



Guided media

Project for 503410-3 | Data Communication ,
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Group 4



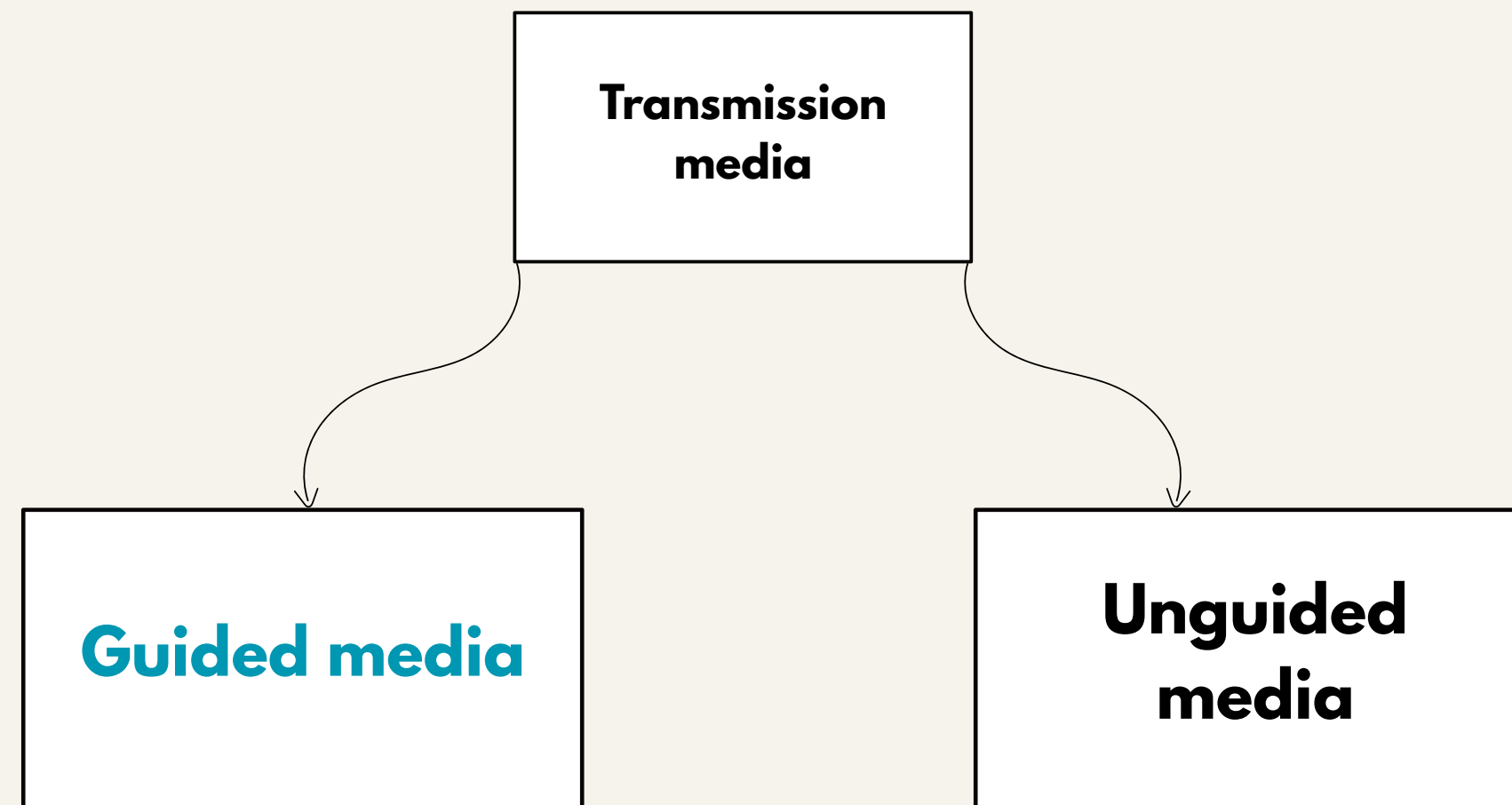
Group 4

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Introduction

Transmission media : physical medium which data is transmitted from device to another within network

There is two types of Transmittion media :





Introduction

We will talk about Guided Media in this presentation .

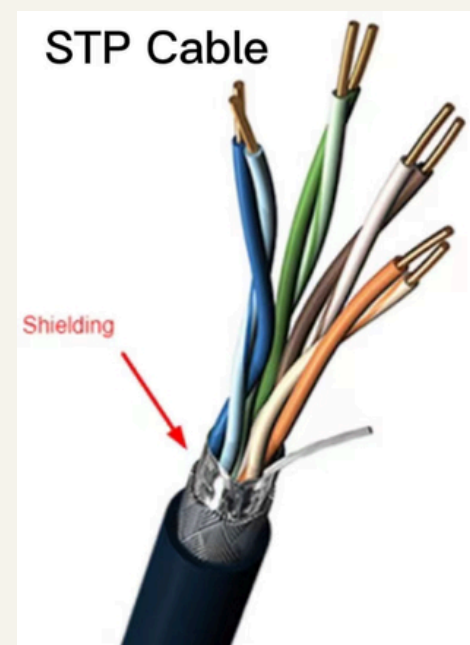
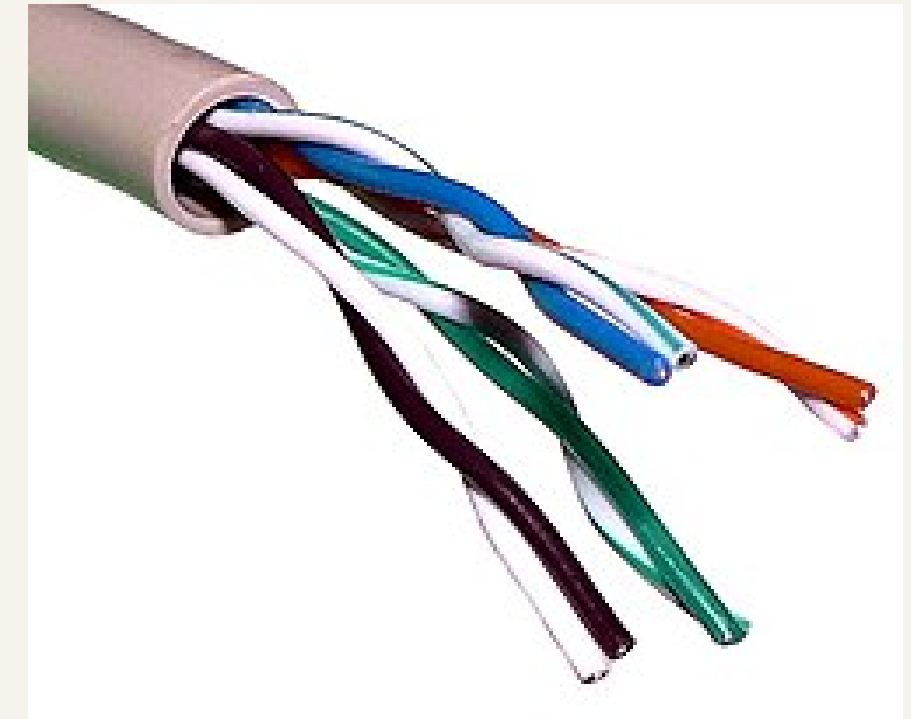
- **In Guided media** Waves are guided along a solid medium
- **Also named (Wired media):** Because this method relies primarily on wires for data transmission.
- Guided media included **Copper twisted pair, Copper coaxial cable, and Fiber optical cables**

In the following slides , we will present and discuss each type.

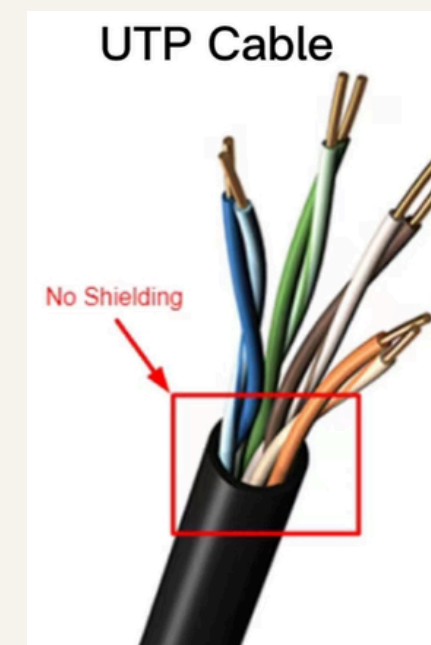
Copper twisted pair

A communication cable, And one type from wired media cables, consists of two conductors wound together in a single circuit and comes in two main types:

1. shielded
2. unshielded.



Shielded
Twisted
Pair



Unshielded
Twisted
Pair

Copper coaxial cable

A coaxial cable is a copper cable used to transmit signals . It consists of a copper wire surrounded by a bundle of stranded wires, separated by an insulating layer. Coaxial cable is specifically designed for signal transmission and is often used to connect one radio or recording device to another .

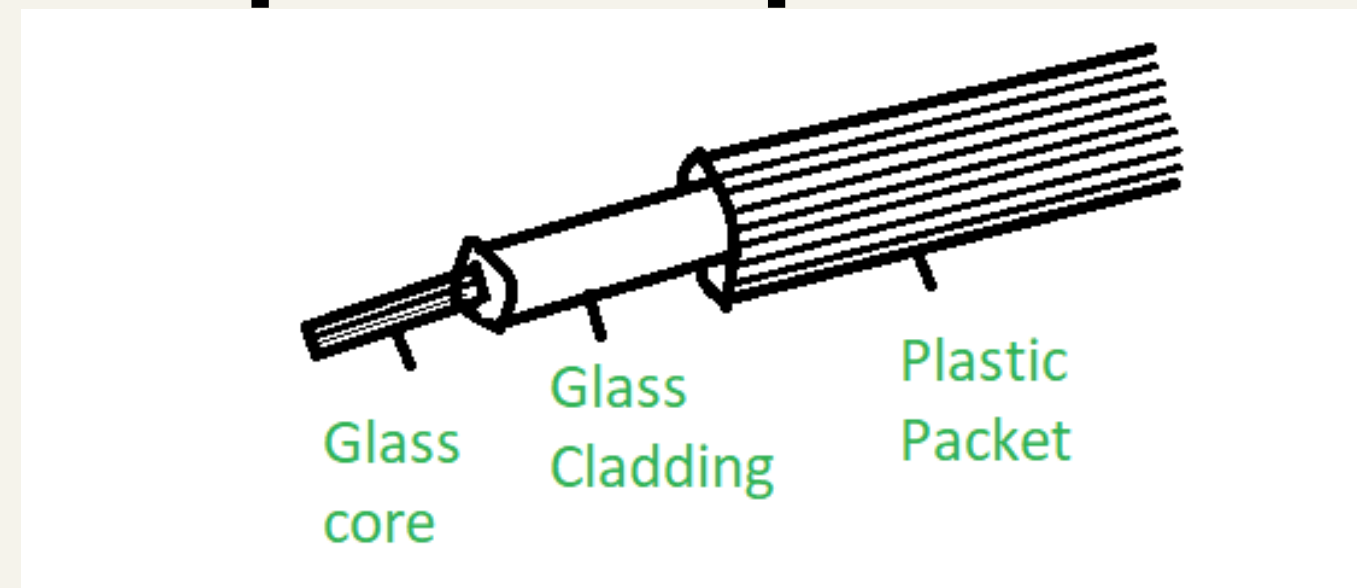


Optical fiber

Cable created from glass or plastic , Can be used to transmit **data using light** For very long distances . Many of these fibers are bundled together inside optical cables.



Main parts of optical fiber :





References

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Thanks for Reading