

COOP Final Report

Princess Nora bint Abdulrahman University

College of Computer and Information Sciences

Computer science

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عال ٤٩٩ ت

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King Fahd Medical City (KFMC)

Training Start Date: 17/ 1/2021

Training End Date: 4/ 3/2021

This Report is Submitted in Partial Fulfillment of the Co-Op Training Program

Date: 6/ 3/2021

Acknowledgment

I would like to express my very great appreciation and thanks to Dr. Hanan Karamti for her support. I also would like to thank my advisor Dr. Ali Alhussein and collage advisor Dr. Faten Diaaldin for their encouragement, valuable advisement, and patience. The support given by all of them during my training program was very helpful to achieve the objectives of this course.

I also would like to acknowledge KFMC for the assistance provided to enhance students' skills to satisfy the vision of 2030.

Summary

The training program I have enrolled in is concentrates on practical approach to gather business requirements, design, develop and deploy a Web based.

This report provides information about the training institution KFMC and will go through the training program period to show the final gained experience.

First, it will present KFMC history, vision, and a brief introduction to the department where I have trained in. Second, the role and responsibilities which had given by the site advisor to the student, assigned and accomplished tasks and the difficulties arose through these tasks and their solutions. Finally, the student insight for the program, appendixes, and references.

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1. Introduction

King Fahd Medical City (KFMC) is a medical facility in Riyadh, Saudi Arabia. KFMC is the largest medical facility in Saudi Arabia with four hospitals, KFMC provides COOP training for students, my training program was in executive admission of information technology department.

We start with Data Definition Language (DDL) which is used to define data structures, and Data Manipulation Language (DML) which is used to manipulate data itself. and then start programming with C# in visual studio and perform CRUD operation (Create, Read, Update, Delete) with ASP.NET. Also, we have worked on import data from excel to the database,

The main training program was focusing on practical approach to gather business requirements, design, develop and deploy a Web based application that automate business processes based on the business needs.

2. Organization



Fig 2.1.1

2.1 History

King Fahad Medical City "KFMC" has a strategic location in the heart of Riyadh city, capital of Saudi Arabia. It started as a pioneering idea that came true. The idea was adopted by King Fahad bin Abdulaziz. The Prince of Riyadh region then, King Salman bin Abdulaziz laid the foundation stone of KFMC in 1403, corresponding to 1983. KFMC came into operation in the era of the Custodian of the Two Holy Mosques, King Fahad bin Abdulaziz, where King Abdullah bin Abdulaziz, Crown Prince then, inaugurated it on 21/08/1425 H, corresponding to 05/10/2004.

2.2 Vision statement

To be a leading Accountable Care Organization in specialized health services.

2.3 Mission statement

Dedicated to providing specialized value-based healthcare services empowered by innovation, training, and research.

2.4 Information

It started in 1425 H corresponding to 2004 G. The Main Hospital is a specialized center that provides medical, surgical, critical care, and dental services. It contributes to the health education and teaching at the local level as well as enhancing treatment of diseases through medical research and specialized medical training programs.

Main Hospital Departments:

Department of Pulmonary and Critical Care:

Pulmonary Medicine Unit

Critical Care Unit

Department of Dentistry:

Oral and Maxillofacial Surgery Unit

Craniofacial Anomalies Unit

Dentistry Unit

Department of Family Medicine and Employee Health

Department of Surgical Specialties:

Urology Surgery Unit

Orthopedic Surgery Unit

ENT Surgery Unit

Plastic Surgery Unit

Thoracic Surgery Unit

General Surgery Unit

Ophthalmology Surgery Unit

Department of Medicine:

General Internal Medicine Unit

Gastroenterology Unit

Rheumatology Unit

Infectious Diseases Unit

Dermatology Unit

3. Department

3.1 Department structure

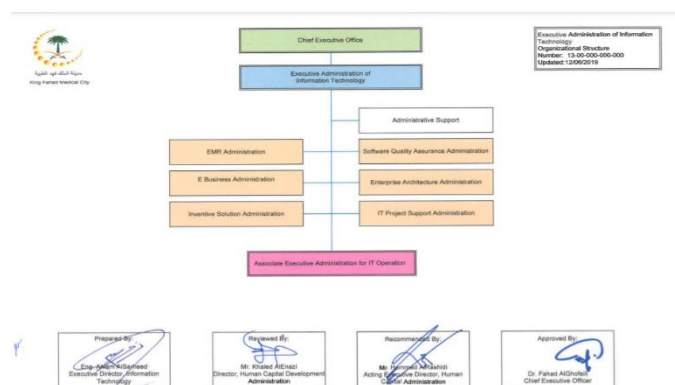


Fig 3.1.1

The establishment of the Executive Administration of Academic and Training Affairs, King Fahad Medical City, dated on 12/25/1424H. Believing that training is the main tool that gives the individual skills to be productive in all levels. The education training and development of our workforce is a sole responsibility of Academic and Training Affairs at King Fahd Medical City. To raise the level with high quality standards of staff and its career and filling of talent in every administration, to work in various fields are the most important needs of each administration, which seeks to achieve. ATA focused on training and in every detail of preparation, study and to present with the latest technology in the training process and attracted talent and advisory staff to participate in the areas of training, both within the city or outside staff qualification and graduates at the highest scientific and training level and provide solutions and training services to keep up with the administrative and medical renaissance enjoyed by our country now.

3.2 Role and responsibilities

I have worked as a trainee student in Training Program Development Department under the supervision of Dr. Ali AL Hussein, I had the responsibility of attending every weekly meeting and perform all the tasks discussed in it on time.

I also had the responsibility of representing PNU well and follow the professional ethics.

3.3 Assigned tasks

- 1- Create a database, lookup table, know how to make database backup and restore, know how to make export, and import data from / to the database
- 2- create a new web app by MS Visual Studio
- 3- create new asp.net (web form) pages
- 4- create drop down list to show look up tables created in database
- 5- Create input form to collect visitor information to be saved in database (create buttons to use CRUD operation)
- 6- Create button to export data from asp.net page to excel.
- 7- Create contact us page to allow visitor to send email from application
- 8- apply site security to the main project
- 9- Add CSS properties on the main project:
- 10- Host the project by Smart ASP.NET and FTP
- 11- Mail merge word document
- 12- Create Sign Up page by MVC
- 13- Add git version control system to files.

3.4 Accomplished Tasks

3.4.1 Create Sign Up page in ASP.NET MVC

MVC is a design pattern used to decouple user-interface (view), data (model), and application logic (controller). This pattern helps to achieve separation of concerns.

I create a sign-up page as shown in figure bellow

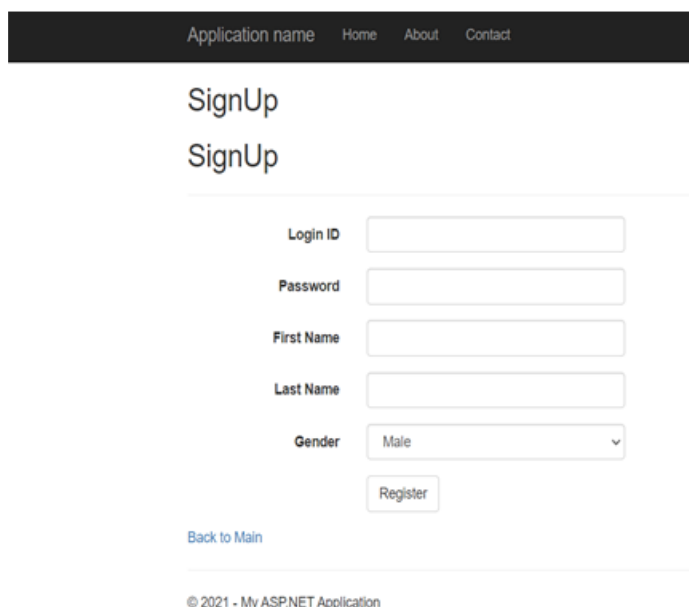


Fig 3.4.1

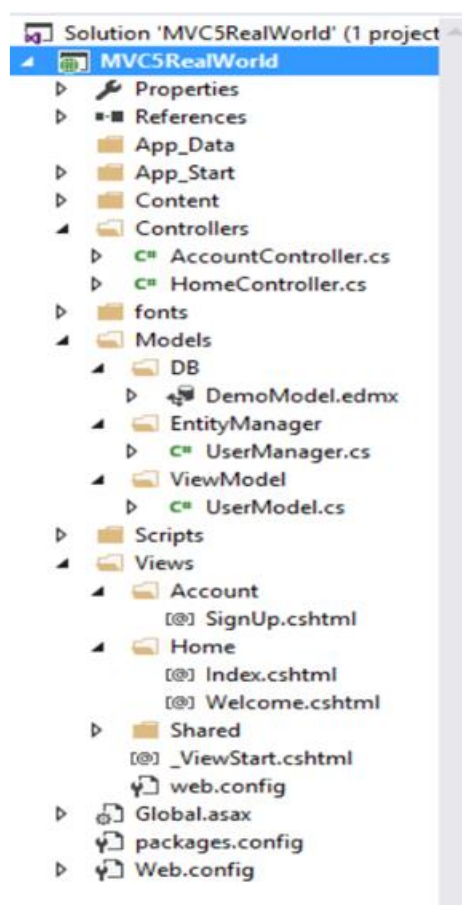


Fig 3.4.2

3.4.2 The final project in ASP.NET Web Forms

This final project objective was to create a web site that has the following features.

Apply CRUD operation, Develop Registration Input Form and Grid View, Develop Course Input Form and Grid View, Import Attendance Data from Excel to Database, Create Templates and automate printing report, Use Email Notification in a web, Apply site security.

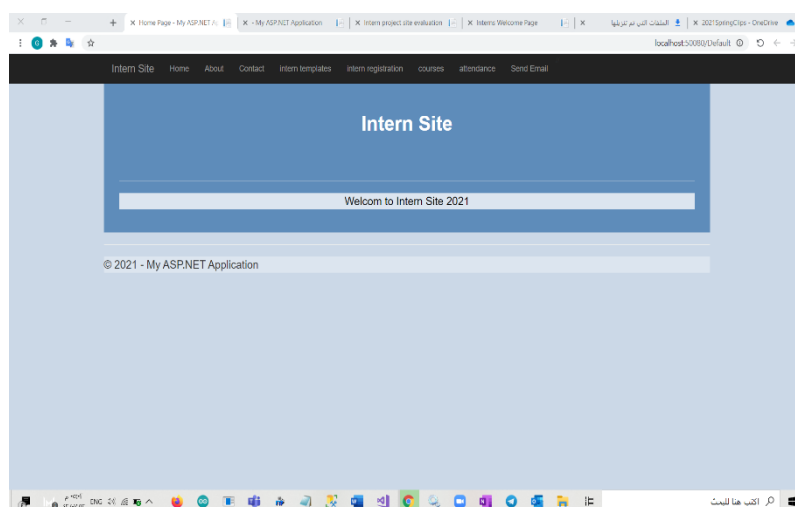


Fig 3.4.2.1 intern welcome

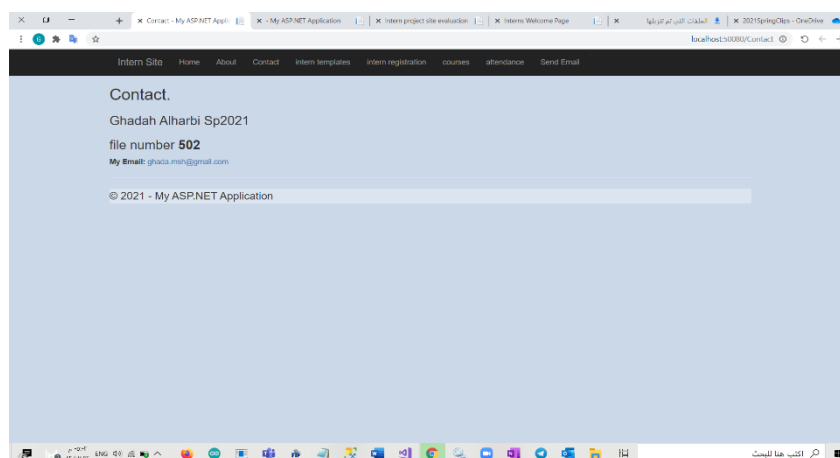


Fig 3.4.2.2 contact page

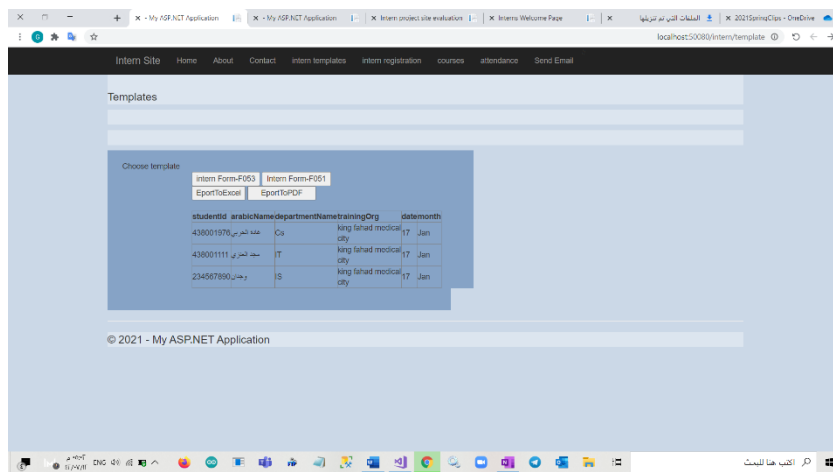


Fig 3.4.2.3 intern templates page

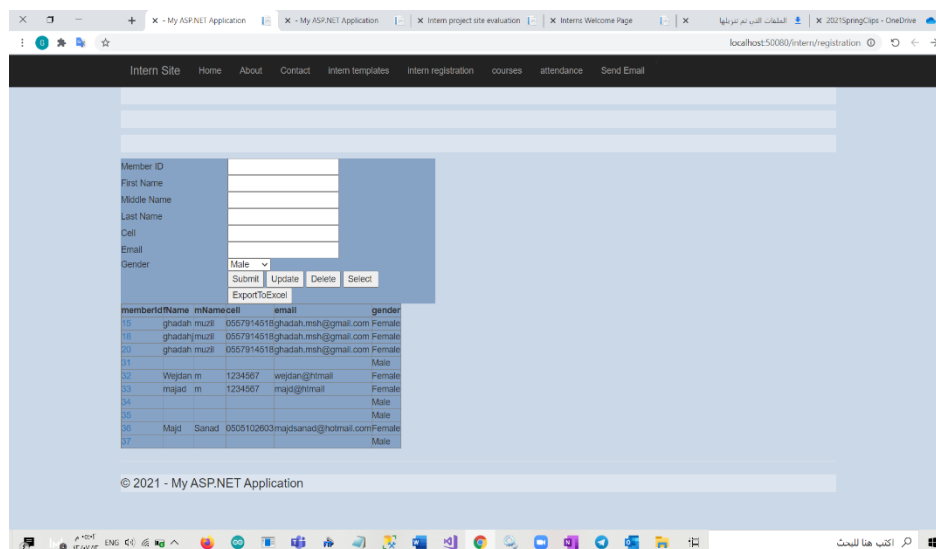


Fig 3.4.2.4 intern registration page

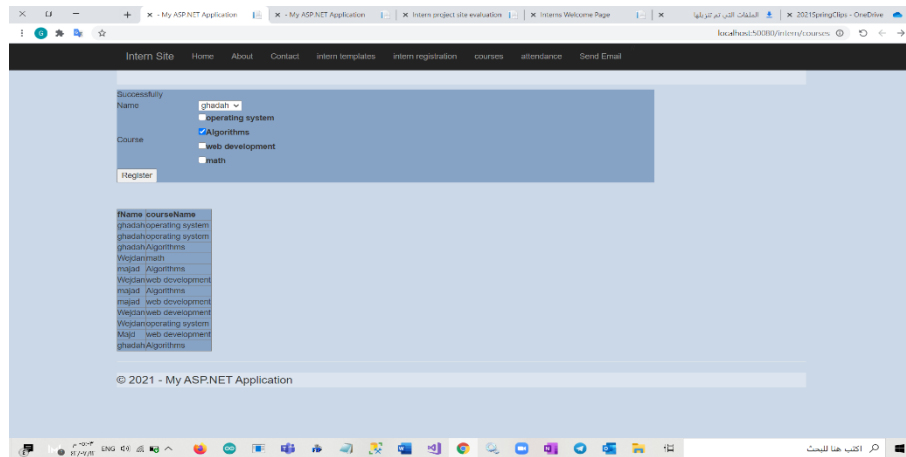


Fig 3.4.2.5 courses page

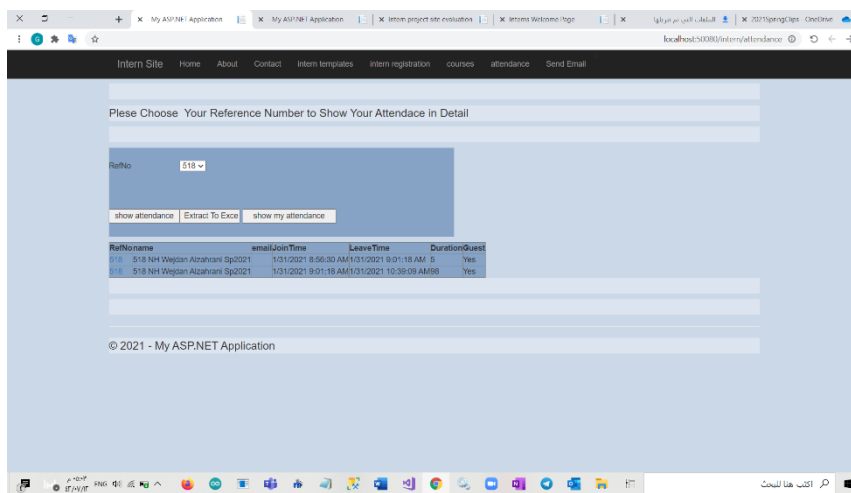


Fig 3.4.2.6 intern attendance page

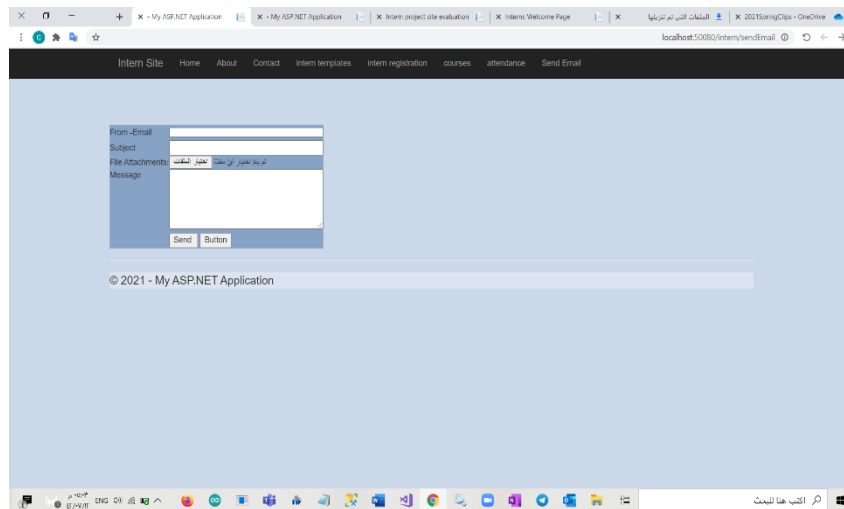


Fig 3.4.2.7 sending Email page

3.5 Unaccomplished Tasks

There was one task I could not successfully complete it, which is split the PDF by students name and ID automatically.

3.5.1 Reason of Incompletion

I was asked to perform these tasks using Asp.net, but I could not find applications of this task to learn from them and perform the asked task.

3.6 Problems and Difficulties

Telecommuting was the major difficulty during the training program if I have any questions or need feedback about something. Also, some difficulties during resolve the assigned problems need direct explanation.

3.7 Solutions and Attempted Solutions

I have tried to search and learn on my own, to solve the issue, this was an advantage to me during each meeting. It helped me get more understanding when the supervisor explaining the issue. Also, I learned how to search and learn effectively.

3.8 Experience Gained

I have gained technical experience with SQL Server Management, Backup and restore the database, apply CRUD operation.

Build a Web development using ASP.NET (Web Forms, MVC) and the know difference between each of them. Add Git (Version control system) to records changes on files, apply site security and host the project by Smart ASP.NET and FTP.

3.9 Skills and Techniques Learned

- Build a web project. (see attachment [1])
- Deal with different web-application framework, ASP.NET Web Forms and ASP.NET MVC.
- Deal with SQL server management and CRUD operation.
- Teamwork skill.
- Self-learning skill
- Time management skill

4. Student insight

The training program has developed my personal and technical skills, it helped me understanding the theoretical concepts I learned in the college and how to apply them to the real world. Also, the program helped me getting technical experience in several tools and software by creating different applications during it.

For the personal skills, I learned how to communicate within a team, participate in meetings and manage time effectively. I found that KFMC's the training program is perfect for improving the student's skills, and I recommend it to my colleagues.

Information about the training supervisor:

Executive Administration of Information Technology

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Email : ahameed@kfmc.med.sa

Phone: 0538692448

Information about the training supervisor:

Name : D.Faten Khalid Karim

Email: fkdiaaldin@pnu.edu.sa

5. Appendix

5.1 Appendix A

Kingdom of Saudi Arabia
Ministry of Health
King Fahad Medical City
Executive Administration of Information
Technology



المملكة العربية السعودية
وزارة الصحة
مدينة الملك فهد الطبية
الإدارة التنفيذية لتقنية المعلومات

KFMC Training Plan

We focus on practical approach to gather business requirements, design, develop and deploy a Web based application that automate business processes based on the business needs.

The following are subject areas we cover during the intern engagements with us for the allocated training hours by the Universities:

1. Business analysis and design
2. Object Oriented Programming concepts and development
3. C#
4. LINQ
5. HTML
6. CSS
7. Java Script
8. JQuery
9. Bootstrap
10. Entity Framework
11. Asp.Net (Web Form, MVC, MVC Core)
12. MS Sql Server
13. MS Visual Studio
14. Other

Training and learning resources we use during the Internship Training Program

1. <http://www.w3schools.com>
2. <http://www.pluralsight.com>
3. <https://www.pragimtech.com/>
4. <https://www.youtube.com/user/kudvenkat>
5. <https://dotnet.microsoft.com/apps/aspnet>



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5.2 Appendix B

1st week report:

Kingdome of Saudi Arabia
Ministry of Education
Princess Nourah bint
Abdulrahman University
College of Computer and
Information Sciences
Training Unit



المملكة العربية السعودية
وزارة التعليم
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كلية علوم الحاسب والمعلومات
وكالة الكلية للخدمات الطلابية والمجتمعية
وحدة التدريب الميداني

Weekly Report

Student Name	Ghadah Muzil Alharbi			Student ID	438001976
Training Organizer	King Fahad Medical City			Department name	IT Department
Department Supervisor	Ali Mohamed				
Week no	1	Start date	17 \1\2021	End date	21/1/2021
Accomplished Tasks	1.Uploaded software requirements: MS SQL server, visual studio, WS FTP. 2.Crate table and insert data, update, delete, backup and recovery, export data from data base to excel.				
Skills Acquired	DDL is Data Definition Language which is used to define data structures. For example create table, alter table are instructions in SQL. DML: DML is Data Manipulation Language which is used to manipulate data itself. For example: insert, update, delete.				
Knowledge Used	Data base knowledge				
Meetings	Via zoom on Sunday ,Wednesday and Thursday				
References	https://www.w3schools.com/				

2nd week report:

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وكالة الكلية للخدمات الطلابية والمجتمعية
وحدة التدريب الميداني

Weekly Report

Student Name	Ghadah Muzil Alharbi			Student ID	438001976
Training Organizer	King Fahad Medical City			Department name	IT Department
Department Supervisor	Ali Mohamed				
Week no	2	Start date	24/1/2021	End date	28/1/2021
Accomplished Tasks	Selecting specific(or all) columns in a table Selecting only some of a table records using where clause Comparison in a where clause Ordering Selected Data Doing Arithmetic with Selected Information Grouping Selected Data, more on Grouping: the HAVING Clause Entity Relationship Diagram Using Alisases Join with Three Tables Using Comparison Operators with Subqueries Using exists				
Skills Acquired	Retrieving data from tables Export data base to Exile file How to connect to a local data base Keeping the database save by Backup and Restore data base				
Knowledge Used	Microsoft SQL Server Database				
Meetings	Via zoom on Wednesday and Thursday				
References	https://www.w3schools.com/				

3rd week report:

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وحدة التدريب الميداني

Weekly Report

Student Name	Ghadah Muzil Alharbi			Student ID	438001976
Training Organizer	King Fahad Medical City			Department name	IT Department
Department Supervisor	Ali Mohamed				
Week no	3	Start date	31/1/2021	End date	4/2/2021
Accomplished Tasks	Apply CRUD operations Develop Registration Input Form & Gridview Import Attendance Data from Zoom App to database				
Skills Acquired	Using GridView to make navigation Connect to visual studio with database				
Knowledge Used	Visual Studio Microsoft SQL Server Database				
Meetings	Via zoom on Wednesday and Thursday				
References	(W3schools, n.d.)				

4th week report:

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وحدة التدريب الميداني

Weekly Report

Student Name	Ghadah Muzil Alharbi			Student ID	438001976
Training Organizer	King Fahad Medical City			Department name	IT Department
Department Supervisor	Ali Mohamed				
Week no	4	Start date	7/2/2021	End date	11/2/2021
Accomplished Tasks	Applying WebApp security Create host account and deploy web app				
Skills Acquired	Make my web project secure and host it				
Knowledge Used	Visual Studio Smart ASP.NET Microsoft SQL Server Database FTP				
Meetings	Via zoom on Wednesday and Thursday				
References	https://www.w3schools.com/				

5th week report:

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وحدة التدريب الميداني

Weekly Report

Student Name	Ghadah Muzil Alharbi			Student ID	438001976
Training Organizer	King Fahad Medical City			Department name	IT Department
Department Supervisor	Ali Mohamed				
Week no	5	Start date	14/2/2021	End date	18/2/2021
Accomplished Tasks	Working on the project : create new menu create new asp.net pages create drop down list to show look up tables created in database Create input form to collect visitor information to be saved in database Create button to export data from asp.net page to excel Create contact us page to allow visitor to send email from application apply site security				
Skills Acquired	Ad hoc CRUD operation				
Knowledge Used	Visual Studio Smart ASP.NET Microsoft SQL Server Database FTP				
Meetings	Via zoom on Wednesday and Thursday				
References	https://www.w3schools.com/ http://www.beansoftware.com/ASP.NET-Tutorials/Build-Ad-Hoc-Queries.aspx				

6th week report:

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Ministry of Education
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وحدة التدريب الميداني

Weekly Report

Student Name	Ghadah Muzil Alharbi			Student ID	438001976
Training Organizer	King Fahad Medical City			Department name	IT Department
Department Supervisor	Ali Mohamed				
Week no	6	Start date	21\2\2021	End date	25/2/2021
Accomplished Tasks	Sign Up page by MVC Add git version control system to final project				
Skills Acquired	Model View Controller (MVC) Git (version control system)				
Knowledge Used	Visual Studio Microsoft SQL Server Database Git (version control system.)				
Meetings	Via zoom on Wednesday and Thursday				
References	(Introduction to Git, n.d.)				

5.3 Appendix C

[1] the final project web site

[Online]. Available: <http://ghadahfr-001-site1.btempurl.com/>.

6. References

(Ad Hoc Queries in ASP.NET, n.d.)

(Getting Started - About Version Control, n.d.)

(How to mail merge Word document in ASP.NET, n.d.)

(King Fahad Medical City, n.d.)

(Maverick, ASP.NET MVC 5: Building Your First web application)

(smarterasp.net, n.d.)

(w3schools, n.d.)