Computer Systems Servicing

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Quarter 1 – Module 13: Basic-input-output-system (BIOS) configuration
           procedures

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Computer Systems Servicing

Self-Learning Module 13

Basic-input-output-system (BIOS) configuration procedures

Introductory Message

For the Facilitator:

Welcome to the **Computer Systems Servicing** Self-Learning Module on **Basic-input-output-system (BIOS) configuration procedures!**

This Self-Learning Module was collaboratively designed, developed and reviewed by educators from the Schools Division Office of Pasig City headed by its Officer-in-Charge Schools Division Superintendent, Ma. Evalou Concepcion A. Agustin, in partnership with the City Government of Pasig through its mayor, Honorable Victor Ma. Regis N. Sotto. The writers utilized the standards set by the K to 12 Curriculum using the Most Essential Learning Competencies (MELC) in developing this instructional resource.

This learning material hopes to engage the learners in guided and independent learning activities at their own pace and time. Further, this also aims to help learners acquire the needed 21st century skills especially the 5 Cs, namely: Communication, Collaboration, Creativity, Critical Thinking, and Character while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:

Notes to the Teacher

This contains helpful tips or strategies that will help you in guiding the learners.

As a facilitator you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Moreover, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the Learner:

Welcome to the **Computer Systems Servicing** Self-Learning Module on **Basic-input-output-system (BIOS) configuration procedures!**

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning material while being an active learner.

This module has the following parts and corresponding icons:

Expectations - This points to the set of knowledge and skills that you will learn after completing the module.

Pre-test - This measures your prior knowledge about the lesson at hand.

Recap - This part of the module provides a review of concepts and skills that you already know about a previous lesson.

Lesson - This section discusses the topic in the module.

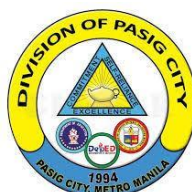**Activities** - This is a set of activities that you need to perform.

Wrap-Up - This section summarizes the concepts and application of the lesson.

Valuing - This part integrates a desirable moral value in the lesson.

Post-test - This measure how much you have learned from the entire module.

EXPECTATIONS

After completing this lesson, you should be able to:

1. Define and explain configuration procedures of BIOS
2. Identify the BIOS configuration procedures.
3. Follow configuration procedures of BIOS.

PRE-TEST

Direction: Read each statement below carefully. Write **T** if the statement is TRUE. Write **F** if the statement is FALSE.
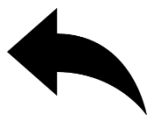
_____1. BIOS is a software usually built onto the motherboard that shows the major hardware components of your computer with the operating system.

_____2. The advance menu consists of time and date, drives' parameters and system information.

_____3. POST helps to verify the computer system requirements to boot up properly.

_____4. The exit menu contains the commands like save and discard changes.

_____5. The power menu consists of option for devices and some other booting settings.

RECAP

Direction: Arrange the following sequence of steps of system unit assembly procedures. Write numbers 1-5 on the blank line.

_____ Attach the System cover properly.

_____ For testing, turn on the computer to check for any errors.

_____ Wear anti-static wrist strap and other PPE.

_____ Clean the equipment and parts before assembly.

_____ Install the system unit components correctly and carefully.

LESSON

BIOS (Basic Input Output System) is a software usually built onto the motherboard that shows the major hardware components of your computer with the operating system.

The BIOS includes instructions on how to load basic computer hardware. It also includes a test referred to as a POST (Power-On Self-Test) that helps verify the computer meets requirements to boot up properly.

Steps of BIOS setup using flash drive:

1. Press the Power button of computer.

2. During the initial startup screen, press Delete or F2 key. (Depending on the company that created your version of BIOS, a menu may appear.)

3. When you choose to enter BIOS Set-up, the set-up utility page will appear.

4. Using the arrow keys on your keyboard, select the BOOT tab. All of the available system devices will be displayed in order of their boot priority. You can reorder the devices here.

5. Move USB to be first in the boot sequence.

6. Save the change and then exit the BIOS Set-up.

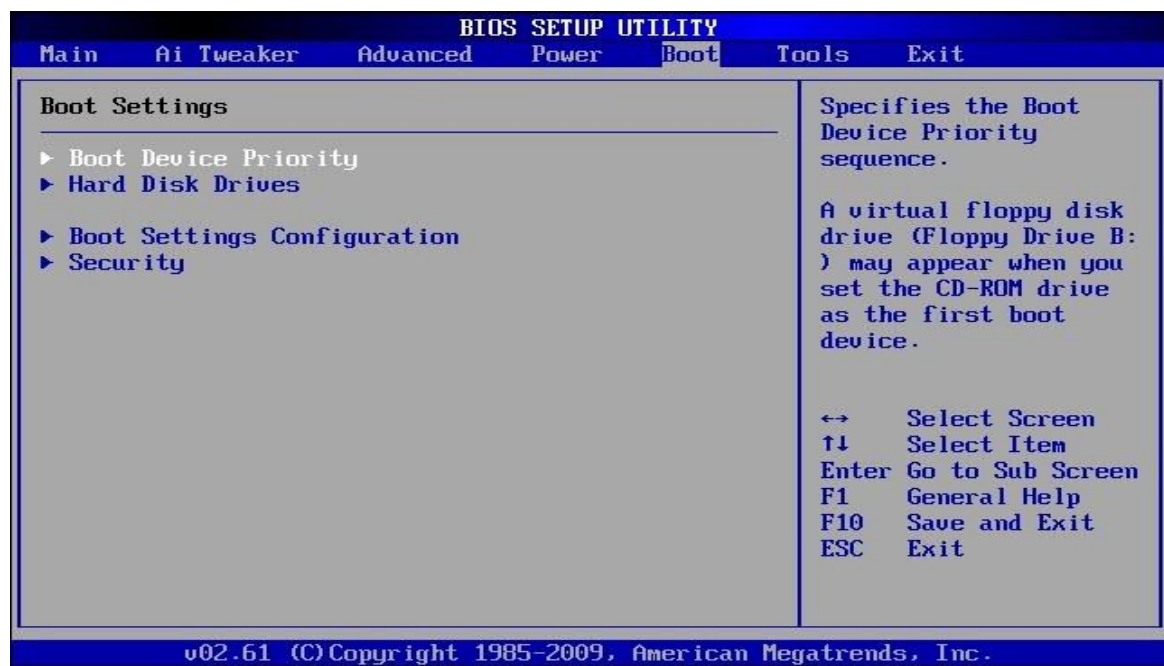7. The computer will restart using the new settings, booting from your USB drive.

Main menu

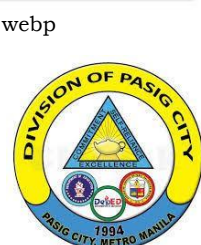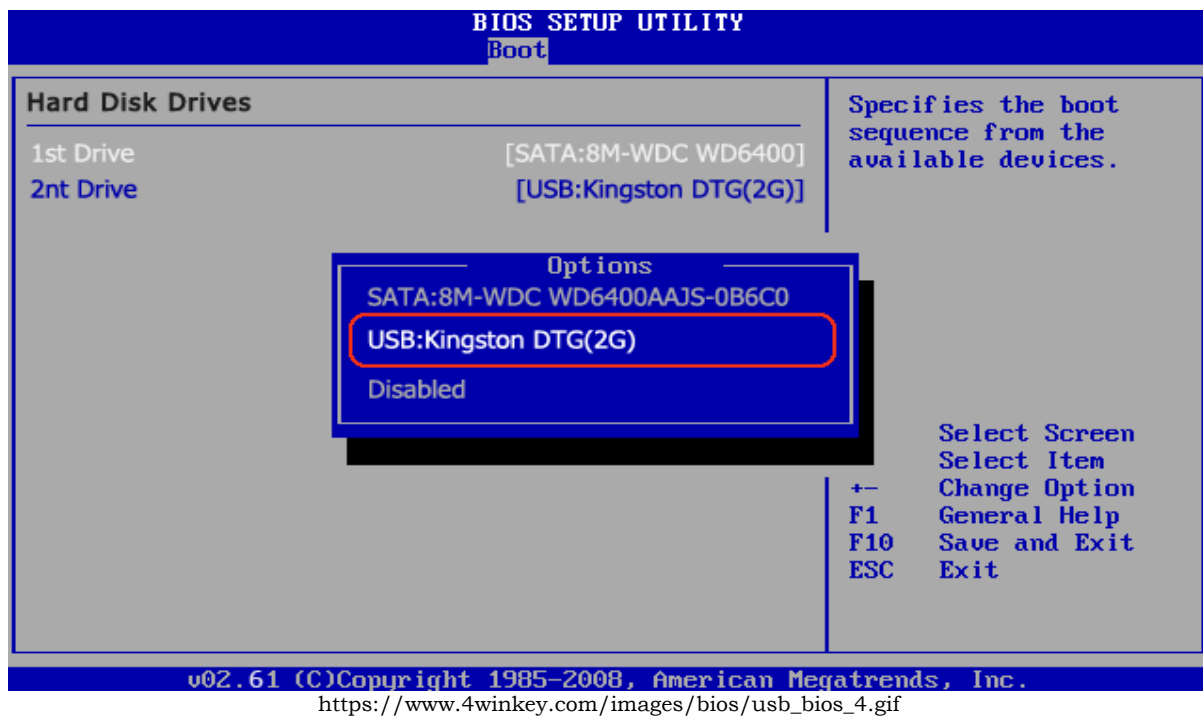The main BIOS settings: time and date, drives' parameters and system information.
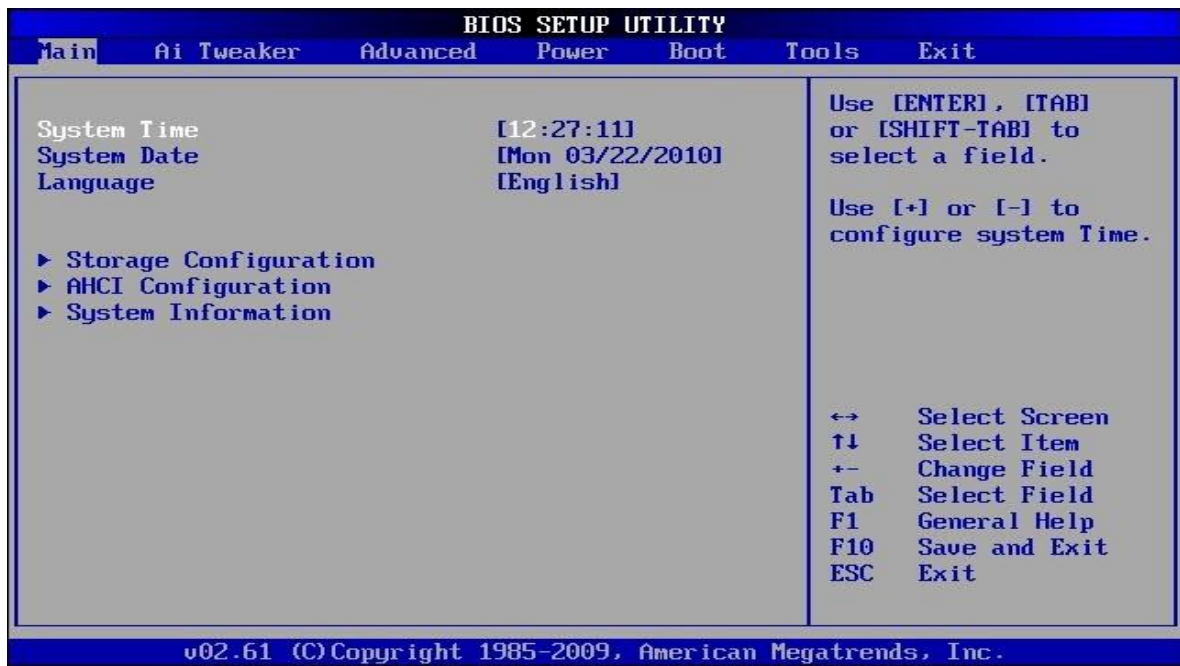
Boot menu

Here can find parameters for appropriate procedure of devices and some other booting settings.

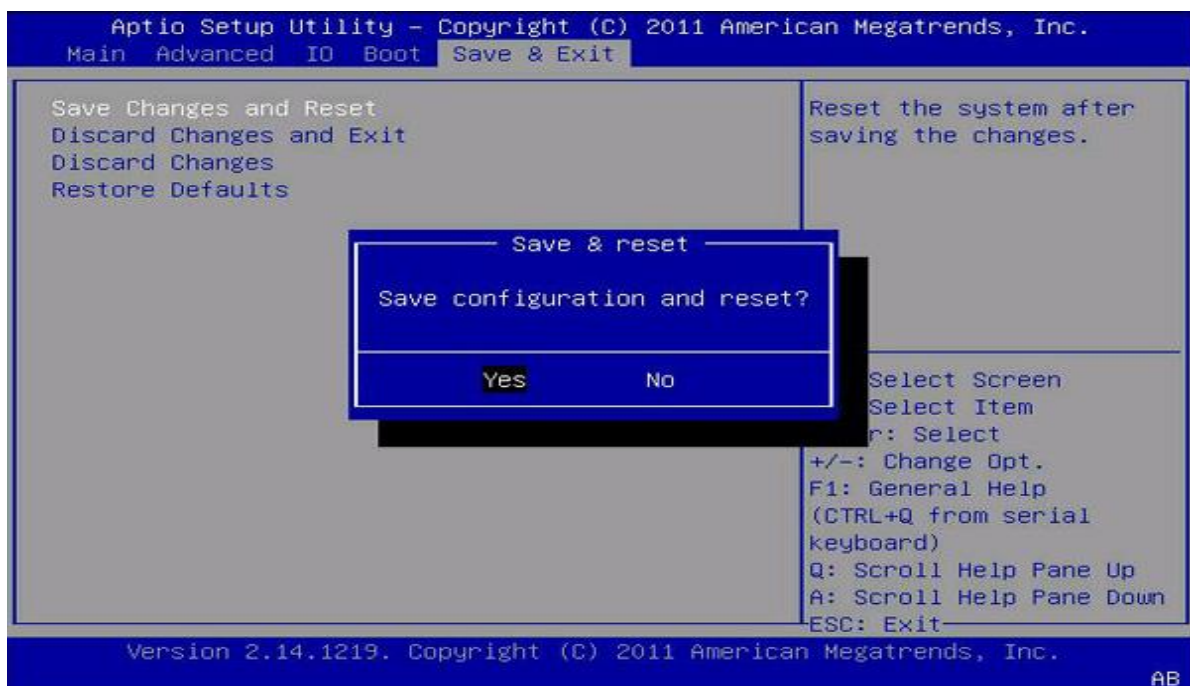https://www.4winkey.com/images/bios/usb_bios_4.gif
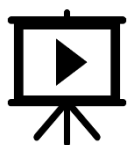
Exit menu

This section usually contains the following commands:
- Exit & Save Changes – exit with saving all changes
- Exit & Discard Changes – exit without saving any changes
- Discard Changes – cancel all changes

https://docs.oracle.com/cd/E20881_01/html/E20891/figures/mb5a.png

ACTIVITIES

Direction: Arrange the following sequence of steps of BIOS setup using flash drive. Write numbers 1-5 on the blank line.

_____ Save the change and then exit the BIOS Set-up.

_____ Press the Power button of computer.

_____ Move USB to be first in the boot sequence.

_____ Using the arrow keys on your keyboard, select the BOOT tab.

_____ During the initial start-up screen, press Delete or F2 key.

Performance Checklist

Check the following if you've met the criteria:

CRITERIA: Did you…?	YES	NO
1. Press the power button of computer?		
2. Press Delete or F2 key?		
3. Use the arrow keys of keyboard to select the Boot tab for the boot priority?		
4. Move USB to be first in the boot sequence?		
5. Save the change and exit the BIOS set-up?		

WRAP-UP

BIOS is a software usually built onto the motherboard that shows the major hardware components of your computer with the operating system. The BIOS includes instructions on how to load basic computer hardware. It also includes a test referred to as a POST (Power-On Self-Test) that helps verify the computer meets requirements to boot up properly.

⬥ VALUING

Direction**:** Read and answer the following questions carefully in two to three sentences each number.

1. What are the importance of BIOS set-up?

_____
_____
_____

2. Cite a situation in which you can apply the knowledge of BIOS set-up.

_____
_____
_____

🧠 POST-TEST

Direction: Identify and choose the answer on the box. Write the answer on the blank space.

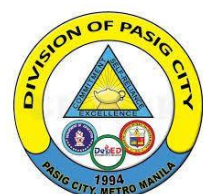| Power menu	POST	Exit menu	BIOS	Boot menu	Main menu

_____1. A menu consists of time and date, drives' parameters and system information.

_____2. This helps to verify the computer system requirements to boot up properly.

_____3. Contains the commands like save and discard changes.

_____4. A software usually built onto the motherboard that shows the major hardware components of your computer with the operating system.

_____5. This menu consists of option for devices and some other booting settings.