Subaramaniam & Alan Keoy Kay Hooi

Contributing writers:

ICSDI staff and students

Graphic Designer:

Nandini Sundran & Melissa Chua Tze Een
(Group Corporate Affairs, UCSI University)

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Foreword by **DIRECTOR**

Associate Professor Dr Keoy Kay Hooi (Alan)
Director
Institute of Computer Science and Digital Innovation
(ICSDI)



Welcome to the Institute of Computer Science and Digital Innovation (ICSDI), UCSI University.

The Final Year Project (FYP) is compulsory for the diploma and undergraduate programmes at ICSDI. This Final Year Project Handbook is designed to provide students with a comprehensive guide for planning, implementing, and documenting project work in accordance with the requirements of the relevant academic programme accreditation bodies.

The goal of FYP is to provide students with the opportunity and exposure to apply and integrate the theoretical knowledge and principles taught in the programme, as well as to solve problems creatively in their final year project.

To maintain the high quality of education at UCSI, we have continuously provided our students with advanced skills, cutting-edge software systems, and industry-relevant teachings by ICT professionals. FYP allows students to demonstrate independence and originality while also planning and organising a project over a set period of time.

I wish to congratulate Assistant Professor Ts. Dr. Kasthuri Subramaniam, FYP coordinator, and all ICSDI supervisors for their effort, dedication, and hard work in supervising the students and producing high quality projects. I hope that this FYP handbook will be set as an example and standard for many more FYP handbooks to be produced and will contribute towards producing quality research work by the students and excellent supervisory skills by the academic staff of the Institute.

Development of Android-based Dine-in and Take Away Digital Restaurant Menu using QR Code

Abilashaa Nair, Shayla Islam, Shabana Anjum Shaik

Introduction

Technology is constantly advancing nowadays, allowing for faster growth and transformation and thereby accelerating the growth rate. Nevertheless, because of the breakout of COVID-19, so much has evolved this year than simply advancements and developing technologies. Technology seems to consistently progress in this era of society, and it has had a massive effect on each element of life, whether it be corporate, social, recreational, or academic. The restaurant menu application presents a virtual or mobile menu system that allows individuals to order as an upgraded service while also eliminating traditional ordering methods that are currently established and implemented in various enterprises. Because the proposed system can employ a mobile application, it will remove the usage of menu catalogues, and paper order which is presently in use at most restaurants, so it is projected to reduce customer time waste and guarantee that vital activities are prioritized and not neglected when waiting hours to reach their turn to order. The proposed mobile application is the most effective when

ordering food in a restaurant and customers do not have to wait for the waiter to take the order, in this modern period, where almost everyone brings their cell phone wherever they go.

Objectives

1. To study the existing system to find out the problems of the current system.
2. To design and develop a user-friendly android-based application using QR code technology.
3. To implement a system that includes the preparation time of food.
4. To ensure the customers can cancel their order.
5. To create a system where customers can also update or add to their order.

Methods

To effectively and efficiently respond to why and how inquiries from the target audiences, our research study will employ a hybrid method. The study will use a mixed-mode approach in which audiences will receive both survey and interview questions. During the period of data collection, surveys and interviews would be done. Online surveys are quick, simple, and cost-effective to conduct. The

researcher can begin the survey, and he has the flexibility to halt and continue it whenever he likes. The following techniques, which are shown in the table below, will be used to gather the data.

Results

It has a takeaway feature where customers who not going to dine-in, can order to take away their food or beverages. Customers are expected to scan the QR code in the particular restaurant to view the food list with the price. Customers will have to make orders using the application which will be sent to the kitchen and cashier. Once staffs at the kitchen receive the order, they will add in the estimated time for the food to reach the table. Customers can also view the estimated time they will be waiting until the food arrives while using the application.

Conclusion

In the conclusion, this proposed application is for users only. Restaurants with QR codes will be much easier compared to the traditional system. Users could find the application user-friendly and not waste their time asking the waiter for the food arrival. This application is to help users to choose their food and beverages without calling the waiters. Sometimes, the waiter will be busy taking

orders at other tables and they could not be able to come as soon as possible which leads to time consumption. Users will be frustrated as well if they wait longer than they should at a restaurant.

Development of Web-Based Stocktaking System In Businesses

Cheah Dei Xuan, Heshalini Rajagopal @ Ramasamy, Shayla Islam

Introduction

Technology has changed the way how we complete a certain task. Interacting with technology improves the effectiveness and efficiency of the workload, as the world is moving toward industry 4.0 technology many sectors are relied. Because of the increase of innovation coming from different platforms and providers making all this possible. Businesses either big business or startup business needs technology to carry on the task. While in this research it study and develop a web-based stock checking system that will bring a innovative way for shopkeepers, or the owners use to check their stock in the store. The importance of checking the stock was to meet the supply of the product and the demand of the customer. From here the term supply pertains to how much the producers of a product or service are willing to produce and can provide to the market with the limited number of resources available. Whereas term demand is how much of that product or service the buyers desire to have from the market. The other

importance of checking the stock was to prevent losses or stealing of stock that might lead to the loss of business assets. Checking the stock able to prevent overstocking as well.

Objectives

1. To develop a cloud-database by using google firebase for the stocks in the shop.
2. To develop a web-based application to perform stock checking and monitoring
3. To implement an automated notification on softcopy of the receipt to the customer.

Methods

As the impact of the technology hits towards the business's aspect into digitalized, its direct things easily and manageable which it able to reduce the workload. The purpose of this report was to do research and develop a web-based application on business stock checking where workers able to track their quantity of their stock from running out of stock as well as to track the business statistic. This application was followed SDLC model to develop while Vue 2 framework, Java

script language, html 5, and tailwind CSS to code the web-based application. A questioner was done with 48 response and 5 user acceptance test (UAT) on the application with the positive result of this application were proof that it is a useful and reliable application that able to beneficial towards the community.

Results

Based on the survey questionnaire and the user acceptance test (UAT) it concludes that most of the respondent found that this application brings benefits towards to community. According to the responses, most of the respondent having the issues of lacking stock when they wanted to purchase the product. Respondents agree that by the feature getting the statistic of the product as well as the notify shopkeeper regarding the stock able to reduce the issues of lacking stock. Respondents agree with the implementation of barcode scanner into the application are much more convenient than the price checker from the customer point of view as well as the softcopy receipt. This project will bring a great benefit toward the shopkeeper as well as the customer.

Conclusion

It concluded the objectives stated has been fulfilled where a database was develop for shopkeeper to store all the data related to the shop on cloud-based that able to prevent from disaster or human errors. The second objectives is to develop a web-based system to perform stock checking and monitoring which allow shopkeeper to check on statistic of the product and also the notify shopkeeper which stock are running low. The last objective is to implement a softcopy receipt as a default for customer instant of hardcopy where customer tossed the receipt, and hardcopy receipt are not recyclable due to some chemical substance. The contribution of the web-based application where shopkeeper able to keep track on their business status, preventing product from lacking stock, as well as to reduce the usage of paper. Finally to provide an innovative way to interact and bring benefits towards to community.

Intelligent Cloud Healthcare System – WI Care

Gong Huacheng, Ghassan Saleh Hussein Al-Dharhani, Kurunathan Ratnavelu

Introduction

Intelligent cloud healthcare system refers to a system that provides services to people on the network in a specific environment, including residences, academic institutions, workplaces, public places, societies, hospitals, and health centers, to promote their health. It is also specifically designed to meet the health needs of the population, and as such, it is much broader than one might first imagine, including community care and programs, public health and conservation, private and publicly funded health care, and more.

Objective

1. To design an intelligent health consultation system on the mobile website to ensure that the workflow of general practitioners and doctors.

2. To develop health consultation system in medical field more efficient and faster, and that people in hospitals and families can enjoy health care services
3. To evaluate proposed systems and collect data or requirements from users by surveying user feedback after development is complete
4. To improve the patient's user experience in non-medical aspects, for reducing waiting time, more communication management and other auxiliary services

Methodology

The application development itself is the consequence of the new healthcare system WI Care. In this project, System Development Life Cycle (SDLC) modeling is essential since it disrupts the perpetual cycle of software development. WI Care has a combination of four portals that give each user a unique way to access the system. Additionally, the system will provide admins and doctors with a variety of access levels for account creation, dashboard management, appointment list editing, and time scheduling.

Result

According to customer feedback, the majority of smartphone users who utilize this technology have problems getting their displays to adjust to vertical mode. Despite the fact that WI Care is primarily preferred when accessed through PC devices, the results also indicate that certain users prefer a smoother transition since the site places a greater emphasis on information than graphic style.

Conclusion

Most of the existing health-care system prioritize IoT modules for screening purpose or sensor to extract the real-time data. By thinking back to square one, services are definitely one of the important elements in health-care, and not everybody will have the financial ability to utilize those new technology due to absurd charges even just one time of screening. WI Care might not have the most advanced technology on hand, as trade off we had successfully developed a website that attracts most of the medical specialist. The website had released appointment portals is to ensure to reduce the workload especially for those GPs that prefer work individually. Since GPs were involved in the appointment, appointers are also the end users who interact with GPs through the appointment system. Despite the fact that appointers only need to submit a form, it is crucial

to allow appointers to join WI Care as members of the community rather than just being one-time visitors. Therefore, I have produced a variety of information on the website to enable users to follow the team's progress toward realizing our goal and objective, which also involves providing medical services.

Memorysaver: Web-Application Trip Organizing System

Abdillahi Mohamoud Ahmed, Neesha Jothi, Abdul Samad Bin Shibghatullah

Introduction

When tourists visit a country or a city for one or multiple days, they are unlikely to make their trip organized by preparing necessary materials to their visit, limiting their expenses, visiting every tourist attraction places and any other important step in their trip if they didn't make their whole trip based on schedules and plans. So that they must deal with the dilemma of which points of interest (POI) would be worth to visit, what price to spend and where to be enjoyable if to stay nights. These choices are normally based on information gathered from different sources like Internet, magazines, or sometimes experienced travellers which, etc. After deciding of which sights to visit, travellers need to consider on which direction to take with respect to the visiting time required for each place, the POI's visiting days/hours and the timetable for sites, entrance fees and other constraints. All these kinds of requirements and questions will be considered as a Trip organizing Problems and a lot of people are in need to solve it. This project

work aims to answer the several variants of trip organizing problems and provide efficient technique to solve it. In order to do that, there will be web- application for users, that will be designed to be easy to use.

Objectives

1. To study and review of existing tourism-related recommendation systems
2. To design a trip organizing system that can make the visit completely organized and planned.
3. To develop features of creating and collecting highlight that can collect the activities of a complete POI visit, including photos, videos and even notes if it's needed.
4. To give the visitors different resources like websites and applications that they can find more information about tourist attraction places, hotels and restaurants, transportation, weather condition, Mapping and location apps and currency exchange if its needed.
5. To test the functionality of this trip organizing system mobile application.

Methods

The chosen Software Development Life Cycle model for this project is the modified waterfall technique. There are several stages for this methodology

which are analysis, design, coding, testing, deployment and maintenance. The waterfall model which is also known as the sequential life cycle model, illustrates the software development process in a flow that is sequentially linear. This is because when the previous phase in the development cycle completes, only then the next phase can start. However instead of using the standard methodology, the modified waterfall method was chosen because it is easier to change requirements during project development this is because unlike standard methods it can be reversed, and modifications can be made where needed by returning to previous phases Application Analysis. There is a survey section being asked to different people from students to retire people and total 50 responses were achieved successfully.

Results

According to the findings of the study, the average male gender respondents whose age group are above 20 years are more likely to be employed than the average female gender respondents. This is significant since the study was conducted throughout the course of a pandemic that was still ongoing at the time of its completion. Also, the study show us that the number of genders who travel once in every 6 month, 1 year or every 2 years are male gender more than female gender. As a result of the employment, most of the travelers were males because they have more employment rate compared to female gender. From the

perspective of visitors, the results show that they are more likely to have prepared trips compared to unprepared trips. The results show that, the visitors like to have private portfolio to document their trips, In addition, the result of the survey, they almost agreed that they prefer to document their trip while they are collecting memories about their visits. As a result, the findings of the study not only figuring out how people want to create memories about their trip, but they also indicate that there are number of factors that any trip can be failed during the first stage of preparation or even in the middle of the visit, most of respondents agreed that biggest problem of any visit is being unprepared and having not enough information about your trip. As a result of these findings, the project's significance in supporting the development of a memory saver application is highlighted.

Conclusion

Lastly, the internet and smart devices such as personal computers and smart phones has surpassed ancient technology, like travel guides and brochures as the primary source of information for planning and organizing trips, prompting users to turn to more online resources, such as travelers' comments and suggestions on online forums, review websites, and blogs, rather than relying on printed materials . Most of tourism-related recommendation systems involve a variety of features, such as attraction selection, POIs, hotel and restaurant suggestions,

information recommendations, and entire tour planning recommendations. We concentrated a system 8 that will focus on organizing the trip and as well as collecting memorable experiences during the period of the tour. Having tourism-related recommendation system with all these above variety features is a good privilege to plan your trip, but imagine when the traveler list and organize their whole trip in continuous steps, note what they need to do before the trip while they labeling it different priorities, calculating their hole spends during the trip, planning where they will stay, deciding and listing before they start their trip all the POIs that they are planning to visit during the trip, while they are getting recommended sites and apps that they can get every POIs and its full information. Our system will not only focus organizing the trips in this way before it starts, but it will make memorable experiences by giving every user the ability to take photos, create videos and sometimes make notes if its needed.

Re-study Learning Management System

*Ahmed Abdilahi Muhumed, Javid Iqbal Thirupattur, Heshalini Rajagopal @
Ramasamy*

Introduction

LMSs have progressed from simple delivery and management systems to critical components of modern organizational learning and performance improvement capabilities. In a changing and globally competitive world, a learning management system (LMS) can improve access and tracking of learning activities while also supporting organizational growth and development. In the modern period, higher education institutions face significant social, economic, and technical changes that will inadvertently alter students' educational experiences. Canvas, Moodle, and Blackboard are just a few of the LMS or e-learning platforms most universities use. The usage of LMS is becoming even bigger for Institutions, unlike in the past which only used assistance tools. But recently LMSs have evolved to more advanced concepts like having different larger modules providing tools like Content Management System that can store all the course materials, exams, and grading system.

Objectives

1. Conduct interview to gain qualitative insight into students and teacher's perspectives and recommendations in relation to the problems of theCN.
2. To develop an application that gives students remarkable communicative power in order to facilitate collaborative e-learning.
3. To provide event management system for students to improve participation rate and streamline the event workflow

Methods

The system design phase was conducted by creating a prototype of the system. The prototype was created using Adobe XD and was used to demonstrate the user interface and the features of the system. The requirement gathering and elicitation phase was conducted by interviewing the lecturers and students from UCSI. The purpose of the interviews was to understand the current situation and to identify the needs of the users. The interviews were conducted in a semi-structured manner, with the same set of questions being asked to each participant. Every software development approach, without a doubt, has its own strengths when it comes to handling a certain process. However, no approach is ideal, since each has its own set of compromises. As a result, parallel development is the method

of choice for this project. Because the project includes numerous subsystems, event management system, a communication platform, and other systems that may be created in parallel.

Conclusion

This report has detailed every step of the project's development for the Restudy LMS. The project's goals were effectively met with the system's delivery. It provides students, teachers and admins with an easy to use platform to interact and collaborate. The Restudy LMS system is a great example of a successful system design project. The system is designed to meet the needs of its users. The system is easy to use and provides a secure platform for users to interact and collaborate. The system is tested and evaluated to ensure that it meets the user's needs. The system is ready for deployment and will provide a great platform for teachers and students to interact and collaborate. Besides, the system has the potential in the universality of its application. It can be used in different educational institutions, such as universities, colleges, and schools. It can also be used in other organizations, such as companies, government agencies, and non-profit organizations. The system can be used to facilitate collaboration and communication between different users. Students that use the platform, will be able to access their course materials, assignments, and exams. Teachers will be

able to manage their classes, assign tasks, and check student work. Admins will be able to manage the system and ensure that it is running smoothly. The Retudy LMS system is a great example of a successful system design project. It provides a secure and easy to use platform for users to interact and collaborate.

A Development of a Prototype based Mobile Pet Care Application

Gan Ai Leen, Shabana Anjum Shaik, Chloe Thong Chee Ling

Introduction

The 21st century is truly a marvelous era with the introduction of new technologies, especially wireless communication, these technologies have shaped the very way we live and has brought forth many conveniences and benefits to many different sectors of society, economy, countries and many more. Technology has advanced till this date and will surely improve in the future. There are multiple pet care developments that offer a variety of pet care apps especially on mobile phones. The apps include various features for the users' daily needs, such as walking and playing meter, health check-ups, and video chats. These apps are made to help manage a pet owners time and worries as it can help them to monitor their pet's health and fitness. The goal of this study is to establish a prototype based mobile pet care application using Android application.

Objectives

1. To study the existing pet care mobile applications.
2. To identify both strength and weakness of the current pet care system.
3. To design and develop a prototype pet care mobile application which include extensive options to pet owners.
4. To evaluate the performance of the proposed prototype mobile application by conducting test to get the users perception.

Methods

The major research problem that developers aim to solve is by collecting data from users to identify potential users who are more likely to use which features in the system, and to seek comments and suggestions, which can be crucial for the development of the system. Questionnaire was chosen because it allows faster collection of data from larger data sets. Hence, this can be used to help developers study the user's needs and wants. The survey questionnaire form will be sent to random UCSI students from various background in order to collect an objective data for the prototype application development.

Result

Based on the responses from the prototype testing survey, it shows that most of the participants have a good experience when using the prototype system. While the majority of the respondents have shown positivity on the prototype app, we can conclude that because it is a prototype app, improvements can still be made to it to ensure it can become a full-fledged, working app before it can be released for public use.

Conclusion

The development of modern technology is rapidly changing with each passing day, Nowadays, mobile phones are no longer restricted to just making phone calls or sending messages. In the 5G era that we are now living in, smart phones have now been integrated into everyone's life, no matter the age group. Mobile phones have brought forth many conveniences throughout our life. It has allowed us to communicate at an efficient rate, which includes online chat and video call, streaming videos, or the commonly used mobile applications that has made the life of people easier. It is believed that in the near future, website usage will be phased out slowly, as mobile technology is growing stronger as the years go by.

Getting Smarter with Fatrix: A Facial Recognition Access Control System

Asia Mohamud Ayub, Reanu Kolandaisamy, Keoy Kay Hooi

Introduction

Since the emergence of digital technology, the world no longer uses bodyguards at every door to safeguard properties and buildings. Automatic security systems are rather used to secure buildings, and resources, with more efficient, and faster security measures. Access control systems in precise are the type of systems that can selectively restrict who can enter the respective buildings. However, due to the rapid pace of advancement of technology, access control systems were evolving over the years from the famous keypads as we now see in ATMs to card readers and biometric systems. In recent years, access control systems are taking new revolutionary turns from using cards to an actual smart biometric system. Biometric-based access control systems are security systems that use biometric traits of people such as the face, iris, fingerprint, and so on as their unique identifier rather than codes and tags. As the shortcoming of the keypad, and card systems was realized, biometric systems have solved many problems and significantly enhanced the security measures where it becomes the best solution

to authorize users. In this project, a facial recognition access control system is proposed for the UCSI library. With such a system, the security of the library will be enhanced as the credential information cannot be stolen, forged, disclosed, or easily breached by hackers.

Objectives

1. To study and analyse the existing access control system in the UCSI library.
2. To design and develop a new facial recognition access control system for the UCSI library
3. To evaluate and benchmark the proposed system with the existing system in the UCSI library

Methods

In this project, a questionnaire is used to collect data from users who are more likely to use the system and to seek comments and suggestions, which can be crucial for the system. The questionnaire was chosen because it allows faster collection of data from larger audiences. The questionnaire is published on all the different social media platforms, and 100 responses were collected. On the other

hand, the scrum framework is used to build and develop the system. The framework allows the development of each feature of the system in sprints based on the prioritized system features and it is one of the widely used agile methodologies.

Results

The responses were collected from all age groups while there were respondents from both genders. Moreover, the respondents have a good educational level and a significant number of them are on their second educational level. This indicates that the responses will not be biased toward a single group and that the respondents have enough understanding of the systems and IT technology. On the other hand, from the collected responses, it can be concluded that the respondents are not very satisfied with the current system where most of them mentioned that they would prefer to have a face recognition access control system. Moreover, most of them opted that the security is compromised with the current system and that a face recognition system will be more secure for the library. Based on these findings, a facial recognition access control system is developed using anaconda distribution, Spyder IDE, and python language. The developed system will be able to recognise users by their faces and will update the user's information on the database. From the administrator's end, they will be able to

see the list of students in the library, a line graph showing the total number of students who entered/exited the library, and search for a specific person. Moreover, they will be able to register new users.

Conclusion

Upon completion, the project has achieved its aims and objectives. A facial recognition access control system was developed. The system can identify the registered users and can classify not registered users from the registered ones. The major contribution of this system is that it will significantly enhance the security of the library of UCSI university as it will provide users with an advanced way to get authenticated while entering the building. Moreover, as UCSI university is one of the best private universities in Malaysia, the system will help the university to set another milestone by offering the students a smart university campus. Future research can improve the accuracy of the machine learning models and can include the hardware configuration of the system since the scope of this project was to develop the software aspect of the system.

Healthcare Mobile Application

Yee Chee Hong, Neesha Jothi, Javid Iqbal Thirupattur

Introduction

Health is always important to people who lives in this world, no matter in which generation. A good health will lead to a productive life. In this generation, many people do not able to manage their health issues because of their busy working life in such bustling society. Overworking and exhausted will cause the increment of stress and decrement of self-esteem. It will cause more mental health problem such as anxiety, depression, and substance use disorders. Therefore, with the high developed technology, healthcare system application comes out in front of people. They are developed to help these people to take care their healthy anytime and anywhere. In 2020, COVID-19 breaks out into the whole world. In the period of Covid-19, clinic and hospital had entered a state of emergency. Clinic and hospital all around the world become very busy on helping people to cure from illness. Therefore, healthcare application plays an important role here. Healthcare application can help those clinic and hospital to manage their system by provide online appointment for treatment. Healthcare application is rapid developed to help this critical situation. Although the critical situation has passed, people are

still using the healthcare application because they realize the convenience of using healthcare application.

Objectives

1. To investigate how healthcare mobile application works and its function, identify its current weaknesses.
2. To gather information and requirement from staff and users.
3. To design and develop healthcare mobile application based on requirements.
4. To evaluate the healthcare mobile application.

Methods

Research methodology allow project to gather the requirement information from public that needed in this project with several techniques or methodologies, then measuring and analyzing the requirement information collected. Qualitative research methodology is non-quantitative type of analysis which is aimed at finding out the quality of phenomenon. Quantitative research methodology is used to measuring the quantity or number of phenomena by use of statistical analysis. Qualitative gives deeper understanding on research that are not clear

which quantitative gives clear generalized fact on research. I will choose quantitative research methodology and it will be survey and questionnaire.

Results

From the analysis of collected information, the app will come with low entry-level of English as the text context. People are preferring to have medium font text in app. Also, they want to have a bright theme design to the app. App will come with many simple button function and simple view such as icon or symbol to replace the button and have a better view. Since most of them may help their family to make appointment, so the app will allow to have multiple patient information for one account. When provide information, short and simple description to clinic and hospital so user will be happy to see the important only information. E-wallet is becoming increasingly popular among young people due to its ease. This healthcare mobile app does have its own e-wallet to make payment. User can also make purchase medicine online through this application. The search engine will use current location to search nearby clinic and pharmacy.

Conclusion

Finally, it can be said that the system has been carried throughout the project's many stages of development, resulting in its effective establishment and achievement of the project's primary objectives. The main objective was to investigate and find out the weaknesses of current healthcare mobile application in Malaysia and then to develop a healthcare mobile application to publics. The system was developed after getting to know public's requirement through survey questionnaire. The prototype healthcare mobile application was successful built runs well on mobile device. As a result, a more complete literature analysis would better represent the current state of affairs on social media platforms when it comes to healthcare mobile application, and would provide a better knowledge of what is needed, as well as the areas that need additional study.

Smart Health Appointment System – WI Care

Siah Cheong Lin, Heshalini Rajagopal @ Ramasamy, Chloe Thong Chee Ling

Introduction

Health Care System is system that provides services to people, such as residences, academic institutions, workplaces and more, to improve environment. Health Care System can be break down into many counterparts, ranking by most common used such as Electronic Health Record (EHR), Medical Database Software and Telemedicine. Smart Telehealth Appointment System is a web app can be access by doctors, admins and any other user. Tasks can be performed by current system is making appointment, scheduling and modifying the result through the system, and also enabled description and design editing.

Objective

1. To analyse existing appointment system that is currently active from the website and pinpoint its strengths and weaknesses.
2. To develop two appointment portals for admin, doctors and appointer access.

3. To design three webpage tabs for WI Care main portal information display.
4. To evaluate the performance of the system across five types of computer and mobile devices.

Methodology

WI Care is a new healthcare system and the result outcome is the application development itself. System Development Life Cycle (SDLC) modelling is crucial in this project as it breaks the never end cycle of software development. WI Care came with a combination of four portals that make every user access to the system in different perspective. The system will also include different types of access levels for admins and doctors to create account and manage the dashboard, edit appointment list and also set schedule time.

Results

According to the user's evaluation, most of the smartphone user that uses this system having troubles on adapting display for vertical mode. Despite WI Care is mostly preferable using website through PC devices, the result also shows that

some user prefer a smoother transition as the site is mainly prior to information instead of graphic design.

Conclusion

WI Care has achieved all of the forementioned objective. Whereas the website had released appointment portals is to ensure to reduce the workload especially for those GPs that prefer work individually. The system also capable provide information for any users and lastly it supports vertical view model devices. WI Care will still have a room of improvement to be done.

Event Hotspot Management System

Daniel Ryan Sunjaya, Abdul Samad Bin Shibghatullah, Shabana Anjum Shaik

Introduction

Being active in UCSI University as a student is a requirement in their study. This leads to the use of ELE points, where students are required to collect certain number of points during their studies in UCSI University. To acquire points, students are required to join activities or events that are held in the university. Currently UCSI University uses email and the ELE Portal website to send information regarding the activities or events in university. This system has many major flaws, from the information delivery to the way that the system sends notification to students. Event Hotspot Mobile Application System aims to improve the current system and eliminate most problems that the current system has. With the help of 3D map visualization and a more enhance user interface, Event Hotspot Mobile Application System can provide better experiences for students.

Objectives

1. To study how to render a 3D map of the university and integrating it to the mobile application, allowing students to interact and show the current events in that chosen place
2. To create a notification system that will inform students with their upcoming events in the university
3. To develop a detail view of the event and allows student to register for that event
4. To create a login where student can use their university ID and password as they would do in IIS or ELE Portal

Methods

The Rapid Application Development (RAD) methodology is used to develop the Event Hotspot Mobile Application System. This methodology is chosen in the premise that the big goal of the mobile application is the user experience ,and overall design and functionalities. In Rapid Application Development methodology there are 5 phases that the project will need to go through, such as requirement, design, rapid development and testing, feedbacks and refinements, and final product. This methodology allows the project to be refined through the

help of testing, evaluating user's feedbacks, and making refinements according to the evaluation result.

Results

Event Hotspot Management System (E.H.M.S) allows a better experience given to UCSI University students on using this system for their extracurricular activities that are mandatory in the graduation of students. This system allows students to see the detail information of events that are happening in UCSI University with a simple way for them to join/participate. The implementation of the 3D map visualization of the university can further compliment the rest of the features in the system. With the use of this mobile application, most of the features are geared towards a better learning experience in the university. This falls under the fourth Sustainable Development Goals (SDGS).

Conclusion

The development of a mobile application system will not be 100% smooth, though the addition of Event Hotspot Management System (E.H.M.S) to compliment the use of ELE Portal used by UCSI University students currently is

a big step-up in terms of its function and usability. The use of an API, such as SceneView, that not many developers use can be quite a challenge. This presents the problems of documentation and finding solutions when I did encounter. The difficulties using a not-so-well-known API can pose threats on the production timeline as I enter unknown territories of the development. The use of multiple modern 3D modeling tools such as Blender shows that the possibility of a mobile development goes beyond understanding a given API, but instead utilizing the resources that I had to make a fully functional system such as Event Hotspot Management System (E.H.M.S).



UCSI University[®]

UCSI EDUCATION SDN BHD [198901008177 (185479-U)]

KUALA LUMPUR CAMPUS DU020(W)

1, Jalan Menara Gading, UCSI Heights (Taman Connaught) Cheras, 56000 Kuala Lumpur, Malaysia.
General Line (+603) 9101 8880 Course Enquiry (+603) 9101 8882 Fax +(603) 9102 2614

KUCHING CAMPUS DU020-02(Q)

Lot 2976, Block 7, Muara Tebas Land District, Sejingkat, 93450 Kuching, Sarawak, Malaysia.
Tel +(6082) 596 965 Fax +(6082) 596 975

SPRINGHILL (SEREMBAN/PD) CAMPUS DU020(W)

No. 2, Avenue 3, Persiaran Springhill, 71010 Port Dickson, Negeri Sembilan, Malaysia.
General Line: (+606) 648 8888 Course Enquiry: (+606) 648 8880

 **UCSI UNIVERSITY**  **UCSIUNI**  info.enq@ucsiuniversity.edu.my

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