

**Assignment Cover Sheet**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Qualification** |  | **Module Number and Title** |  |  |
|  |  |  |  |  |
| Higher National Diploma in Computing & | | SEC4101 - Fundamentals in Computer Systems | |  |
| Software Engineering |  |  |  |  |
| **Student Name & No.** | | **Assessor** |  |  |
|  |  |  |  |  |
| Azlan Raban NG/HNDCSE/24/04 |  | **Mr. Dhanusha Somawardhana** | |  |
|  |  |  | |  |
| **Hand out date** |  | **Submission Date** |  |  |
|  |  |  |  |  |
| **29/11/2019** |  | **02/02/2020** |  |  |
|  |  |  | |  |
| **Assessment type** | **Duration/Length of** | **Weighting of Assessment** | |  |
|  | **Assessment Type** | 70% |  |  |
| Assignment | Two Weeks |  |  |
|  |  |  |
|  |  |  |  |  |

**Learner declaration**

I, Azlan Raban NG/HNDCSE/24/04

certify that the work submitted for this assignment is my own and research sources are fully acknowledged.

**Marks Awarded**

First assessor

IV marks

Agreed grade

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Signature of the assessor | Date |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

1

**FEEDBACK FORM**

**INTERNATIONAL COLLEGE OF BUSINESS & TECHNOLOGY**

**Module:** Fundamentals in Computer Systems

**Student:**

**Assessor:**

**Assignment:** Netwrix Software Developing Company

**Strong features of your work:**

**Areas for improvement:**

**Marks Awarded:**

2

**Assignment**



**earning outcomes covered**

LO 1 Understand the environment of computer systems.

LO 2 Understand hardware and software components of a computer system.

LO 3 Be able to recommend a suitable computer system for a specific requirement.

**Scenario and Tasks**

**Netwrix** is software developing company which is located in Colombo. They are planning to open

a new branch in Kandy. Their business activities will be started within six months’ time. In future

they are planning to develop websites as well.

|  |  |  |  |
| --- | --- | --- | --- |
| **1.** | **Branch Manager** | **02** | **(01 PC & 01 LAPTOP)** |
| **2.** | **programmers** | **10** |  |
| **3.** | **Front office** | **05** |  |
| **4.** | **Project manager** | **01** |  |
| **5.** | **IT administrator** | **05** | **( 3 PC’s for the servers )** |
| **6.** | **Finance Department** | **03** |  |
| **7.** | **Coordinators** | **03** |  |

Assume that you are the newly appointed IT executive of “**NETWRIX**” and it is your responsibility to provide system specification for the organization considering the roles and responsibility of the employees.

3

**Tasks**

1. Recommend the suitable, peripheral components, software and hardware components for Netwrix Software Developing Company with relevant examples. **(25 Marks)**
2. Produce system design specifications to meet the user needs of each functional area while considering different types of computer systems. **(30 Marks)**
3. Develop a health and safety policy for computer users in this Netwrix Software Developing Company and discuss the adaptability. **(20 Marks)**
4. Provide a well-structured document with evidence of time management. **(25 Marks)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **This submission will be assessed as follows** | **Total** | **marks** | **Marks** | **obtained** | **by the** |
|  | **Allocated** |  | **student** | **for the** | **answer** |
|  |  |  | **provided** | |  |
|  |  |  |  |  |  |
| TASK 1 | 25 |  |  |  |  |
| For input peripherals 10 |  |  |  |  |  |
| For output peripheral 10 |  |  |  |  |  |
| For software and hardware 05 |  |  |  |  |  |
|  |  |  |  |  |  |
| TASK 2 | 30 |  |  |  |  |
| For a client pc specification 10 |  |  |  |  |  |
| For a server computer specification 10 |  |  |  |  |  |
| Suitable operating systems 10 |  |  |  |  |  |
|  |  |  |  |  |  |
| TASK 3 | 20 |  |  |  |  |
| For suitable health and safety polices.10 |  |  |  |  |  |
| For implement suitable polices with adaptability.10 |  |  |  |  |  |
| TASK 4 | 25 |  |  |  |  |
| As an evidence of time management should be on |  |  |  |  |  |
| time submission and attached a Gantt chart.10 |  |  |  |  |  |
| For proper document standards 10 |  |  |  |  |  |
| For proper Harvard references 5 |  |  |  |  |  |
| **Total Marks** | **100** |  |  |  |  |
|  |  |  |  |  |  |

4

**Assessment Criteria**

**Task (1) contains 25 marks.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | **Marks** | **Marks obtained** |  |
| **Criteria** |  |  |  | **by the student** |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  | **Out of 25** | **for the answer** |  |
|  |  |  |  | **provided** |  |
|  |  |  |  |  |  |
| **Fail** |  |  |  |  |  |  |
|  | Identification of some input devices | |  | **0-5** |  |  |
|  |  |  |  |
|  Identification of some output devices | | |  |  |  |  |
| **Pass** |  |  |  |  |  |  |
|  Identification of some input devices | | |  |  |  |  |
|  | Identification of some output devices | |  | **6-11** |  |  |
|  Identification | | of some software and | hardware |  |  |  |
|  | components |  |  |  |  |  |
| **Good** |  |  |  |  |  |  |
|  | Identification of correct input devices with | | |  |  |  |
|  | relevant examples. | |  |  |  |  |
|  | Identification of correct output devices with | | | **12-18** |  |  |
|  | relevant examples. | |  |  |  |  |
|  Identification | | of software and | hardware |  |  |  |
|  | components with relevant examples. | |  |  |  |  |
|  |  |  |  |  |  |  |
| **Excellent** |  |  |  |  |  |  |

* Identification and recommendation of correct input devices with relevant examples.
* Identification and recommendation of correct **19-25** output devices with relevant examples.
* Identification and recommendation of software and hardware components with relevant examples.

5

**Task (2) contains 30 marks.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Marks** | **Marks obtained** |  |
| **Criteria** |  | **by the student** |  |
|  |  |
|  | **Out of 30** | **for the answer** |  |
|  | **provided** |  |
|  |  |  |
| **Fail** |  |  |  |
|  Produce a specification only for a client or | **0-7** |  |  |
| server computer. |  |  |
|  |  |  |

**Pass**

* Produce specifications for client and server **8-15** computer systems.

**Good**

* Produce specifications for client and server

|  |  |
| --- | --- |
| computer systems. | **16-22** |

* Recommendation of suitable operating systems.

**Excellent**

* Produce specifications for client and server

|  |  |
| --- | --- |
| computer systems with proper justification. | **23-30** |

* Recommending and justifying suitable operating systems.

6

**Task (3) contains 20 marks.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Marks** | **Marks obtained** |  |
| **Criteria** |  | **by the student** |  |
|  |  |
|  | **Out of 20** | **for the answer** |  |
|  | **provided** |  |
|  |  |  |
| **Fail** |  |  |  |
|  Produce few health and safety policies. | **0-5** |  |  |
|  |  |  |  |
| **Pass** | **6-9** |  |  |
|  Produce proper health and safety policies. |  |  |
|  |  |  |  |
| **Good** |  |  |  |
|  Produce appropriate health and safety policies | **10-14** |  |  |
| and discuss the adaptability. |  |  |
|  |  |  |
|  |  |  |  |
| **Excellent** |  |  |  |

* Produce appropriate health and safety policies

|  |  |
| --- | --- |
| and discuss the adaptability. | **15-20** |

* Identify possible risk for employee’s health and safety.

7

**Task (4) contains 25 marks.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Marks** | **Marks obtained** |  |
| **Criteria** |  |  | **by the student** |  |
|  |  |  |
|  |  | **Out of 25** | **for the answer** |  |
|  |  | **provided** |  |
|  |  |  |  |
| **Fail** |  |  |  |  |
|  | Poor standard of documentation with poor | **0-5** |  |  |
|  | explanations |  |  |  |
|  |  |  |  |  |
| **Pass** |  |  |  |  |
|  | Acceptable standard of documentation with poor | **6-11** |  |  |
|  | explanations |  |  |  |
| **Good** |  |  |  |  |
|  High standard of documentation with screen | | **12-18** |  |  |
|  | shots & average explanations |  |  |
|  |  |  |  |
|  |  |  |  |  |
| **Excellent** |  |  |  |  |
|  | Professional standard of documentation with |  |  |  |
|  | screen shots & good explanation. | **19-25** |  |  |
|  | Harvard Referencing System is used for |  |  |
|  |  |  |
|  | Referencing and in-text citation. |  |  |  |
|  | Proper Gantt chart.. |  |  |  |
|  |  |  |  |  |

**Submission Guidelines**

|  |  |  |
| --- | --- | --- |
|  | Submission format | Report |
|  | Paper Size: | A4 |
|  | Words: | 3000 words |
|  | Printing Margins: | LHS; RHS: 1 Inch |

* Header and Footer: 1 Inch

|  |  |  |
| --- | --- | --- |
|  | Basic Font Size: | 12 |
|  | Line Spacing: | 1.5 |
|  | Font Style: | Times New Roman |

* **Referencing should be done strictly using Harvard system**

1. Branch manager

PC - Hardware

Intel core i5

8GB RAM

1TB hard drive

24-inch Display Monitor

Wireless mouse

Speakers

Keyboard

Headphones

High performance PC with high RAM for better work efficiency. For management of employee information and payment details, high storage. Wireless mouse for portability. External hardware for a better communication network.

Software

Windows 10

MS office full package

Virus guard Kaspersky

Firefox

Adobe

Skype

VLC Media player

MS SQL Server

For better performance and versatility, Windows 10 and MS Office full package. Kaspersky Anti-Virus for best security. Firefox for its Internet customization functions. Other Software for their well performance. SQL for anytime access extra storage facilities.

Laptop – Hardware

Intel core i5

8GB RAM

256GB Storage

Wireless mouse

Software

Same software as PC for a more portable use.

2. Programmers

-Hardware

Intel core i7

16GB RAM

256GB SSD

24-inch Display Monitor

Wired mouse

Speaker

Keyboard

Headphones

To maximize the processing power and guarantee speed Intel core i7, 16GB RAM with 256GB SSD. 24-inch Display (20 inches wide and 12 inches tall) for better screen space. Wired mouse to avoid misplacement. Speaker, Keyboard and headphones for the finer details and communication.

-Software

Windows 10

MS Office Full Package

Virus Guard Kaspersky

Firefox

Adobe

Skype

Photoshop

MS Visual studio

NetBeans

Brackets

Notepad

Jenkins

UltraEdit

SQL Server

For the best performance, versatility and security, Windows 10, MS Office full package and Anti-Virus Kaspersky. Firefox for its wide array of internet customization options. Skype for face to face communication. Other software for the use of programming languages. SQL for anywhere access and storage operations.

3. Front Office

-Hardware

Intel Core i5

8GB RAM

1TB Hard Drive

22-inch Display Monitor

Wired Mouse

Keyboard

Headphones

To have good work efficiency and processing speed, Core i5 and 8GB RAM. To hold detailed reports and other information 1TB hard Drive. 22-inch display (18 inches wide and 10 inches tall) for an acceptable screen space. Other hardware for easier use of computer.

-Software

Windows 8

MS Office full package

Virus guard Kaspersky

Chrome

Adobe

VLC Media player

For acceptable performance, windows 8. MS Office full package for best work output. Anti-Virus Kaspersky for best security. Chrome for strict internet access. Other software for utility.

4. Project Manager

-Hardware

Intel core i7

8GB RAM

1TB Hard Drive

24-inch Display Monitor

Printer

Wired Mouse

Keyboard

Headphone

Intel core i7 and 8GB RAM for the best processing speed and performance. High storage for files and other applications, 1TB Hard Drive. 24-inch Display for best screen space. Printer for hard copy of files to be distributed or management. Other hardware for maximum use of computer.

-Software

Windows 10

MS Office Full Package

Virus Guard Kaspersky

Firefox or Chrome

Adobe

VLC Media Player

Workzone

ProofHub

Scoro

Windows 10 for best outputs and performance. For convenience and management uses MS Office Full Package. Anti-Virus Kaspersky for best security. If customization is to be added, Firefox, if not, Chrome. Other software for management purposes and utility. Other special software for management.

5. IT Administrator

-Hardware

Intel Core i7

8GB RAM

1TB Hard Drive

24-inch Display Monitor

Printer

Wired mouse

Keyboard

Headphones

For efficient performance Core i7 with 8GB RAM. To store client details, server details, Network details and other files 1TB Hard drive. 24-inch display for better visibility and screen space. Printer for hard copies of documents or other. Other hardware to fully function the computer.

Software

Windows 10

MS Office Full Package

Virus Guard Kaspersky

Firefox or Chrome

Adobe

VLC Media player

WireShark

Microsoft message analyzer

Clonezilla

Notepad

Windows 10 for the best experience and performance. MS Office full package for documenting, reading or analyzing. Best security Anti-virus Kaspersky. For customized internet Firefox. Normal internet access chrome. Adobe and VLC for their respective application. And other IT administration software.

6. Finance department

-Hardware

Intel core i5

8GB RAM

1TB hard drive

22-inch Display Monitor

Wired mouse

Keyboard

Headphone

Intel core i5 for its fast processing speed with 8GB RAM. For storage function and better access 1TB hard drive. For acceptable screen space 22-inch display Monitor. Wired mouse to avoid misplacement. Other hardware for their own applications.

Software

Windows 8

MS Office Full Package

Virus guard Kaspersky

Chrome

Oracle

Mint

Quicken

Windows 8 for good performance and MS office full package for its versatile use. For best security Kaspersky. Chrome for internet access. And other special software for better financial management.

7. Coordinator

-Hardware

Intel core i5

8GB RAM

256GB SSD

22-inch Display Monitor

Wired mouse

Keyboard

Headphone

Intel core i5 with 8GB RAM and 256GB SSD for fast, accurate and information and storage.

22-inch display for better screen space and view. Wired mouse and keyboard to avoid misplacement. Headphones for communication purposes.

Software

Windows 8

MS Office full package

Virus guard Kaspersky

Chrome

Skype

Adobe

VLC Media Player

Windows 8 for performance and MS Office package for activity scheduling and management works. Virus guard Kaspersky for best security options. Chrome for internet access and Skype for face-time communication. Adobe and VLC For respective applications.