

**INTERNSHIP REPORT ON COMPUTER NETWORK SYSTEM**

**BY**

**TASMIHA JANNAT  
ID: 172-15-10040**

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

**Shah Md. Tanvir Siddiquee**  
Assistant Professor-Department of CSE  
Department of CSE  
DaffodilInternational University



**DAFFODIL INTERNATIONAL UNIVERSITY**

**DHAKA, BANGLADESH**

**OCTOBER 2020**

## APPROVAL

This Project/internship titled “**Computer Network system**”, submitted by **Tasmiha Jannat**, ID No: **172-15-10040** to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on **07.10.2020**.

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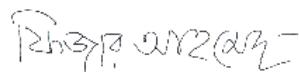


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Faculty of Science & Information Technology  
Daffodil International University

**Internal Examiner**



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Department of Computer Science and Engineering  
Jahangirnagar University

**External Examiner**

## DECLARATION

I hereby announce that, this internship report is prepared by me **Tasmiha Jannat (172-15-10040)** to the department of Computer Science and Engineering, Daffodil International University. Under the supervision of **Shah Md. Tanvir Siddiquee, Assistant Professor, Department of CSE**, Daffodil International University.

With full of respect I declare that this internship was about Networking. And this book title is “Computer network system” supervised by **Shah Md. Tanvir Siddiquee, Assistant Professor, Department of CSE**, Daffodil International University. I am so much thankful to my dear supervisor and so much pleased to him.

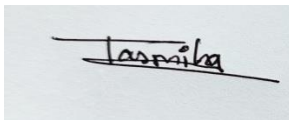
**Supervised by:**



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**Shah Md. Tanvir Siddiquee**  
**Assistant Professor**  
Department of CSE  
Daffodil International University

**Submitted by:**



---

**Tasmihajannat**  
**ID: 172-15-10040**  
Department of CSE  
Daffodil International University

## ACKNOWLEDGEMENT

First of all, I express my heartiest gratitude and gratefulness to Almighty **ALLAH** for his divine blessing which makes me possible to complete the final year internship. And special thanks to my parents for giving encouragement and invaluable assistance to me.

I would like to thank to my dear supervisor **Shah Md. Tanvir Siddiquee, Assistant professor, Department of CSE**. If he wasn't, I can't complete my internship book properly. Because I did thousands of mistakes on my internship book creation time. Every single step I instructed and correct my mistake by his help. For this reason, All the time he inspired and motivated me and follow up my report. I don't know how can I express my thankfulness to him. I am praying to **ALLAH** for his happiness and better future.

I would like to thank my Trainer, and whole organization who give me this opportunity to work with them and learn so many best things in my life. Also, I got others so many people who assisted me with lots of various information. I am really very grateful all of them who helped me unconditionally.

I also thankful my dear Prof. **Dr. Syed Akhter Hossain**(Head of the department of Computer science and engineering) for his important directions and so much kind.

And I also very much thankful to my whole classmates and friends for give me some information and support me mentally. I would like to thank our entire team mates who took part with me and discuss with me a lot of informative things.

Finally, I apologize all other unnamed who helped me in various ways to have a good training. I always keep your loves in my depth of heart.

## **ABSTRACT**

As a student of CSE,I have completed my internship at Infinity Dreams Bangladesh.The report is a requirement of the internship program for my Bachelor of Science course degree.An organization has a lot of gadget associated by correspondence joins.A hub can be a PC,Printer,monitor or other gadget fit for sending or potentially getting information produced by different hubs on the system.So I was able to experience in IT Department at Infinity Dreams Bangladesh. They are third party service provider Company in Bangladesh.They have many departments for giving supports in different types of departments. InmydepartmenthadISPSupportsandSoftwaresupports and hardware supports withlicensereneu,validation. So, I got a chance to done many types IT related works. Therewere ISP Clients management, reputed company's software managements etc. I learned about create ISP plan, online software purchase for multiple licenses, installation, troubleshooting and many more. Nowadays each and everything is depend on computer networking. Every kind of business and every work station is completely relying upon programming based correspondence and web technology based.

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# **CHAPTER 1**

## **Introduction**

### **1.1 Introduction**

Working on this project, gave me the opportunity to know the basic things that should be kept in mind while designing network for any organization, identifying the requirements, designing the topological structure for the organization, applying the access control method to limit the access to important parts of the organization etc. This book is the era of Networking and IT Support for a company. Day by day we are growing up with lots of modern facilities and our life is majorly based on Internet. For this reason, networking system is a popular section of the world. There are different kind of networks exists in the world. And they are exists under different kind of servers. And these servers are should be under maintenance. So, if anyone interested in this sector, they have to know about CCNA details first. CCNA has many parts. We have to select just one part to done our project and multiple tasks. It is surveyed that more than 1 million CCNA confirmations have been allowed since it was first moved in 1998. The CCNA assertion covers a far-reaching extent of frameworks organization thoughts. Today's market situation I want to build up my carrier in networking and I love to work with it. Now, I am confident that I am ready to meet any challenges and having an excellent carrier.

## **1.2.Motivations**

I am the student of CSE and from that purpose I want to gain knowledge about networking.I have complete my internship on networking.I was completed many credits under many valuable subjects in my BSC life. Now I need to know something visually and practically.The motivation of this internship basically come from the intention of learning about the work environment of IT firms and gaining knowledge of networking.Before joining this internship, I was just a beginner who wants to learn something. This internship will give me a bright carrier and an ideal opportunity to extend my carrier.

### **1.3. Internship objectives**

The essential objective of the internship is to make myself as professional, to see how to work professionally. How to manage a company network, now I know, how to communicate with colleagues, clients and others. I didn't know about working environment, but now I know about the work environment, how to behave with others, how to communicate, how to cooperate with others, which will be very helpful for my future career. By this internship, I developed my skill level. Now I know how to give supports and services. It includes profitable ability to like find out the duties, make solution to overcome a problem, responsibilities. This entry level position report covers the whole temporary job time and I have finished successfully all the communication skills, improve my technical skills, style and improvement. One important thing I can understand too, which is relationship between colleagues. They play an important role, they can help to understand many many things.

## **1.4 Introduction of company**

**Infinity Dreams Bangladesh** is a third-party service provider company. From 2012 they are working on this sector. They have available many services like Information technology sector, Web and Offline Software Department, Networking Department, Hardware department, Freelancers Department, Interior Design department. Services they are providing like:

### **IT Services**

- 1. Corporate Internet Solution**
- 2. IP calling.**
- 3. Security solution.**
- 4. Domain registration and webhosting.**
- 5. Website development.**
- 6. Open source application solution.**
- 7. Internet Service Provider**
- 8. Data Connectivity, Data center & Co-Location.**
- 9. Proxy & DNS Server solution, Mail Server Solution.**
- 10. Professional course and trainings.**
- 11. Troubleshooting.**
- 12. Hardware maintenance etc**

## 1.5 Report Layout :

The organization of my report is assorted by 5 chapter.

- In the chapter 1, I discuss about introduction,motivation,intershipobjectives,introduction to the company and report layout.
- In the chapter 2, I discuss about introduction of organization,product and market situation,target group,SWOTanalysis,organizational structure.
- In the chapter 3, I discuss about my daily task and activities,events and activities,project task and activities and challenges.
- In the chapter 4, I discuss about competencies earned,smart plan and reflection.
- In the chapter 5, I discuss about conclusion and my scope for further career.

## **CHAPTER 2**

### **Organization**

#### **2.1 Introduction:**

This organization is registered software development and it solutions company.they provide customized software development and maintainence,ITsevices,E-commerce services,ITconsultancy,IT training and mobile applications.

## **2.2 Product and market situation**

Today Market situation depends on modern and future industrial movements and so as to understand product values and situations every ought to investigate industrial supply discipline and fake buyer status. Every company has their own network system. The organizations reworking and implementing their behavior day by day. Infinity dreams Bangladesh has create the valuable market positions for their fair and fast with predictable cost and accounting. They conjointly do training on- Network system, software development , hardware maintainence, mobile application etc.

In the other countries, governmental and non-governmental agencies are collecting and achiving entertainment informations for the next generations. Cause they need to maintain their culture too.they collect public comments,opinion about movies and shows and then make a report about the survey.we also have to contribute and develop the archives for our next generations.

Bangladesh is now very technology based developed country.we have man powers,experttechnologist,hardware and software engineers. Our government is also trying to digitalized each and every sector. So that, entertainment and cultural sector should have to be developed very soon.

Currently Infinity dreams Bangladesh have smart variety of team members and consumer therefore it clearly shows that their market scenario is sweet enough to guide. They conjointly bring opportunity for the job seekers and others. They conjointly offer necessary coaching to the staffed joint organizations.



## **2.3 Target Group**

We provide most informative data. we store past, present and future entertainment in our data center. we archive data for our next generations. we develop and share our data in world wide web. so that, peoples from whole world can access our data center. we will become updated instantly. we are developing cross friendly software, so that, everyone get permission easily to access our database from any device. we ignored wrong information, so that, people can get a fresh and true information. Whole world updated constantly, so we will update our software, hardware, network and all the system constantly. And obviously we will provide a best training in our employee and who choose us for gain knowledge. we will setup a large data center one day, where we will have each and everything to related about information.

## **2.4 SWOT analysis**

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats, and so a SWOT Analysis is a technique for assessing these four aspects of your business. SWOT is a structured planning method that evaluates those four elements of a project or business venture. This is a method of analysis of the environment and the company's standing in it. Swot analysis is a strategic planning technique used to help a person or organization identify strengths, weaknesses, opportunities, and threats related to business competition or project planning.

SWOT analysis figure given below:

<b>STRENGTH</b>	<b>Weakness</b>	<b>Opportunities</b>	<b>Threats</b>
Suitable location	Instant financial crisis	Hihg speed internet Connectivity availability	Political instability
Strong technical knowledge	Communication sytem	We are making Large data center In our country	Global compititions
Good Working environment	High rent cost	Government has Positive view on developing digital bangladesh	Super market moving online deliveries

Figure 2.4.1: SWOT analysis

## 2.5 Organizational Structure

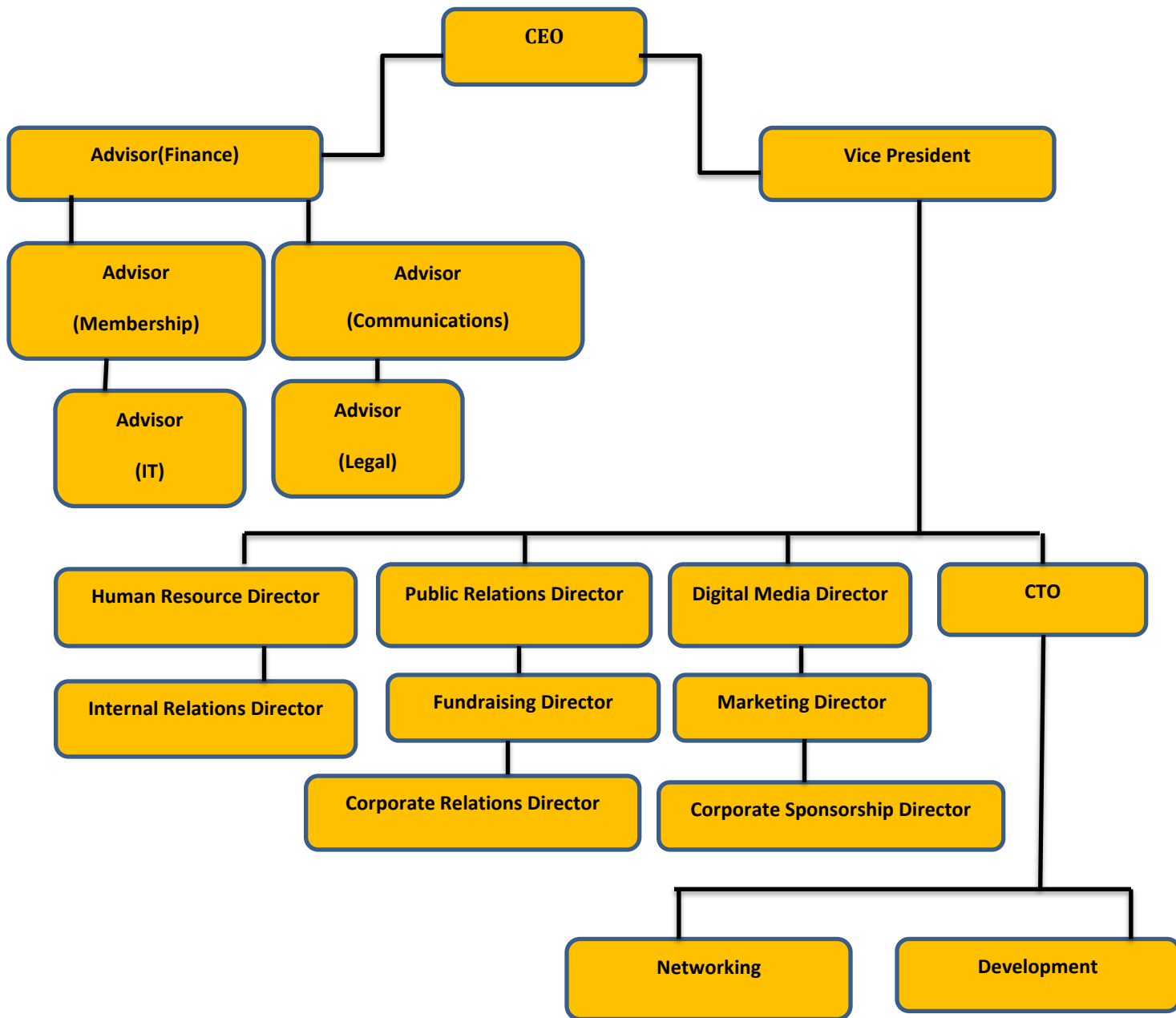


Figure 2.5.1: organizational structure of Infinity Dreams Bangladesh

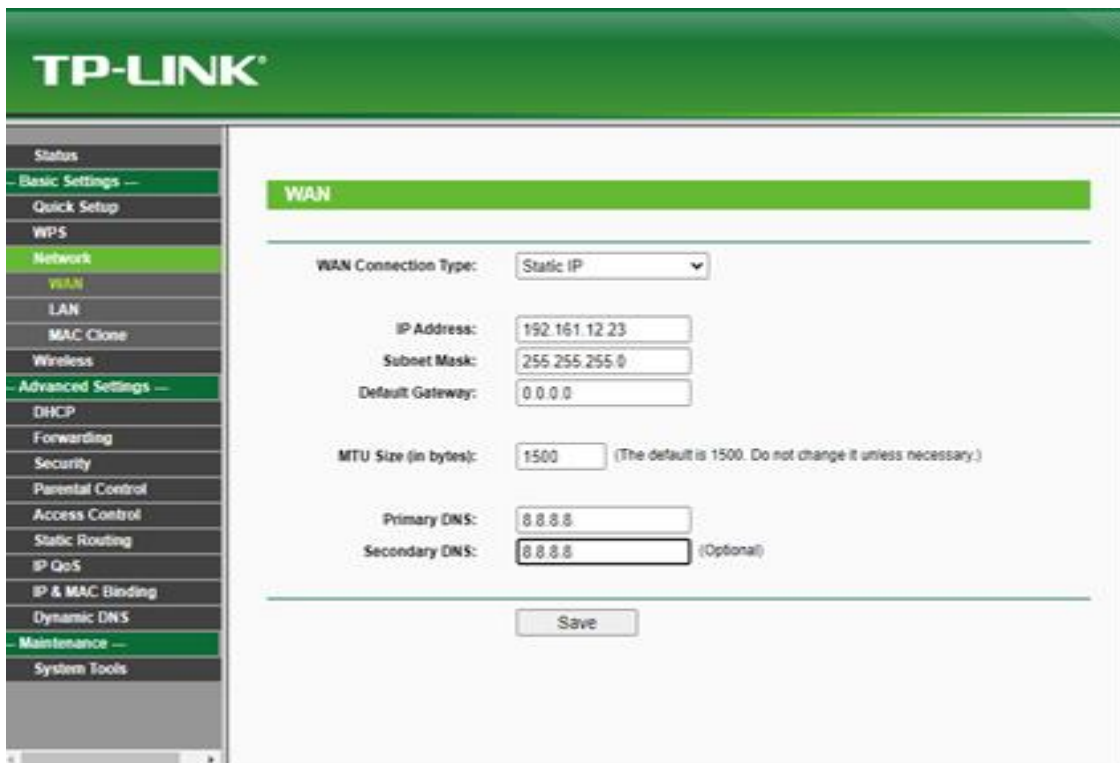
## CHAPTER 3

### Tasks, Projects and Activities

#### 3.1 Daily Task and Activities

First I was setup a pc, then setup router, then installed windows, then I installed some necessary software. Such as: Microsoft, avrokeyboard, antivirus installation, Printer configuration, winrar, shareit Team viewer, Virtual Machine for Experiment Troubleshoot. Ubuntu. also I handle some hardware related issues like check UPS, CPU, some troubleshoot problem.

#### Setup router via IP address:



The image shows the TP-LINK router configuration interface. The left sidebar contains a menu with options: Status, Basic Settings (selected), Quick Setup, WPS, Network, WAN (selected), LAN, MAC Clone, Wireless, Advanced Settings, DHCP, Forwarding, Security, Parental Control, Access Control, Static Routing, IP QoS, IP & MAC Binding, Dynamic DNS, Maintenance, and System Tools. The main content area is titled 'WAN' and displays the following configuration fields:

- WAN Connection Type: Static IP (dropdown menu)
- IP Address: 192.161.12.23
- Subnet Mask: 255.255.255.0
- Default Gateway: 0.0.0.0
- MTU Size (in bytes): 1500 (The default is 1500. Do not change it unless necessary.)
- Primary DNS: 8.8.8.8
- Secondary DNS: 8.8.8.8 (Optional)

A 'Save' button is located at the bottom of the configuration area.

Figure 3.1.1: Router Configure

### **3.2 Events and Activities**

By all this kind of activities, I can complete my internship successfully. The work environment is an evaluation of the monitoring and logically maintenance work to maintain information technology system. This internship helps me to learn about many kind of technology and working environment. That helped me to make myself well known with the IT management and other curriculum within the scheduled time. I have learned and played out accompanying work,

1. Discuss IP address with subnet.
2. Learning about Network components.
3. Network management system.
4. Learning about hardware system

### **3.3 Project task and activities**

I have a lot of achievement from infinity dreams Bangladesh.it was a beautiful journey with them. By working with them I can understand about working environment and necesarity about good communication with colleague.here is some of my activities-

1. Update network component inventory.
2. Help network team.
3. Help hardware team.
4. Create summury report.
5. Update some existing report.
6. Install important software

## Linux Operating System UBUNTU Install and run for Troubleshooting Network:

1. open virtual machine

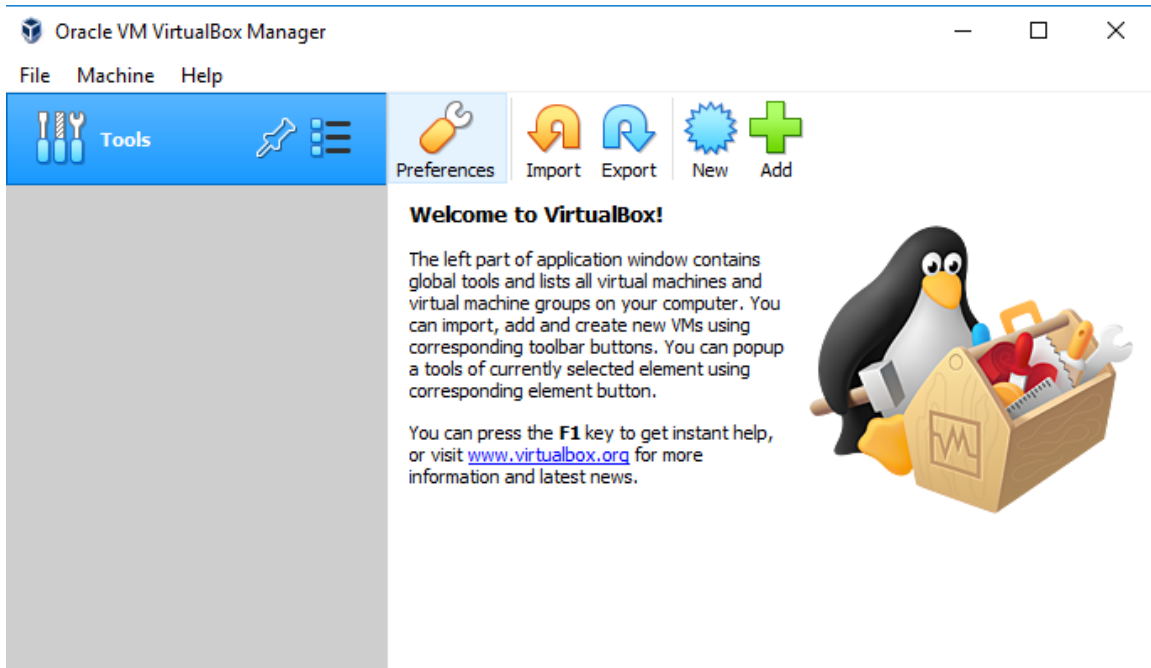


Figure 3.3.1: Virtual Machine Setup



## 2. install Ubuntu

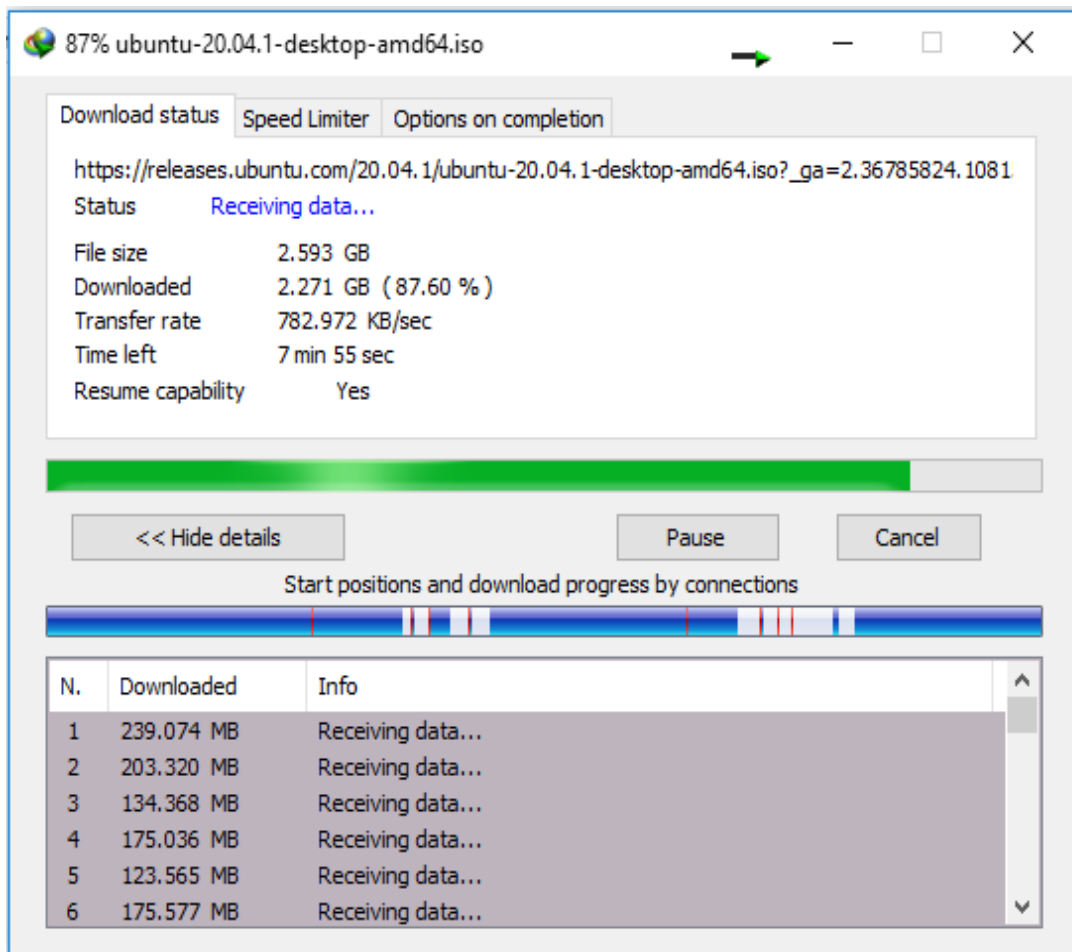


Figure 3.3.2:Ubuntu installation process

### 3.open virtual box

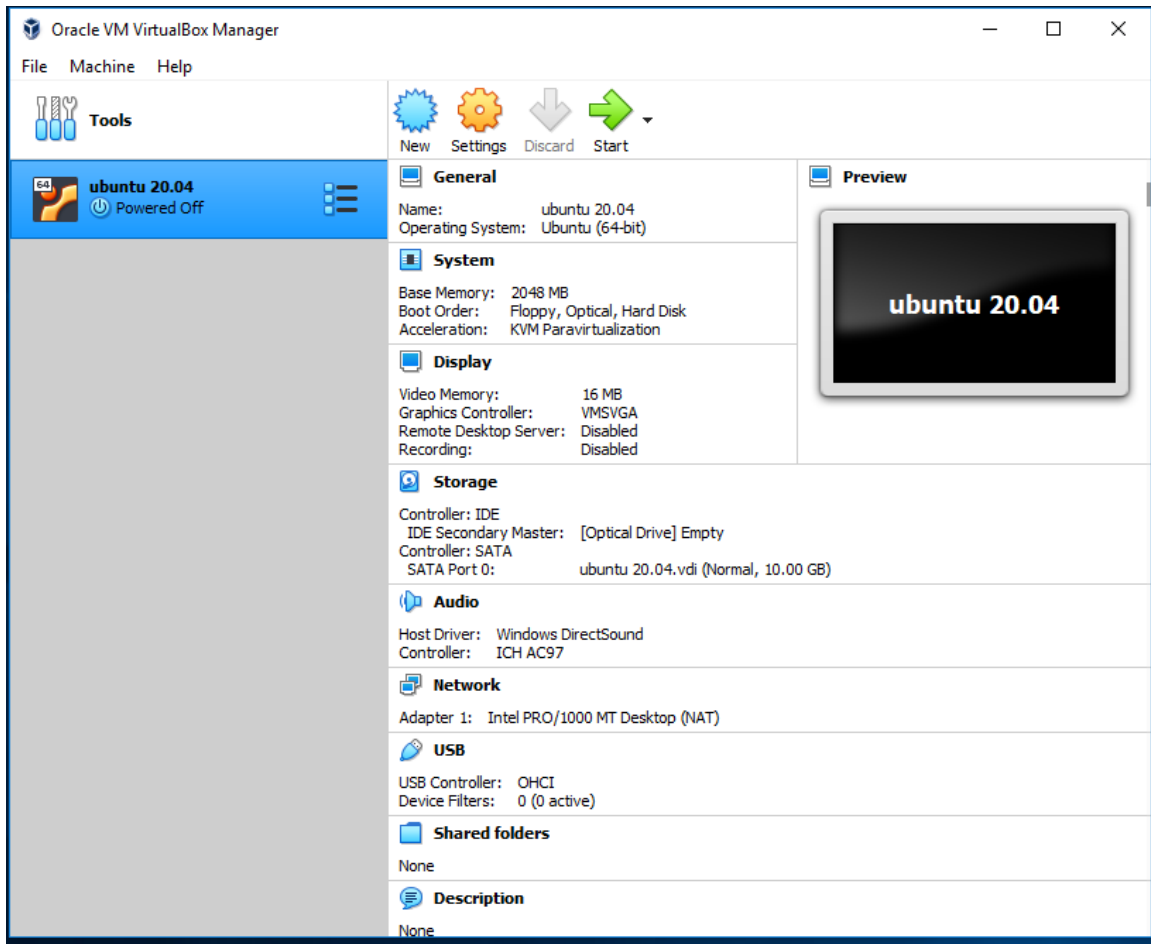


Figure3.3.3 virtual box settings

4.Add UBUNTU ISO in this system for compile and run in emulator:

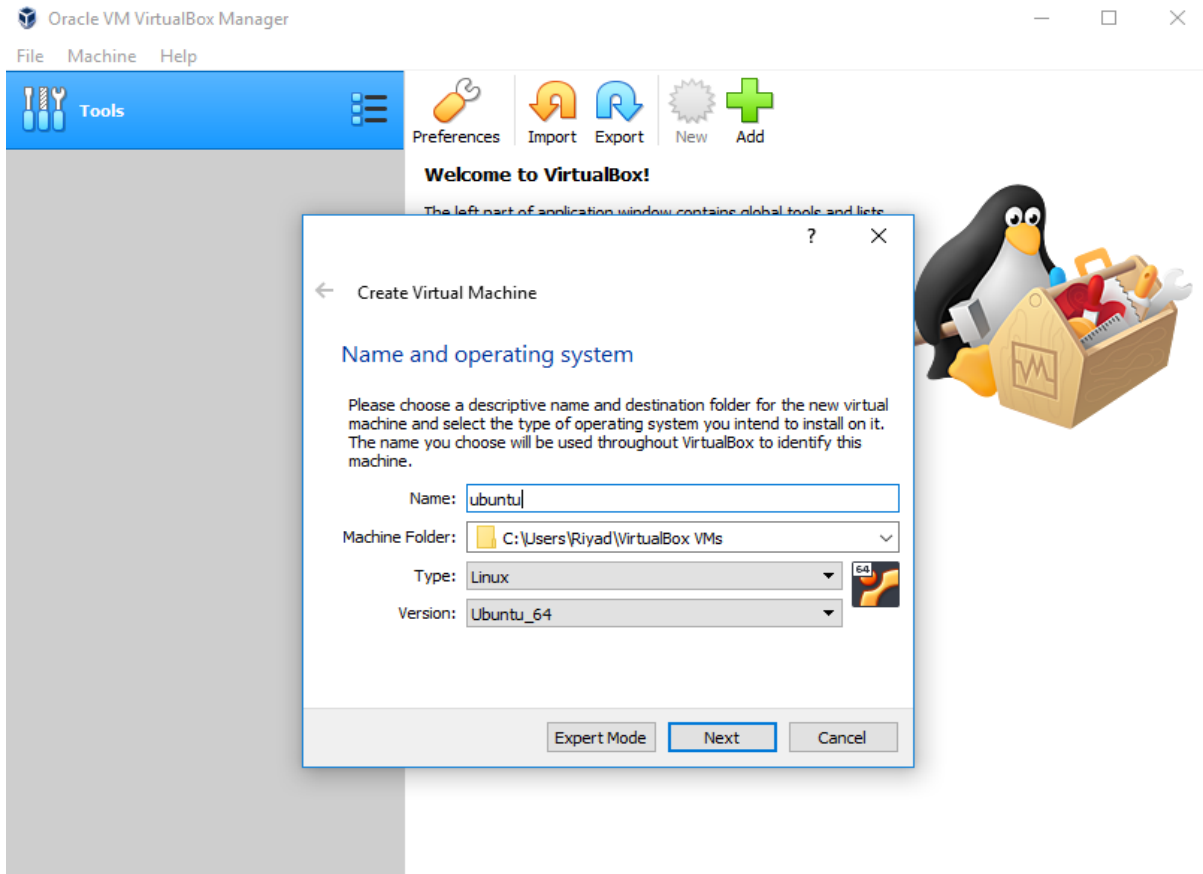


Figure3.3.4: Ubuntu setup process

## 5.now run and setup Ubuntu operating system

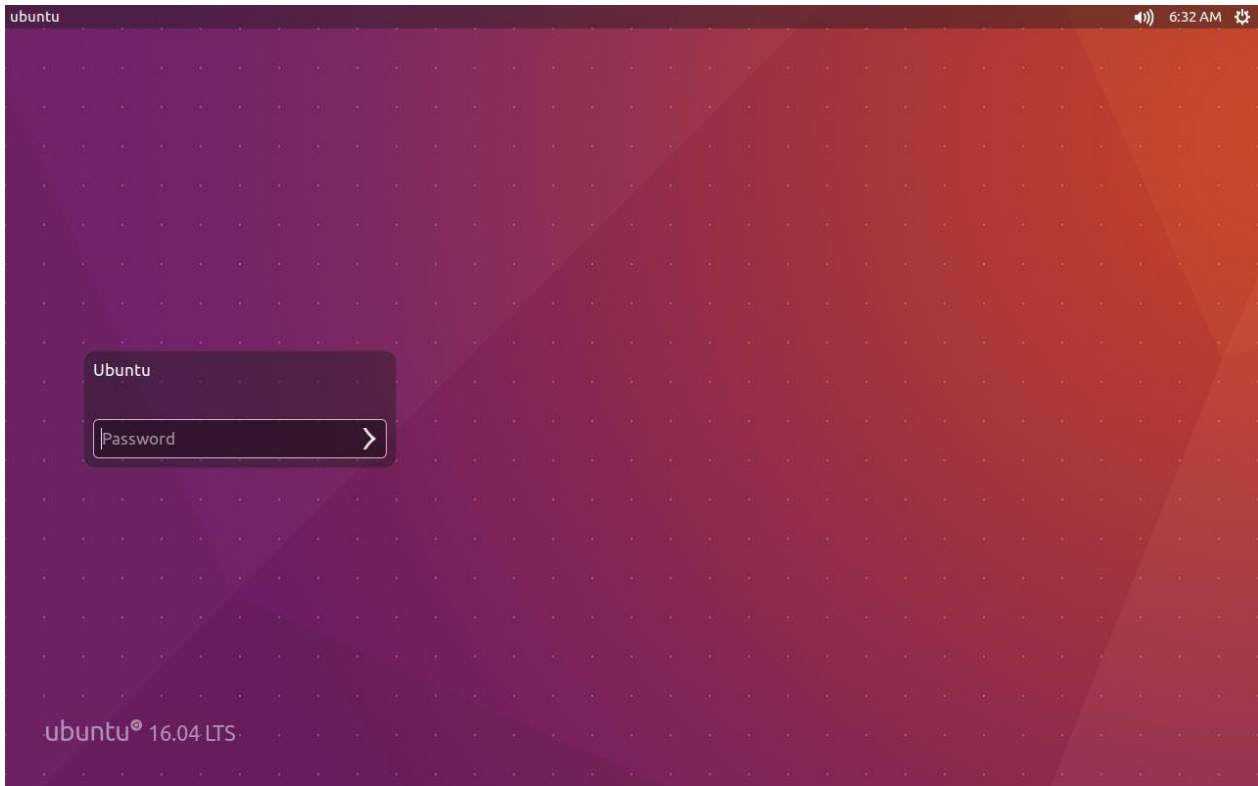


Figure3.3.5: Ubuntu login screen

## 6. login to Ubuntu secure screen

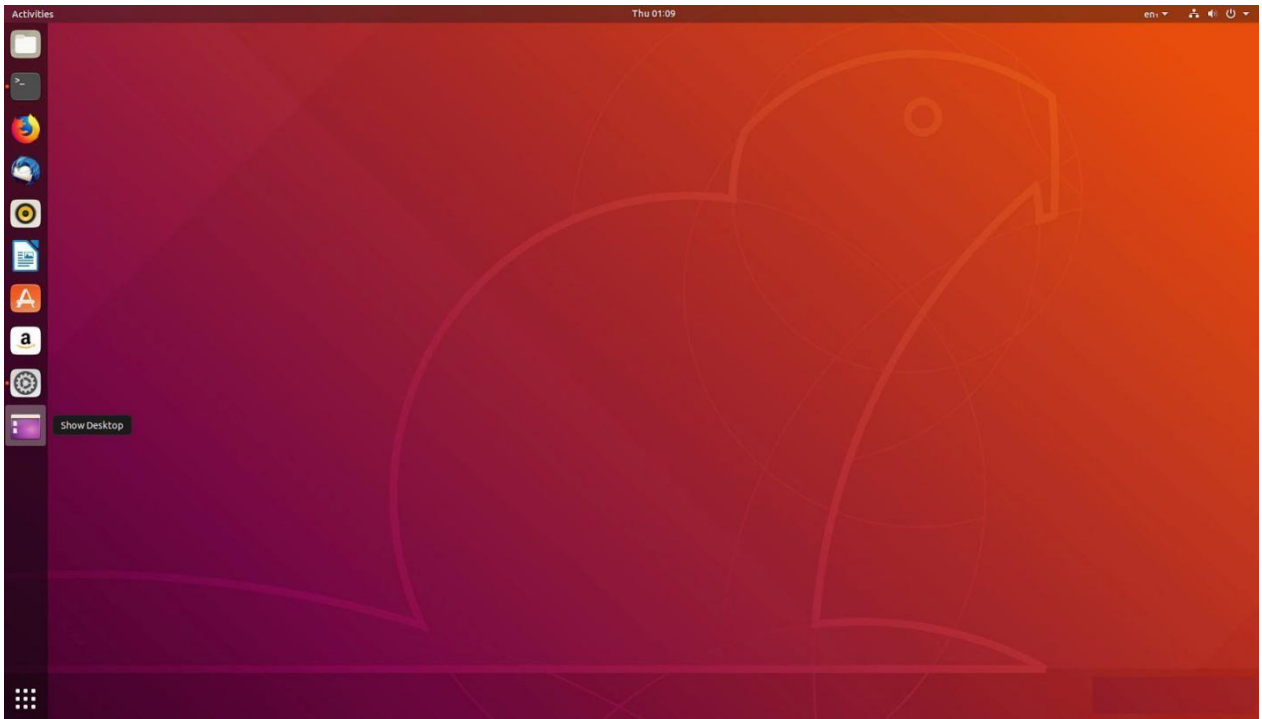


Figure3.3.6: Ubuntu desktop

**3.3.7** Inintership period I had to this type of work which is assigned by the authority-

**Problem identification:**

- # Computer starting problem
- # Display power can notreceived by the monitor
- # Computer takes a lot of time to boot
- # Computer making problem to shutdown
- # Driver installation problem
- # Printer does not working
- # Mouse not moving at all
- # PC restarting
- # Operating system is not working.
- # Utility software is not working.

**Problem solutions:**

- # If RAM is week then PC can be restarted. So need to replace or increase RAM.
- # If RAM is not working for that reason display not getting. So need to clean dust from RAM and reset the RAM in slot. Or need to replace RAM.
- # Virus affected & RAM do not work properly
- # Driver CD/DVD is damaged or do not matching with the relative computer
- # Printer's tonner, Telephlon damaged & need to repair or replace it.
- # Mouse sensor don not work properly
- # Operating system crashed so new operating system should be installed.
- # Need to reinstall the windows.
- # Need to uninstall then install again.
- # Need to use updated antivirus and clean the PC etc.

### **3.4 Challenges**

Working with computer network system is not easy task,because it appears with a lot of challenges and works.there is many kind of difficulties,because everything is depened on networking. We have to find error and slolvingerror,but finding error and solving error is another fun for me. It may make more courageous to holding another task and ready to the next challenge.

## **Chapter 4**

### **Competencies and smart plan**

#### **4.1:Competencies Earned**

Nowadays computer market depended on quality. To increase higher achievement, you have to win capabilities. By chance if anybody gives system and observing data yet their data is not responded enough, that means they have not enough skill about this division. so you need to hold your situation in the system administration advertise. At that point you should need to increase high possibility else you will lost your incentive on the system administration showcase. For earned incredible abilities one needs to become familiar with some fundamental and specialized level work that bring them achievement. And one more important thing that is communication, this communication can be with employee, colleague, with other organization, with customer ,buyer, with others.

#### **4.2.Smart Plan**

Always I follow smart plan, which is make my work more easy. but it is critical to monitoring terminals all the time, if you want to performance better. check out many devices and many smart technology for unique screen resolution and ideas. Release or gain idea in a unique way.

#### **4.3.Reflection**

My future plan is to be an excellent network system developer. So in this company I get an excellent chance to gain knowledge about networking system. it was the best opportunity to me. If I want to be successful, I must have my own portfolio, which is reflection on my work. It helps to show my merit and creativity in front of my client. I have to create something outstanding for my country. for faster work, I must learn more about technology and others.



## **Chapter 5**

### **Conclusion And Future Career**

#### **5.1: Discussion and conclusion**

I have learned a lot and experience many important things from my internship. During this internship I learn to make report and manage the tipmeline was the most important topic. I gain knowledge about professional environment. I can say easily that, this internship motivate me, encourage me a lot which will help me to my career. I have got to learn and got opportunity to implement my knowledge and it helped me to increase my working knowledge on IT based company. My company gives me such an excellent scope to learn and discover my potential. I am so much grateful to them.

#### **5.2. Scope for further career**

This internship knowledge will help me to utilize my further career. Its provide me a very clear and good concept about practical and simentic knowledge about network based system. Finding a great work can be a real challenge,

- Good communication.
- Work in ISP based company.
- Work at as a network engineer.
- Work as a network monitoring concern.
- Ability to team work.
- Data and information collection.
- Work with a network company.
- Work at as an IT supervisor.
- To be a successful engineer.

## References:

[1] Learn about VirtualBox. Available at : <https://www.virtualbox.org/wiki/Documentation> last access date: 01.09.2020,11.00am

[2] Learn about Ubuntu Server. Available at: <https://ubuntu.com/download/server> last access date: 04.09.2020,12.00pm

[3] learn about basic networking, Available

at: [https://www.google.com/search?sxsrf=ALeKk02vN2m5v7PjAs7LcuGra1OfNKg\\_hg:1600849144643&q=basic+networking+fundamentals&sa=X&ved=2ahUKEwjZ0Ovk6\\_7rAhVNfH0KHZPNCqIQ1QIoAnoECA0QAw&biw=1366&bih=657](https://www.google.com/search?sxsrf=ALeKk02vN2m5v7PjAs7LcuGra1OfNKg_hg:1600849144643&q=basic+networking+fundamentals&sa=X&ved=2ahUKEwjZ0Ovk6_7rAhVNfH0KHZPNCqIQ1QIoAnoECA0QAw&biw=1366&bih=657) last access date: 08.09.2020,03.00pm

[4] Learn about Ubuntu/Linux Terminal. Available at:

<https://help.ubuntu.com/community/UsingTheTerminal> last access date: 15.09.2020,08.00pm

**Google site link-** <https://sites.google.com/diu.edu.bd/final-defense-tasmiha15-10040/home>

## Appendices

### Appendix A:

#### Internship reflection

The main purpose of my practice in the expert environment is the specific answer to the certification topic, which is the knowledge that is applied in the classroom. I am a live demonstration of clients, experts and experienced leaders, as well as representatives of various representatives who benefit from an understanding of behavior and increased links. In order to meet my internship requirements, I practiced legal business practices. They are the central goal/vision of informed connections, how to communicate with partners, how to control, how to organize, how to choose, how to understand the lifestyle of the expert union and the level of responsibility and contribution to the union

### Appendix B:

#### Company detail

Name	<b>Infinity Dreams Bangladesh</b>
Address	<b>Solimullah Road, Mohammadur, Dhaka-1212</b>
Telephone	<b>+880 1756-111 441</b>
Fax	<b>+88027710413</b>
Email	<a href="mailto:ifdbd@gmail.com"><u>ifdbd@gmail.com</u></a>
Website	<a href="http://www.infinitydreamsbd.com"><u>www.infinitydreamsbd.com</u></a> <a href="http://www.ashabtech.com"><u>www.ashabtech.com</u></a>
Type of Organization	<b>(Software Firm and Third-Party IT Support Provider)</b>

## Plagiarism Report

### Internship

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