UD 01.
INFORMATION REPRESENTATION

Desarrollo de Aplicaciones Web
CFGS DAW

Study guide
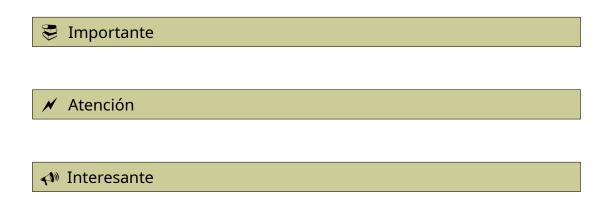
Licencia

Nomenclatura

A lo largo de este tema se utilizarán distintos símbolos para distinguir elementos importantes dentro del contenido. Estos símbolos son:

> ≋ Importante

> ⚡ Atención

> 📢 Interesante

ÍNDICE DE CONTENIDO

UD01. Information representation

1. Data

From 19/09/2022 to 02/10/2020. The length of the unit is 2 weeks (16 hours).

2. Previous Knowledge

- How to perform basic mathematical operations.
- How to convert between two general units.

3. Objectives

1. To learn how the computer systems manage information.
2. To learn how to convert form decimal to binary, octal and hex.
3. To learn how to convert form binary, decimal, octal and hex.
4. To learn how to convert betwen octal and hex.
5. To learn how to perform basic mathematical operations in binary code: addition, subtraction, multiplication.

> ✗ The division is not in the scope of the objectives.

6. To learn how to perform logical operations.
7. To learn how to represent negative numbers in binary code.
8. To learn how to represent real numbers in binary code.
9. To know how to represent alphabetic characters in binary code.
10. To know the information units.
11. To learn how to change information units.

4. Contents

1. Numeral systems
2. Binary code
3. Operations with binary numbers
4. Negative numbers

5. Real numbers

6. Boolean algebra

7. Octal

8. Hexadecimal

9. Alphanumeric Representation

10. Numeric and alphanumeric data

11. Internal representation

12. Unit system

5. ACTIVITIES

It is very important to read the notes and perform the exercises. This exercises are not part of assessement, but note that it is very common to have several questions from this unit in the exam. The solutions will be published at the beginning of the week 3.

6. RECOMMENDATIONS

You have some videos explaining some of the contents. The TC of the week 2 will be exclusively dedicated to practice exercises, so it is very important to go there with the main concepts studied.