ICS 411 - Senior Project (012)
Project Summary

Student Name	Project Title	Description
Saleh Al-Abbas Abdallah Al-Bar	Website for the Prep Math Courses **(Dr. F. Fairag/ Math)**	This is a web-based system that was developed to make all Pre-Math resources available to students and faculty. In addition the system provides communication features such as chatting and discussion groups.
Muhammad Al-Harbi Zaid Al-Otaibi	Short Course Management Systems **(ITC + DES)**	This is a web-based system that was developed to (replacing current MS Access system) for management of short courses registration and finance. The system can be used by participants from outside KFUPM as well as faculty, Chairmen and Deans.
Ammar Al-Mubaiyedh Faisal Al-Matawwa	Saudi Water Net Project **(Dr. A.Al-Shiban/ ES)**	This is a web site developed for a group concerned with water (as a resource) in Saudi Arabia. The group is called *SAUDI WATER NET*. The project is more than just a home page design. It contains information on all professionals, government agencies, organizations, academic identities, and publications that deal with water resources in terms of occurrence, abundance, regulations, quality, and public awareness. It also includes a forum for discussion and information exchange.
Turki Al-Suliman	Construction Company Database System **(Al-Suliman Construction Company)**	This is a database system developed for a construction company to handle and automate all its functions. The system provides features for storing, retrieving, and updating all data related to the company.
Tareg Mahmoud Khaled Mahmoud	Markulator: A tool to Attack, Evaluate and Rate Watermarked Images **(Mr. Ghouthi / ICS)**	This project is a computer science project to evaluate and test image watermarking, tools. The intended tool will evaluate the given tool with several attacks and alteration techniques and see how they preserve the original images.
Abdul-Rahman Al-Garni Musab Al-Turki Mohannad Al- Dharrab	The Residential Unit Headquarter On-Line Systems and Integration with CAAC Systems **(Dr. Saad Aiban/ DSA)**	This is a web-based system that was developed to be used by Student Affairs to handle all the data and functions related to residential units and their presidents. The system was also integrated with the current few systems available there so one common database is used.
Noufal Al-Maghaslah Muhammad Al-Jamed	Faculty & Personnel System **(ITC + DFP)**	This is a web-based system that replaces the existing Faculty subsystem in MS Access. The system will have more features than the existing one in addition to the current features. The system will automate almost all the work done by the Faculty affairs and can be accessed through KFUPM network

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Project Summary

Student Name	Project Title	Description
Samer Shaheen Abdallah Al-Harbi	Medical Center Automation Project **(Eng. A. Al-Shehri/MC)**	This project involved the design of a complete automation system for KFUPM Medical Center (MC). This includes the Reception , Labs, Pharmacy and X ray sections. The project also include the full implementation of the Reception section
Khaled Al-Tairan Naser Al-Naser	Student Readmission System **(Al-Muhtaseb/ DAR)**	This is a web-based system that was developed for the KFUPM Admission Committee. It stores complete data about all students applying for re-admission. The data which includes courses, Cum. GPA, Major GPA and all other related information. To help the committee members to make the right decision for the case.
Adel Al-Otaibi Faisal Al-Malki	Web-based Browsing for Telephone Billing **(ITC)**	This is a web-based system that replaces the current mainframe COBOL CICS-Based system. The system will store the information about telephone bills and allow any user to see his bill and make any inquiry about it.
Abdul-Aziz Al-Khuraidili	The Implementation of An Image Authentication and Processing Tool **(Mr. Ghouthi / ICS)**	This project is a computer science project to design and implement an image watermarking, authentication and watermarking tool. The intended tool employs some state-of-the-art watermarking techniques like wavelets and Cox's watermarking algorithm.
Muhammad Al-Ghamdi Dhafer Al-Gahtani	Slide Management System **(Dr. T. Al-Rugaib / ARC)**	This is a web-based system that will be used by the Architecture Department at KFUPM to classify and access and modify its collection of thousands of Architectural slides in the library. The system can be used by faculty and students for education purposes
Moaiyed Al-Jarrash Muhammad Al-Khalaf	Al-Hussan Student Registration System **Al-Hussan Institute (Dammam)**	This is a complete Students Information web-based system for Al-Hussan Institute for Computer Science. The system will store all information about students, instructors, courses and degree plans. It will handle all functions related to student registration such as adding, dropping and change of sections. It also provide many more features that will help the institute to automate their academic work.

ICS 411 - Senior Project (021)
Project Summary

Student Name	Project Title	Description
Abdallah Al-Amoudi	Developing A Faculty Database System for the Math Dept **(Math Dept)**	This is a web-based system that was requested by the Math department to automate their faculty applicants' evaluation process. The system will be used first by the department secretary to enter various information about applicants' files received from Faculty Affairs. Then the Faculty search committee members will use the system to record and pass their feedback to the chairman for his final decision. Various reports can be generated from the system
Abdul-Salam- Al-Marhon Wafi Al-Muallem Muhammad Al-Gudaihi	KFUPM Storehouse Receiving Section Tracking System **(Storehouse)**	This is a web-based system that was requested by the storehouse to automate the activities of their Receiving Section. The system will be mainly used by the section staff to record information about purchase orders and items for various KFUPM departments. Various reports can be generated from the system
Umar Al-Humaidi Hamad Al-Mahlouth	Alteration Management System **(Dr. T. Al-Rugaib / ARC)**	This is a web-based system that was requested by the Chairman of the Housing Alteration Committee to automate the committee activities. The system will be used first by the applicants to fill all information about their requests. Then the committee members will use the system to follow up the process from the beginning to the end. The applicants can always follow up on the status of his request. Various reports can be generated from the system
Muhammad Ataallah Mohammed Alloush Zeyad Hamoudah	An Implementation of an Arabic Text to Speech System **(Mr. Husni Al-Muhtaseb, ICS)**	This web-based system was developed as part of a current KACST project in the ICS department. The system basically will be used by any user and it provides two functions: Vocalizing a written Arabic text and pronouncing (speaking) that text. The system was well implemented and it can be used immediately.
Aarif Shahin	Developing of a Web Site for Dammam Colleges **(Mr. Mowaiya Taj, / DAR)**	This project was to build a complete website for the Girls Colleges in Dammam. The site will contain various information about the colleges, in addition to various news items about their activities. The site will also contain two major subsystems: one for admission and the other one for grades posting. The grade posting subsystem is already completed as an initial step. The other system will be implemented next semester as a part-time work

ICS 411 - Senior Project (021)
Project Summary

Student Name	Project Title	Description
Abdallah Al-Mutairi Ali Al-Shaggag	KFUPM Diploma Financial System **(Dr. M. Al-Mulhem/ DES)**	This is a web-based system that was requested by the Deanship of Educational Services to automate the financial activities of their Diploma Program. The system will be used by students and administrative staff in the diploma program.. It allows students to register for courses, purchase books and calculate the corresponding charges. After paying the charges the student will communicate with the staff to finalize their registration. Staff can use the system to store all the information about courses, fees, books, etc. Various reports can be generated from the system
Majed Baksh Ahmed Al-Uthman	Image Processing Education Product (IPEP) **(Dr. Atif Al-Najjar, COE)**	In this project, the students have developed an educational software to provide all many image processing techniques and functions. The system will be used in labs to teach students these techniques.
Faras Nabulsi	Redesigning and Enhancing CIBS **(Mr. Jaweed Yazdani / ITC)**	This project was developed to enhance the current Computerized Item Banking System (CIBS) that will be used by the Testing and Evaluation Center (TEC) at KFUPM. The system overcomes many of the disadvantages the current system has and it provides many advanced features. The system will create banks of Exam questions (items) and generate various exams
Munis Makkawi AReda Al-Shehri Salem Al-Ghrabi	Natural Language Processing System of the Holy Qur'an **(Mr. Sharafulislam, ICS)**	This web-based system was developed as part of some research idea in the ICS department. The system basically will be used by any user and it provides the following major function: Analyzing and processing the Arabic text in the Holy Qur'an. Various statistics and search can be generated by the system
Muhammad Al-Gahtani Muhammad Al-Aidan	On-Line Faculty Information System for CCSE **(Mr. M. Salim, ICS)**	This is a web-based system that will be eventually used by CCSE departments to store the information provided in the Faculty Annual Evaluation. The system will be used by faculty members, chairmen of department and CCSE Dean. The main function of the system is to provide an On-line version of the Faculty annual evaluation that can be filled and submitted by faculty on-line. Chairmen will put their evaluation on each form then submit it to the Dean for his final input. The system will be used to store all the information in these forms in a database to enable departments to generate various reports that are normally requested throughout the year.

ICS 411 - Senior Project (022)
Project Summary

Student Name	Project Title	Description
Abdulhadi Al-Mahfouth, Nazih Al-Khatam and Mohammad AL-Zawad	Al-Tahtheeb Schools Web Portal **(Dr. A. Al-Sukairi / ICS)**	This is a web portal system for Al-Tahtheeb Schools. It facilitates the communication between all the parties in the schools community that includes students, parents, teachers, and administrators. This communication is achieved through several ways including an e-Learning center, discussion boards, mail service, and others.
Ali Al-Dubaisi, Rayed Al-Bahrani and Yasser Al-Rebh	Scheduling of Final Exams at KFUPM **(Mr. Z.. Khan / DAR)**	This project is composed of two parts (Windows Application and Web Site) that was developed to (provide a schedule that avoid the conflicts in arranging the time of each course' final exam to make the students satisfied as much as possible.). Windows application part is for the scheduler and Web part for the students and the instructors to view their schedules as well as the whole schedule of exams.
Abdallah AL-Saleh and Saad AL-Zahrani	Online Course File System **(Mr. S. Khan + Dr. K Furati / Math Dept)**	This on-line web-based system helps the math department to automate all the processes related to their course files. These files will contain all the necessary information about courses such as quizzes, home works assignments, exams, students' evaluations, etc. The system will be used by the department faculty and chairman to view and get various reports about courses.
Mansour Al-Sogayer And Abdullah Al-Jaloud.	Design a Web Site for Tahfeed Al-Quran's School **(Mr. Mr. Eyad S. Al-Saleh / Tahfeed Al-Quran's School)**	In this project a complete website is built for Tahfeed Al-Quran's School in Dammam. The site contains detailed information about the school such as its history, faculty, activities ... etc. Also, this site will have a student page. Through this page, each student can log on and see his grades. Moreover, this web site will have a forum and magazine.
Adel Bin-Shahbal and Saad Al-Hamlan	Purchase Order Tracking System **(ITC))**	This is a Web based system developed for the ITC. This multi-user system will help users to keep track of the process of purchasing by the ITC. The user can fill purchasing requisition form online and see where particular order is in addition, the user can print statistic reports.

ICS 411 - Senior Project (022)
Project Summary

Student Name	Project Title	Description
Adil Al-Marzoug and Isa Al-Hashem	Assigning locations to final exams at KFUPM **(Mr. Z.. Khan / DAR)**	The goal of this system is to assign locations to final exams at KFUPM. After the final exam periods are finalized, this system will take the responsibility of assigning the locations to the exams. There are some rules that are taken into account. For example, the capacity of the rooms should be 2.5 to 3 times the number of the students. Another rule also is to assign a common location to exams that are conducted with the same instructor in the same period of time. There are also some rules to assign certain exams to certain locations.
Eyad Buhulaiga and Abdullah Al-Bar	Faculty Recruitment System **(ITC/ FAP)**	This is a web-based system that was developed to allow the applicant (a Faculty member who needs to apply for KFUPM) to fill the application form, attach all the supporting documents and submit them on line to the Deanship of Faculty and Personal (DFP). Furthermore, the system provides the DFP with the ability to send the applications to the different academic departments and then receive the recommendations; all the processes are done on-line
Abdul-Rahim Asiri and Bnadar Al-Zahrani	Design and Development of Multi-Media Organic Chemistry Animations **(Dr. Ian Forristal / Chemistry Dept)**	The aim of this project was to develop Organic Chemistry reactions Multi-Media Animations that clearly illustrate the interaction between, and reaction of, 3-dimensional chemical structures. The development of suitable Visual Aids would enhance the understanding and learning experience of students. This could potentially be unitized in the teaching of CHEM 201 and CHEM 530 (either in the classroom or on Web CT)
Ali Al-Sehri and Fayes Al-Sofyani -	Faculty Evaluation System for the Math Department **(Mr. S. Khan + Dr. K Furati / Math Dept)**	The purpose of this project is to build a web-based, database-driven, online system for the evaluation system for Math Department and to integrate it with the existing web site for the Math Department. The evaluation system keeps track of instructors' evaluation data that are obtained from ITC, for previous semesters, organizes it, and makes statistical analysis about the received data and then makes it available to the various users of the system. The evaluation system is a web-based, database-driven, online system. It has mechanisms to check for authorization and specifying different privileges for different user groups. User groups of the system are Chairman, Instructors, and an administrator for the system.

ICS 411 - Senior Project (022)
Project Summary

Student Name	Project Title	Description
Abdul-Mohsen Madani and Adnan Zaidi	Redesigning the KFUPM Library Website **(Mr. Mr. S. S. AHMED / KFUPM Library)**	In this project the KFUPM library website is redesigned. This is done using Flash animations, drop down menus and appropriate buttons to make the interface more attractive and user friendly. At the back end, a database that stores all the online journals will be connected to the website. User information is also stored, for those users who will make issue, or renew, or request books. The database is accessed using ASP (active server pages). Database forms are used for searching and requesting of services. Dynamic menus are used for the interface.
Naser Ahsan	Proving Termination of Rewrite Systems **(Dr. Krishna Rao / ICS)**	This is a research project in computer science. This project is based on finding new techniques for proving termination of rewrite systems. The intended end product will be a front end to which a logic or functional program will be an input, and this front end will tell us if our functional or logic program is terminating or not.

ICS 411 - Senior Project (031)
Project Summary

Student Name	Project Title	Description
Muhammad El-Mubarak Mohammad Al-Musallam	*KFUPM Clearance Workflow System* **Mr. Mohammad Al-Hubeil, (Student Affairs)**	This project is a web based system that enables students to start and complete their KFUPM clearance process on-line. This system will automate the flow of clearance transactions around the intended divisions.
Abdulaziz Al-Hasan Ali Abu-Haid	*Student Clubs Management System* **Dr. O. Al-Abdali / (Student Affairs)**	This is a web-based application used for managing the information of the students clubs in the university. It will be available in the intranet and it is the first application build for the students clubs.
Khaled Al-Gahtani Ahmed Al-Ghamdi	*Student Housing Reservation System* **Dr. O. Al-Abdali / (Student Affairs)**	This is a web-based system that will be used by students and Housing Department Staff to replace the old way of managing students rooms and housing issues. The system will be more effective, faster and with lower cost that the existing traditional way. The system will automate almost all the work done by Housing department staff and will allow students to choose their preferences in housing, Where to live and with whom, and will make the process faster and more guaranteed.
Muhammad Al-Amoudi	*Re-design the Educational Services web page* **Dr. M. Al-Mulhem / (Educational Services)**	This project is a web-based application where to redesign the current website of the Deanship of Educational Services, which has some problems and poor design techniques, to a better site that will replace the current one.
Ahmad Namazi Radha Al-Bahrani	*Teaching Assignments Scheduling System for Prep Year* **Dr. M. Al-Mulhem / (Educational Services)**	This is a web-based system that gathers the teachers' preferences through a web-based form. The information collected will be saved to a database then used to create a schedule where teachers are assigned to sections. This system replaces the current manual process done by the English program coordinator.
Majed Al-Juhani	*Student Housing Services System* **Dr. O. Al-Abdali / (Student Affairs)**	This is a web based application which will be used by the Deanship of Student Affairs to maintain and process student requests for housing and other related matters.

ICS 411 - Senior Project (031)
Project Summary

Student Name	Project Title	Description
Umar Al-Mulhem Nayef Samandar	*QLib - Quantum Computational Library* **Mr. F. Alvi / (ICS department)**	This project is a software application to compute and deal with the quantum computation (qubit). It implements functions, procedures and mathematical routines involved in quantum information science research. It will be a standalone calculator to help the teachers and students who are interested in this topic.
Ahmad Ba-Gais Bandar Al-Shuraimi	*A Performance Comparison of Java RMI, MPI, PVM* *and RPC over Ethernet Network of Workstations* **Dr. K Qureshi / (ICS department)**	This project is going to investigate the performance of four programming tools that are used in distributed computing. Since these tools are used on a network, the major issue is the bandwidth and latency. The project will analyze these tools and give their behavior in terms of bandwidth and latency.
Kamal Al-Khadrawi	*Educational Services CD (ESCD* **Dr. M. Al-Mulhem / (Educational Services)**	In this project the student design and generated an auto-run CD containing information about Educational Services. The information will be provided to the student in different formats such as Word documents and HTML files.

ICS 411 - Senior Project (032)
Project Summary

Student Name	Project Title	Description
Ibrahim Al-Ghamdi, Saeed Al-Gahtani and Manha Al-Yami	*Survey of Algorithms in Computational Geometry* *Dr. Krishna (ICS)*	This is a research-based project in which the students made a comprehensive survey of computational Geometry algorithms. The students initially studied several algorithms from a traditional book on computational Geometry and analyze them. They then looked at the latest developed algorithms and make a comparisons among them.
Husain Al-Turaish, Ayad Hamad and Abdallah Al-Kubaish	*Building Clinical Information System* *Mr. Ramzi Al-Khabbaz (A Private Clinic in Sanabes)*	This is a complete web-based system that was developed for Al-Hadi Medical Center, a private clinic in Snabes. The main objective of this system is to automate all the activities and transactions done in the clinic. The system consists of four integrated subsystems, the Reception, Lab, Pharmacy and Inventory. The system was completed and will be used by the clinic
Yousef Al-Saeed and Badr Al-Ulaiw	*Software Quality Assurance for Databases* *Mr. Ejaz Ahmad (ICS)*	In this project the students worked on one of the main applications developed by the ITC which is the Human Resources management System (Naas). The project consisted of three parts, namely: Quality Assurance (QA), Data Migration (DM) and Development (D). In the QA part software quality assurance was performed on NAAS to make sure that it works as desired and report any encountered errors, bugs and fixes during this testing stage. In the DM part data was migrated from the old database systems to DB2 including cleaning, transforming, merging, and adding new columns according to the targeted table. In the D part the student participated in developing some part of the Naas system using programming like Java, JSP, Servlets, SQL (DB2) and HTML
Adel Al-Suhaim and Majed Al-Rugaie	*Design and Analysis of Quantum Algorithms* *Mr. Faisal Alvi (ICS)*	The project studies Quantum algorithms, which take place in Quantum Computers, and analyzes their common features and characteristics. Shor's Algorithm, which finds the prime factors of a composite number, was studied deeply in particular because of its importance. At the end, a simulator of Shor's Algorithm was designed and implemented in Java. This simulator simulates the steps that go in a quantum computer. It would help as a tool for people who want to study Quantum algorithms and observe their behavior.

Student Name	Project Title	Description
Ala Al-Whaibi and Meshal Al-Thuaini	*KFUPM Medical Center Website* *Mr. Ejaz Ahmad (ICS)*	This is a web site that was developed for KFUPM Medical Center. The objective was to establish a complete website that all KFUPM users can access from the Intranet, and later the Internet. It contains static and dynamic information about the medical center and all its main activities, events and personnel. Finally, the link to the site will be placed on the homepage for KFUPM.
Umar Al-Gahtani and Abdulrahman Al-Harbi	*Trade Net Management System* *Mr. Mazen Al-Zamil (A Private Establishment in Al-Khobar)*	This is a web-based system that was developed for a private computer company in Al-Khobar. The main objective of this system is to automate all the activities and transactions done in the company. The systems handle all the issues related to the company such as the purchasing, sale and maintenance services that are provided by the company
Ahmad Al-Suwaiyan and Jehad Al-Saikhan	*Partial Downloading of Bit-map Images* *Dr. Mohammad Al-Suwaiyel*	In this research-based project the students developed an application that allows for a partial downloading of bit-map images. This was done by allowing the user determines the percentage of the picture he wants and then download the image as per his request. This application will be useful in many applications (e.g. E-commerce) where users are not interested in downloading the whole image since they are concerned about a small part in that image.
Husam Al-Ramadi and Abdullah Gadi	*Conference Management System* *Dr. T Maghrabi & Dr. Krishna (ICS)*	This project is a web-based system that was developed to handle all issues related to conferences' management at KFUPM. It handles the issues of the papers' submissions and referring, registration, publications, etc.
Ali Al-Gahtani and Badr Al-Muhaisen	*Design and Verification of Business Processes* *Dr. Abdulqader Dekdouk (ICS)*	This is a tool developed using .Net framework that takes in a BPEL4WS specification and translates it to a PROMELA model. This is done to invoke Spin model checker on the translated model so the developer can design, simulate, and verify his business process composition. The tool enables the developer to detect syntax and validation errors. With Spin, the developer can be assured of the correctness and safety of his business process.

Student Name	Project Title	Description
Usamah Jan and Ayman Katbah	*Patient Treatment System* *Mr. Ejaz Ahmad (ICS)*	A complete design for an automation system for KFUPM Medical Center was developed in an earlier project. In the this project the students implemented two modules of the designed system: the Reception and Lab. The system resulted in an automation of these services in which information are stored in a database and different reports are generated.
Bassam Al-Shammasi	*Bilingual Crossword-Puzzle Generation* *Dr. Nasir Darwish (ICS)*	This is a web-based puzzle game that generates dynamic bilingual Crossword puzzles with different sizes in both Arabic and English. Before starting the game the user should specify the language and size of the puzzle that he want to solve. After generating the puzzle, the player can start playing and then he can check his answers.
Husain Al-Khalaf	*Segmentation of Arabic Texts* *Dr. Adnan Amin (ICS)*	The goal of this project is to locate and segment each Arabic character in a Black/White image that contains typewritten Arabic text in addition to all necessary preprocessing steps like smoothing and finding connected components. In this project, three algorithms were implemented for segmentation and two for smoothing
Yousef Al-Amer	*Hofuf Commercial Secondary Institute On-Line System* *Mr. Abdullah Al-Ghadeer (HCSI)*	This is a database-driven web-based system that was developed for Hofuf Commercial Secondary Institute. The main objective of this system is to automate all their academic processes. The system can be used by faculty, students and administrators. It handles all issues related to admissions, registration and academic record keeping.

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Project Summary

Student Name	Project Title	Description
Ahmad Al-Youbi Yasser Maatouk	**UEP Database System (Mr. E. Uprichard / UEP)**	The UEP system is a flexible and secure online database which contains the records of student performance as they progress through the undergraduate programs. The grades should be entered by teachers through secure login. The database must also contain records of exam results, report topics, and other relevant information: section, course, and semester. UEP system must provide a different privilege for different groups of user. Accessing the database must be restricted to unauthorized access and give access to authorized user according to the following specific rights: Director, Coordinator and Teachers. The system also can show the statistical information like the average. Records can be inserted, deleted and updated through the web application.
Al-Suwaiyel, Muhammad and Al-Khalaf, Humoud	*Partial Downloading of Bitmap images through Client/Server Architecture* *Dr. Mohammad Al-Suwaiyel*	This project is a system, that was implemented in JAVA based on the client/server architecture, in which the server has an image and the user at the client side can select a percentage of that image, in order to be downloaded from the server side to the client side. The user can requests an additional percentage of the image, and the server then will send the additional pixels of the image, or the user can requests the complete image to be downloaded. The project deals mainly with minimizing the time required to download an image within a Local Area Network(LAN).
Al-Naser, Muhammad and Al-Sahhaf, Ahmed	*An Agent-based Personalized Web Searching* *Dr. T. El-Basuny*	One of the biggest problems, we nowadays face in the information society is the information overload, which is boosted by the size and dynamic nature of the World Wide Web. Retrieving relevant information that is consistent with the user's information need has become increasingly difficult. We have been developed a User Interface Agent (UIA) that will reside in the user's machine and be adapted to learn the user's preference. The system will operate in parallel with the user, monitor user's explicit or implicit actions from his browsing behavior, and communicates with the search engines to retrieve relevant information consistent with the user's need.

Student Name	Project Title	Description
Abdullah Al-Makrami and Mashaan Bani Hameem	**A Resource Center Website for Freshman Students** (Dr. M. Khaled + Dr. M. Morsy / Chem. Dept)	*The Resource Center Website for Freshman Students* is a web-based system to keep and maintain data related to CHEM.101 & CHEM.102 courses so it can be used by freshman students. The website reflects the on going activities of these general chemistry courses including courses materials as well as useful links. It also contains many related materials, such as exams, animations, video, etc. Exams results, general remarks, instructors or course coordinator notes, students and/or lab technician activities will be posted on the web too.
Al-Ramadi, Basam and Addas, Faisal	*Building an Interactive Image Compressor Kit* *Dr. Alfy*	This is a standalone application that serves as a learning/training tool for whom who wants to learn and compare different compression techniques that are used in Image compression area. Five algorithms are implemented, three of them are lossy: Huffman Code, LZW and RLE, and two of them are lossless: DCT and JPEG. After Compression or decompression of an image, several results will be shown to the user like: time taken to do the job, file size before and after, compression ratio and specific results for the chosen algorithm.
Aayed Al-Shammari and Suliman Al-Uwaisi	**Enhancement of the Webpage of Housing and Office Services** (Mr. M. Al-Gahtani / HOS)	The project is to design a website for the Housing and Office Service (HOS) department replacing the old website which does not satisfy all requirements of its users. In addition the new website provides On-line forms that enable faculty and staff to request services from HOS directly without physically going there and fill the forms. This system will automate a large part of the work done by the Housing and Office Services Department.
Ali Al-Othman and Yaser Al-Wadie	**Final Exam Scheduling System** (Mr. A. Al-Darrab, DAR)	The Registrar Office currently has a system, which was also developed as a senior project earlier, for scheduling the final exams. It has two separate parts: the first part schedules time and date in specific periods for finals. The second part, which is not working, schedules the location of final exams according to their specific periods assigned to them by the first part of the system. This project enhances the first system by adding some new graphical and statistical features that are helpful in the scheduling process features. The project also developed and implemented a new subsystem that assigns locations for final exams.

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Project Summary

Student Name	Project Title	Description
Dalaim Al-Qahtani and Sami Al-Mohanna	**A Webpage for the Chemistry Department** (Dr. H. Al-Muallem / Chem. Dept)	The project is to design a website for the Chemistry department replacing the old website which does not satisfy all requirements of its users and does not cover all information about the chemistry department. The new website will overcome problems existing on the old website; in addition it provides users of the chemistry department with more new features such as teaching resources, news and events, and alumni forms. The new website has new format (e.g. font size, and font and background colors) and new techniques to make it easier for users to use the website. Also, it is easily readable, reliable, maintainable and usable. Finally, the website satisfies requirements of its users.
Ben-Assaf, Ahmad and Al-Mosallam, Ibrahim	**Document Tracking and Management System** *(Mr. M. Siddique / ICS Dept)*	DTMS is a web-based application for document tracking and management. The application is generic in nature. It can be applied on any platform and can be used in any organization irrespective of the nature of work. The web-based application is accessible from the internet so that employees and applicants can access it upload their documents, submit them to a workflow and track them. The web-based application automates, and restricts the processes and the rules defined by the administrator.
Walid Al-Olah, Ibrahim Al-Tamimi and Raiyan Al-Dharrab, Raiyan	**Load adjustment for under load-students** (Mr. A. Al-Darrab, DAR)	This is a web-based system that will be used by registrar office to solve one of their biggest problems which is the under load students (students have less than 12 hours). They used to check manually each student's major degree plan and compare it with his transcript to find the suitable courses to register to reach 12 hour or more for more than 1000 students. This system will check the transcript and the major degree plan for each student and compare the result with the offered courses on that semester. The final result will be the proper courses for each student so the registrar office will only have to choose and register one of the resulted proper courses.