

Salah Abdo
Student ID: 6179614
Module: 206 CDE- Real World Project

206CDE Individual Report

Student ID: 6179614

Name: Salah Abdo

Email: abdos@uni.coventry.ac.uk

Role: Design of the car park, use case diagram, class diagram, activity diagram and editing of video.

Tutorial Group ID: 7

Tutor Name: Rachid Anane

Group ID: 2

Group project title: Smart Parking

Group Members:

	Student ID	Forename	Surname
Member 1 (Team Leader)	6210272	Barbara	Gabrys
Member 2	6179614	Salah	Abdo
Member 3	6435196	Siim	Jarg
Member 4	6647283	Shahad	Alkhrboush
Member 5	6224774	khasad	Rasul
Member 6	6375168	Amir	Askari

Introduction:

The project idea was trying to solve the car parking issues currently at Coventry University. The student car park currently wouldn't be considered modern in this day of age, also to the university which is currently the "modern university of the year". Currently, there is no way to check if there are any spaces available, this will cause problems for people who commute or any student using a car. One of the main problems is that it affects student attendance as they are currently taking up to 10-30 minutes just looking for a place to park and many streets need permits to park on so driving down with no space to park in is a problem.

So, the proposed solution was that I and my team wanted to implement a smart car parking solution, which allowed the student to check if there is any available car parking space at the student car park. The way the student can do this is by either checking the available space on the app which they can download on their phone or check the billboard at the front of the car parking displaying the number of available parking spaces. The way the information will be collected is by using sensors which would be placed in the bays that are then connected to a database that is updated in real time and displayed on the billboard or accessed on the app. The student must register their vehicle online, so once they reach the main entrance to the car park the car license plate will be scanned by a camera and will only grant them access if the vehicle has been registered.

My role in the project

My main role within the project was the design, I was responsible for creating the design of the car park, use case diagram, class diagram and the activity diagram. I had to make sure that the design met the requirement of the project and kept getting feedback from my group members. I was also responsible for editing the video as I had some basic experience with editing on past project.

Reflection:

From my perspective, I found that the project was successful. The main success was due to communication, I tried to communicate with the team as much as possible getting their input and feedback on my designs which allowed me to produce a detailed use case diagram, class diagram, and activity diagram. I tried to make myself available to help each of my member to maximize the work produced, such as providing helping with market research looking at competitors that I've recently worked for giving my input and knowledge that I know of that company.

Skills I have gained within the project would be firstly teamwork. My team work skill has improved, this will benefit with another project to come and will help during professional practice within the industry, as teamwork is key to any group project. This improvement was due to my communication within the group chat and input during the meeting, I made sure that I was there for my team when need providing input and feedback.

What went wrong with the project was that with google drive each other work can be overwritten, with the SWOT analysis there were 4 people working on it each person doing one of the SWOT analysis. The problems started when people started uploading each of the analysis with the same file name with kept overwriting the previous person who uploaded.

If I could the project again I would have used something better than google drive to share and access out work such as GitHub. We neglected to use GitHub as no code was involved with the project and overlooked the features it had which could have saved us time and people were constantly overwriting each other work on google drive without an option to roll back the drive something which GitHub offered. Lastly, GitHub also offered the opportunity to see if the team member were contributing to the project.

Social, professional, legal and ethical issues consideration

The legal consideration that the project considered would be the data protection act. The UK has an act called the data protection act that controls how personal information is used by organisation and business (gov.uk 2017). We had to consider this as we are going to be collecting student data and must make sure everything done with that date is being stored and used appropriately according to the act.

Ethical issues of the data are that it's our responsibility to make sure that the system admin or any other of the staff aren't just able to browse through the student's data unless they are obligated to. We shouldn't be selling student data to parking companies and not be disclosing the student's data to other universities (safariBooksOnline n.d).

References

Gov.uk (2017) *Data protection*. [Online] Available from <<https://www.gov.uk/data-protection/the-data-protection-act>> [03/04/2017]

Safari books online (n.d) *Ethical issues related to data collection and storage*. [Online] Available from <<https://www.safaribooksonline.com/library/view/accounting-information-systems/9781118162309/c13-26.html>> [07/04/2017]

SALAH ABDO

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Portfolio: <http://salahabdo.wixsite.com/mysite>

SUMMARY

Currently, a second-year student at Coventry University achieving a 2:1, BSC (Hons) in Computer Science. Looking to pursue a career in IT. A committed team player that is approachable, ready to take any opportunities to improve and to be a better individual for the team. A quick learner who enjoys finding new concepts and, Also problem solving through testing. Has gained a broad knowledge in computing and technology, including Python, SQL and github, and would like the opportunity to use his knowledge in a professional environment.

SKILLS

Technical skills:

- **Programming:** Python, C++ and SQL.
- **MS Office:** Experienced user of Microsoft Office, including Word documents, Excel spreadsheets, Access database creation, PowerPoint presentations.
- **Hardware:** Computer assembly & Maintenance.
- **Operating system:** Linux, windows

Practical skills:

- Ability to work individually as well as in group environment.
- Good Conceptual, Analytical and Logical skills.
- Detail oriented and strong interpersonal skills.
- I also own a full UK driving license and have access to a car.

EDUCATION

Bachelor of Science: Computer science, Current
Coventry university - Coventry

Currently achieving a 2:1 in first year.

Projects: <http://salahabdo.wixsite.com/mysite/projects>

Modules I'm currently studying:

-Programming, Algorithms and data structures -Operating systems, Security and networks -Software Engineering
-Data and information retrieval -Technology and its social, legal and ethical context

Robotics EV3

During my first year at university, I worked within a team of six to design and create a robot which was used to play a game. The aim was to work as a team and develop a program that covers a number of key subjects areas: programming fundamentals, computer architecture, networking and software design.

My Actions

- Researched the main components of the robot, such as the infrared sensor, colour sensor, touch sensor, motors and also the computer brick.
- In charge of three of the main components and created suitable algorithms for each one.
- Tested each component to see if it worked as it should and functioning up to standard.

At the end of the project, we completed the robot on time. I presented my work in a portfolio and had to take a viva about the project, I achieved an upper second (2:1) with a mark of 68%.

Python Game project

During my second semester in year 1, I worked within a team of 6 to create a game using Pygame in Python. The aim of this project was to work as a team and also individually to create a game which included a search and sort algorithm.

My Actions

- Researched efficient Search Algorithms and then created a search algorithm for the robot to locate items on the map.
- Designed and created the GUI for the whole game.
- Tested Search and Sort algorithms.

On the concluding day, the project was judged during a 15-minute viva. The project was marked on our understanding of the Search and Sort algorithms, the complexity of the game, design, the interaction of GUI and the testing. I achieved an upper second (2:1) with a mark of 65%.

Secondary Education Exam: 2015

The Duston school - Northampton

- 3 A-levels including Applied Business, Computing and Applied IT.
- 14 GCSE's A-C including Maths, English and IT.

WORK HISTORY

Christmas Sales Support Team, 12/2014 to 12/2014

NEXT – Northampton

- Worked as part of the sales team in order to provide excellent customer service through continuously developing product knowledge, as well as understanding and demonstrating customer care and high levels of customer service on the sales floor. Replenishing stock and maintaining high standards of merchandising and housekeeping. Displaying good listening skills, identifying customer needs and responding to them quickly.
- Also, had to work as part of the sales team through supporting and helping colleagues with their work and getting involved in day-to-day activities as and when required. Showing a genuine interest in other people and willingness to help. Using initiative at all times. Showing flexibility and willingness to meet store needs.

Christmas Marshal, 12/2014 to 12/2014

Smart Parking – Northampton

I was in charge of managing free flowing of traffic and space spotting for customers I had to make sure people parked into the correct allocated spaces. I also had to help customer with their grocery to make sure they enter and leave as quickly as possible ready for the next customer. This role developed my communication skill while working under pressure.

CERTIFICATIONS

(CISCO) CCNA routing and switching: introduction to network

ADDITIONAL INFORMATION

- I enjoy traveling - I've traveled to many different countries, my most recent trip to Yemen. My experience going to see my family home country was amazing, learning more about my own culture first-hand makes it an unforgettable and memorable moment. I've also been to Sweden, one of the most beautiful countries I've visited, and Turkey, Istanbul, a very historical city.
- Also, enjoy sport such as mixed martial arts - I started MMA when I was 12 years old. I have always enjoyed it, learning new techniques and my loved ones and most importantly teaching me to always think positively because for every obstacle there is always a solution.

References available on request