

TLE – ICT - CSS QUARTER 2

Week 6



Introductory Message

MODULE 4-Q2 GRADE 9

WELCOME TO THE WORLD OF COMPUTER SYSTEM SERVICING

This module covers the two of seven (7) common competencies in Computer System Servicing which will lead you to acquire a National Certificate Level II (NC II). It contains information and suggested learning activities for you to complete. Completion of this module will help you better understand the succeeding module on setting up computer networks.

This module consists of two (2) lessons and (6) six learning outcomes. Each lesson and learning outcome contains other sub-learning outcome and learning activities supported by each instruction sheets. Before you perform the activities read the information in What's New and What is It, to ascertain yourself and your teacher that you have acquired the knowledge necessary to perform the skill required of the particular learning outcome.

The specific competency covered in this module and their schedule of recitation are as follows:

LESSON 3: PERFORMING MENSURATION AND CALCULATION (PMC)

- LO 1. Select measuring instruments
- LO 2. Carry out measurements and calculations
- LO 3. Maintain measuring instruments

LESSON 4: PREPARING AND INTERPRETING TECHNICAL DRAWING (PITD)

- LO 1. Identify different kinds of technical drawings
- LO 2. Interpret technical drawings
- LO 3. Prepare/make changes to electrical/electronic schematics and drawing

Lesson

4

Performing Mensuration and Calculation



What I Need to Know

Learning Competency: Lesson 4: Preparing and Interpreting Technical Drawing

Learning Outcomes: LO 2. Interpret technical drawings

Learning Objectives:

This module contains unit of competency on “PREPARING AND INTERPRETING TECHNICAL DRAWING (PITD)”. This covers the knowledge, skills, attitudes, and values needed in preparing and interpreting technical drawing. At the end of this module, you are expected to:

1. Recognize the elements of flowchart; and

Identify and interpret symbols used in the drawing.

In the previous lesson, you have learned the different types of technical drawing. Before you proceed to our new topic, let us recall different types of technical drawing.



What's In

Directions: List down at least (3) three different types of technical drawing.

1. _____
2. _____
3. _____




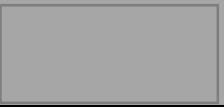
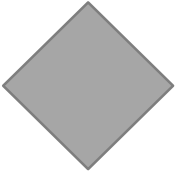
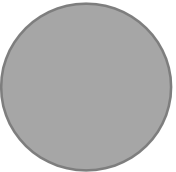




What is It


In this module, you will learn more about the elements of flowchart and right symbols to be used in creating a flowchart.

Flowcharts can provide a step-by-step diagram for mapping out complex situations such as programming code or troubleshooting problems with a computer.

BASIC FLOWCHART SYMBOLS

The symbols that are commonly used in flowcharts have specific meanings and are connected by arrows indicating the flow from one step to another.

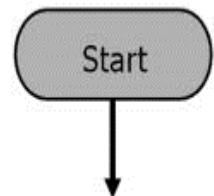
Elements	Symbol Name and Purpose	Symbols
Terminator	1. Start/Stop - ovals indicate both the starting point and the ending point of the process steps.	
Process	2. Process - a box represents an individual step or activity in the process.	
Decision	3. Decision - a diamond shows a decision point, such as yes/no or go/no-go. Each path emerging from the diamond must be labeled with one of the possible answers.	
Connector	4. Connector - a circle indicates that a particular step is connected to another page or part of the flowchart. A letter placed in the circle clarifies the continuation.	
Sub-process	5. Sub-process - is represented by a rectangle with double lines on each side. A sub-process is a major process that could be broken up into simpler processes developed into another flowchart.	
	6. Input/Output – a parallelogram represents input/output. It represents material or information entering or leaving the process such as customer order (input) or a product (output).	
Arrow Lines	7. Arrow Lines - arrow lines drawn in one direction, preferably from top to bottom, keep a flowchart clear. Avoid arrow lines that loop because this could indicate redundancy in the business process.	
	8. Delay - indicates a delay in the process. For example "Wait 1 day"	

	9. Triangle - a triangle shows where an in-process measurement occurs.	
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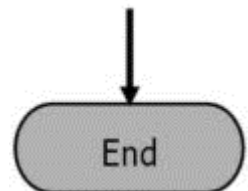
When drawing a flowchart, every stage should be listed out in a logical order.

The flowchart should be clear, neat, and easy to follow. There should not be any room for misunderstanding or ambiguity.

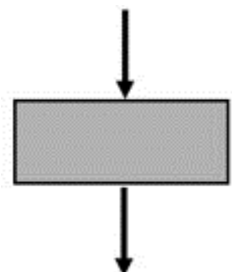
Only one flow line is used with a terminal symbol. When starting your flowchart, the flow line leaves the terminal symbol.



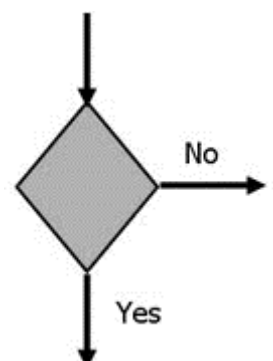
When completing your flow chart, the flow line enters the terminal symbol.



Only one flow line should come out from a process symbol.



Only one flow line should enter a decision symbol but two or three flow lines may leave it depending on the options that can be chosen.



References

“Flowchart” www.computerhope.com, last modified October 11, 2017,
<https://www.computerhope.com/jargon/f/flowchar.htm>

Ronaldo V. Ramilo and Deover M. Pasco, Computer Hardware Servicing K to 12
Learning Module Exploratory (for Grade 7 & 8) p.49-62
http://www.depedbataan.com/resources/9/k_to_12_pc_hardware_servicing_learning_module.pdf

Flowchart, p.6-8 https://saferpak.com/flowchart_articles/howto_flowchart.pdf