Sistemas Informáticos (Computer Systems)

Unit 11. Study guide

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Updated March 2024

Unit 11. Computer networks

1. Dates

From 25/03/2024 to 28/04/2024. The length of the unit is 5 weeks (40 hours).

2. Previous knowledge

Previous units, specially unit 01 and unit 07.

3. Objectives

1. To learn what is a computer network.
2. To know how networks are classified.
3. To know the different network topologies.
4. To learn what the layers and protocols are
5. To learn the functionality of each of the layers.
6. To know the structure of an IP address.
7. To know the different classes of networks.
8. To know the difference between a public and private address.
9. To learn to do subnetting.
10. To learn how to create static route tables.
11. To know the different network devices.

4. Contents

1. What is a computer network.
2. Types of networks.
3. Architecture of networks. Topologies and layers
4. Internet layer
5. Hardware components.

5. Activities

You have non-assessable activities, but I really encourage you to try to solve them.

6. Recommendations

This is a large unit. The first part is theoretical, and the second one is practical. Both of them are very important. Maybe it is one of the most complicated units of the course, so you need to study the concepts very well, and then you need to practice resolving the exercises.