# Internship project

Khawarizmi international college

12/18/2016 Dr. Omar Khalil Roya Abdolhamid Khonji K-91315150



# Introduction

Khawarizmi international college is an institution which was built since 1985. The organization has three main strategies.

- 1985 to 1994
  Become partner with institute in London for Management of Information System.
- ❖ 1994 to 2003 Follow the standards and policies that are designed by Ministry Of Higher Education.
- From 2003
  Moving forward and offering different majors that IT institute.

KIC offers different academic majors to students. The IT department have a very important role in the organization and the department gains a big success for the organization. In addition, this is a good opportunity for IT students to have a good experience in the organization. The department focuses on the different areas to train students such as:

- Hardware knowledge
- Software knowledge
- Customer service
- Management skills
- Networking



# Hardware

## Setup a computer

The first step which the IT department takes to improve the hardware skills of trainees is to teach them how to setup a computer. Computer is an electronic device which has the ability to send, receive information and perform different operations which is been requested by the users. However, it is important for the trainee to know how to fix a computer, solve hardware disabilities and arrange a new computer in classrooms and departments. The main parts of a computer are:

- Pc: combination of motherboard, hard disk and fan. In addition this is the main part of each computer.
- Monitor: monitor or a computer display has electronic visual display for the computers.
- Mouse: mouse is a handheld device that is small and it will be moved over the computer screen.
- ❖ Keyboard: set of keys on a board that handles a certain functions and operations on the computer.
- ❖ 2 Power cable: power cable is used to transfer the electronic power and it is combination of one or more electronic conductors.
- VJ cable: VJ cable is used to move the picture signal from the pc and display it on the computer screen.
- ❖ PCI card: used to connect the computer to the internet. However the PCI card is connected to the motherboard.

# To setup a computer we have to:

- First connect the mouse to the pc.
- Second connect the keyboard to the pc.
- Third, should connect the PCI to the pc.
- Forth, have to connect the VJ cable from screen to the pc.
- Fifth connect the power cable from monitor to the plug.
- ❖ And at the end connect the other power cable from the pc to the plug.

It is important to connect each computer in the organization to the domain. This will help the organization to have the control over the devices and limit the access of the different users. However to connect the computers to the domain we have to Connect to the domain. we need to connect the internet to staff, open network and sharing center, click on change adapter setting, right click on WIFI, properties, enter the domain ID and password, click on internet protocol4, double click, change DNS server address to 172.19.1.17, press ok, then right click on this pc, properties, advanced system setting, enter the domain ID and password,

go to the computer name, change the computer name and domain, press ok, restart the pc, connect to test, again we will go back to the same steps and put the DNS on automatic. It is important for the IT departments to make sure all computers in classes are working properly. However, we have to make sure all parts of computers are working properly. To complete the task we need to:

- Change monitor in case of damage.
- Remove the slow mouse and replace it with new mouse.
- Change the broken keyboards.
- ❖ Tight the VJ cable.
- Fix the broken PCI and change them with new one.











# **Networking**

#### Limited internet connection

Many different departments and library faces the problem of limited internet connection. To solve this problem trainee has to make sure that are the DNS is removed.

Check if DNS is removed, in case no, follow these steps:

- All on networks other than WIFI should be disabled, right click on WIFI, open network and sharing center, click on change adapter setting, right click on the other networks that are appeared click on option disabled, enter the domain ID and password.
- Right click on WIFI, enter the domain ID and password, double click on IP4, remove the DNS and click on automatic DNS.

However, to fix the internet connection in the classes we have to connect the data58 to the switch box IDF8 then connect the cable from plug (D58) to laptop (the cat cable). At the end we connect the VJ cable from plug to laptop.

# **Access point**

Different organization needs internet access for completing the tasks and operations. A big organization like KIC has many users who use the internet access all the time. In result to have good internet accessibility the organization needs to set different access points. A hardware network device that makes the connection between the wired network and WIFI device called access point. Each wireless access point is connected to the router by use of network cable.

- ❖ Have to configure the access point.
- Prepare the cable and do crimping.
- Check the cable wires order.
- Then fall the cable after plugging.
- Check the data point.
- Then go to the IDF box and connect the switch cable.
- Check the wireless data and connect to the Etisalat internet.
- Then connect the new access point.
- ❖ If all lights are working in it, we will connect the internet wireless.

#### **Network cable**

Network cable is used to make connection between the router and access point. However to crimp a RJ cable we need:

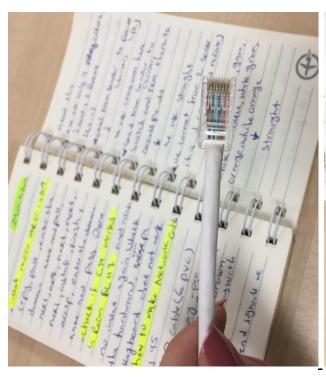
- ❖ STP plug
- RJ45 crimping tool
- ❖ CAT Se (STP)
- ❖ Network cable tester

#### To make a network cable we have to:

- Cut a part of the CAT cable (network cable) by RJ45 crimping tool.
- Keep the cable in the middle and turn it round.
- ❖ A circle cut will appear on the cable.
- \* Remove the plastic cover.
- Separate the colours and make them straight.
- Remove the plastic in the middle and cut it with cutter.
- ❖ Keep the colours in the order.
- Brown+white/brown+green+white/blue+blue+white/green+orange+white/orange.
- Cut them to make sure that they are in one line.
- ❖ Move the cable into the STP plug and tight them with RJ45 crimping tool.
- ❖ Make sure all colours are in the same order and straight.
- Once we complete the same task for the both sides of the cable we have to test it.
- ❖ Keep both sides in the tester and on it, if the green light for the both side goes up together means the network cable is working.









# Software

#### **Antivirus**

To protect the computer from danger and harm we need to install antivirus on the computers. In addition, this will help the user to not lose the information. Keeping the antivirus update is an important task that the IT department does in the organization. However, KIC uses ESET Endpoint antivirus.

We check the antivirus for the computers with these steps:

- Open
- **❖** Setup
- advance, tools
- system update (should be no update), press ok
- open ESET endpoint antivirus
- update and update it

# Cisco pocket tracer software

Pocket tracer is used to design different network topologies. This software is been designed by the Cisco. However to install this software we have to:

❖ Double click, Cisco pocket double click, next, press on I accept the agreement, next, next, next and install.

## **Adobe Bridge software**

It is a digital application that is designed by adobe systems.

For installing the adobe we follow this steps, go to set up, accept, press install, select the language, select the adobe programs that you need, install, done, go to activator, right click, run as administrative, auto patch, start and close.(internet and antivirus should be off).

## **Cryptool software**

It is a secure electronic learning tool that has different methods to encrypt and decrypt the plaintexts.

❖ We install the software with following these steps: next, chose I agree, install, press next and then finish.

### **Adobe Muse software**

Adobe muse software is used to create websites without coding. In addition the users can host their websites easily by using this software.

❖ Install Adobe muse: set up, install, enter the domain ID and password, launch now, sign in later, start trial, accept and finish(internet should be disconnected).

## Adobe CS5 (sound booth) software

Adobe sound booth Cs5 is designed by Adobe system and is used audit the digital audio.

- Select Adobe CS5, set up, I agree then continue, I agree and conform, accept(select the language), next, select sound booth, install, go to activator, right click, run as administrator, auto patch, start and close.
- Make sure that antivirus and internet are disabled while installing adobe Photoshop.

#### Auto shutdown in labs

Auto shutdown is programmed by the IT department and this will shut down the computers available in labs and libraries at 9:00PM.

- ❖ At the first step we have to make sure that the time and date are correct on the computers.
- Click on the time which is on the computer desktop, click on change date and time setting, change the time zone to the "Abu Dhabi, Muscat", press on change date and time, enter the domain ID and password, enter the right date and time, press ok.
- ❖ To install the auto shutdown right click on this pc, manage, enter the domain ID and password, click on task scheduler, right click on task scheduler library, click on import task, brows and click on the auto shutdown program, press ok and then done.

# Uninstall Maya2016 and install the new Maya software

Maya software is 3dimension software that is sued by computer graphics.

- We uninstall the Maya software by fallowing these steps: go to control panel, programs, uninstall a program, click on Autodesk maya2016, click uninstall, enter the domain ID and password, click uninstall.
- Then we will copy and paste the new file of Maya to drive C or D, then restart the pc and install the new one, after Autodesk self extract enter the domain ID and password, accept license agreement and then press install.

## **Download Google Chrome**

❖ Download the Google Chrome: enter Google in Internet Explorer, get chrome, download chrome, accept and install, run, run, enter the domain ID and password.

# Keep a URL as the home page of Google Chrome

❖ Copy the URL in the word file, go the chrome setting, click open page on start up, set page then copy and paste the URL and press ok.

## Install Dev C++

It is a programming language used by the IT major to implement and compile codes.

- ❖ Install C++ by.
- Enter the domain ID and password.
- Select the language
- ❖ Select I agree, next, install.
- Finish.
- Next, next, ok.

#### **Install Adobe reader**

- ❖ Disconnect the internet and antivirus for installing Adobe reader.
- Double click on Adobe Rdr, click on yes, press update then finish.

## Install moviemaker

Moviemaker is video editing software that is designed by the Microsoft.

- Copy
- Paste
- Enter the domain ID, password
- ❖ Next
- ❖ Install
- Finish
- ❖ Accept
- Enter the domain ID and password
- Done

## **Install Textpad**

Textpad is a text editor that is designed in 1992. In addition, to install the software we will follow these steps:

- Double click
- ❖ Next
- l accept
- ❖ Next
- ❖ Next
- ❖ Install
- Enter the domain ID and password
- Finish

# **Install Java/Oracle**

Java is a programming language that is used by the IT major. In addition this software is designed to code and compile the programs. To install the software we have to:

- Enter the domain ID and password
- ❖ Next
- ❖ Next
- ❖ Next
- Continue
- ❖ Next
- ❖ Next
- Close

# In case Textpad does not have the compile/run Java

- ❖ Go to the configure
- Preferences
- **❖** Tools
- **❖** Add
- Java
- **♦** Ok

# **Management**

It is important to train students and teach them how to manage a task. Arrange different kind of workshops, conferences and celebrations is an important task which is done by the IT department in the organization. However, during the training we arranged medical conformance, national day event, bookshop and Martyr Day. The IT department receives the request by the management for example: projector and sound booth system.

To arrange an event we will:

- Connect the VJ cable from laptop to the projector.
- ❖ We connect the ELV professional installation cable to the sound system.
- ❖ Arrange 2 mice, 3 adopt cable, 3 BIX4 (speaker channel), 3 wireless mice and 3 audio mixer connecters.
- Firs we connect the adopt cable to extension.
- Then we connect the adopt cable to BIX4 (speaker channel).
- ❖ And then we connect the BIX4 (speaker channel) to the audio mixer connecters.
- Test the sound system.













In addition the organization arranges different external examination. For example the IATA training examination is arranged by the IT department. To arrange the classes for the examination first we have to make sure that computers are connected to the domain, the DNS is removed, only WIFI is enabled on the device, switch to IATA use, install the word file for IATA users, keep the URL as the home page, determine the list of trainees and their information, record the name of trainees on the computers and list of the trainees with their sit numbers on the door.

- connect the internet to staff, open network and sharing centre, click on change adapter setting, right click on WIFI, properties, enter the domain ID and password, click on internet protocol4, double click, change DNS server address to 172.19.1.17, press ok, then right click on this pc, properties, advanced system setting, enter the domain ID and password, go to the computer name, change the computer name and domain, press ok, restart the pc, connect to test, again we will go back to the same steps and put the DNS on automatic.
- ❖ All on networks other than WIFI should be disabled, right click on WIFI open network and sharing center, click on change adapter setting, right click on the other networks that are appeared click on option disabled, and enter the domain ID and password.
- Switch to the IATA user (enter the user name and password).
- Keep the word file of IATA for trainees.
- Copy the URL in the word file, go the chrome setting, click open page on start up, set page then copy and paste the URL and press ok.
- ❖ Label the name and detail of the trainees on the tables of three labs.
- ❖ Make sure that all computers in the labs are switch to the IATA user.
- Stick the list of trainees and their table number next to the door of each lab.

# **Customer service**

Each organization has to focus on the customer service and satisfaction. IT department receives different requests from students, departments and staff.

To keep the customers satisfy trainee needs to make sure that the task requested by the customer is been completed. However the requests could be hardware damage, software installation and connection issue. Different majors have different need of software and this is IT department duty to install software that is required in labs. For example IT department requests for Cryptool software, Dev C++ and Java where the Computer graphics requests for installation of Adobe Muse, Adobe CS5 Photoshop, Adobe Bridge, Adobe After effect and Maya. The IT department has to make sure that they satisfy the students and staff by completing the requests from them.

# Conclusion

Khawarizmi international college is an IT institute that was built in 1985. KIC faces different strategies and now it is one of the best colleges in the UAE which provides different academic majors to the students. Working in the IT department in the KIC was a good opportunity to improve the hardware, software, networking, management and customer service. In addition completing the tasks that was requested by this department improves the IT skills of the trainee and I am happy to be part of this department.

# **References**

https://www.dreamstime.com/royalty-free-stock-photos-hand-highlighting-information-technology-tags-female-light-blue-highlighter-words-tag-cloud-clear-glass-whiteboard-image40549318

http://satimis.com/

 $\underline{\text{http://depositphotos.com/35304701/stock-photo-information-technology-in-tag-}}_{\text{cloud.html}}$