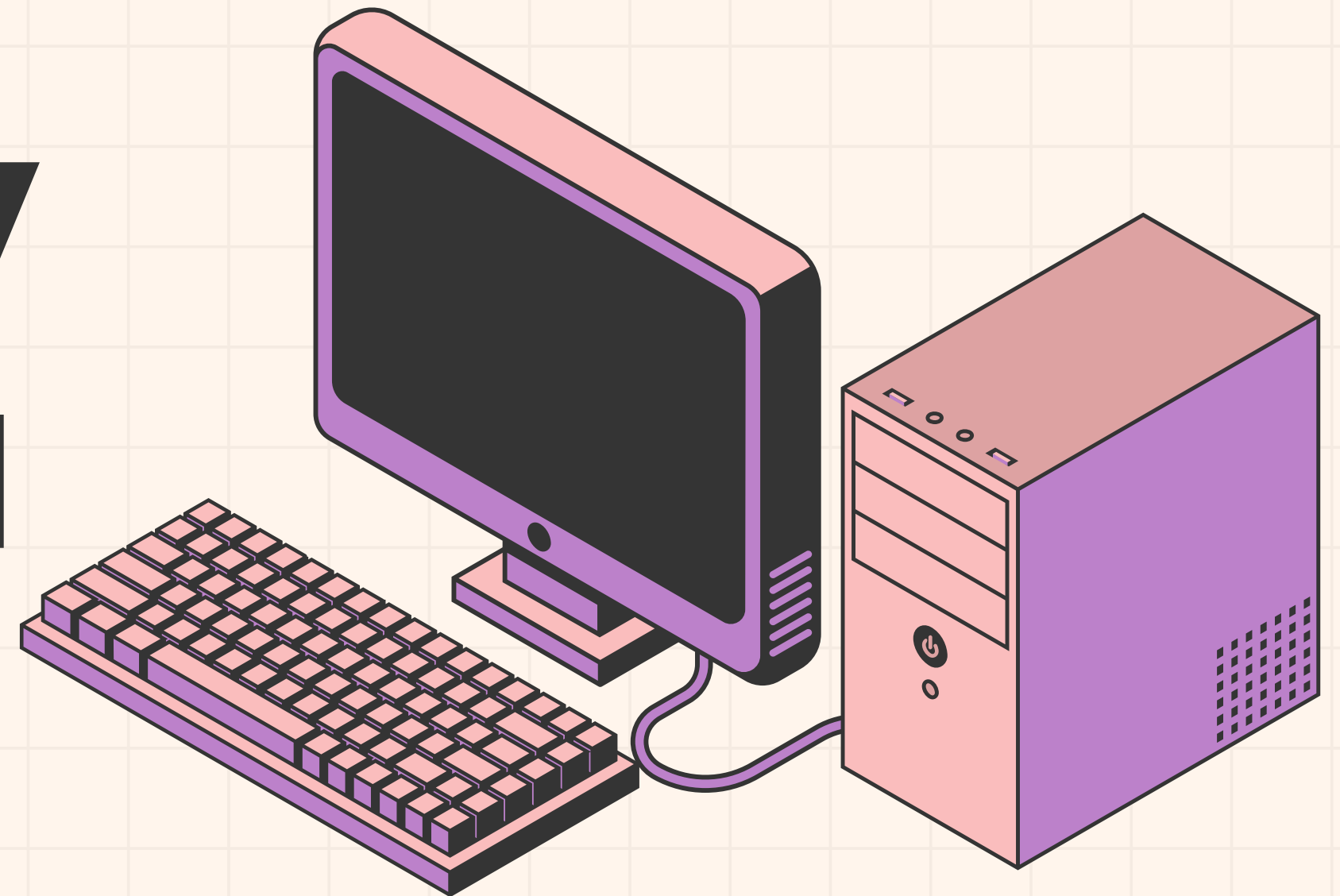# TECHNOLOGY AND INFORMATION SYSTEM
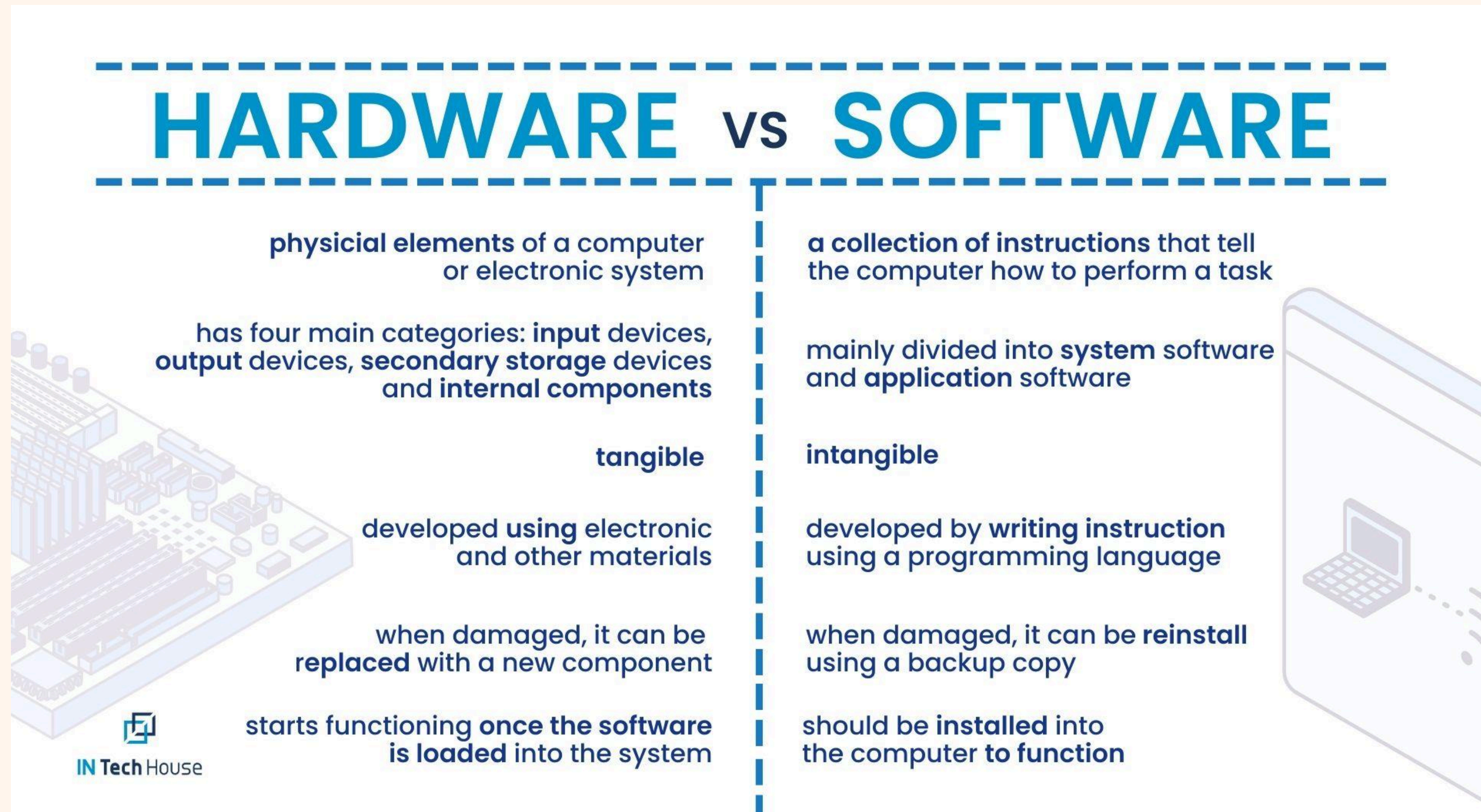
Group 1 : Introduction to Cmputer System and Hardware

what is a computer system ?

A combination of hardware and software components working together to perform specific tasks, encompassing devices like the CPU, Memory, Input/Output, devices and operating system.

Difference between hardware and software

HARDWARE vs SOFTWARE

HARDWARE	SOFTWARE
physical elements of a computer or electronic system	**a collection of instructions** that tell the computer how to perform a task
has four main categories: **input** devices, **output** devices, **secondary storage** devices and **internal components**	mainly divided into **system** software and **application** software
tangible	**intangible**
developed **using** electronic and other materials	developed by **writing instruction** using a programming language
when damaged, it can be **replaced** with a new component	when damaged, it can be **reinstall** using a backup copy
starts functioning **once the software is loaded** into the system	should be **installed** into the computer **to function**

IN Tech House

EXECUTION OF SOFTWARE

DATA STORAGE

INPUT AND OUTPUT OPERATIONS:

Importance of hardware in computer functionality

PERFOMANCE

CONNECTIVITY

Types of computer hardware

keyboard

scanner

microphone

mouse

Input Devices

webcam

monitor

printer

speaker

projector

Output Devices

hard disk drive

solid state drive

USB Flash drive

Storage Devices

external hard drive

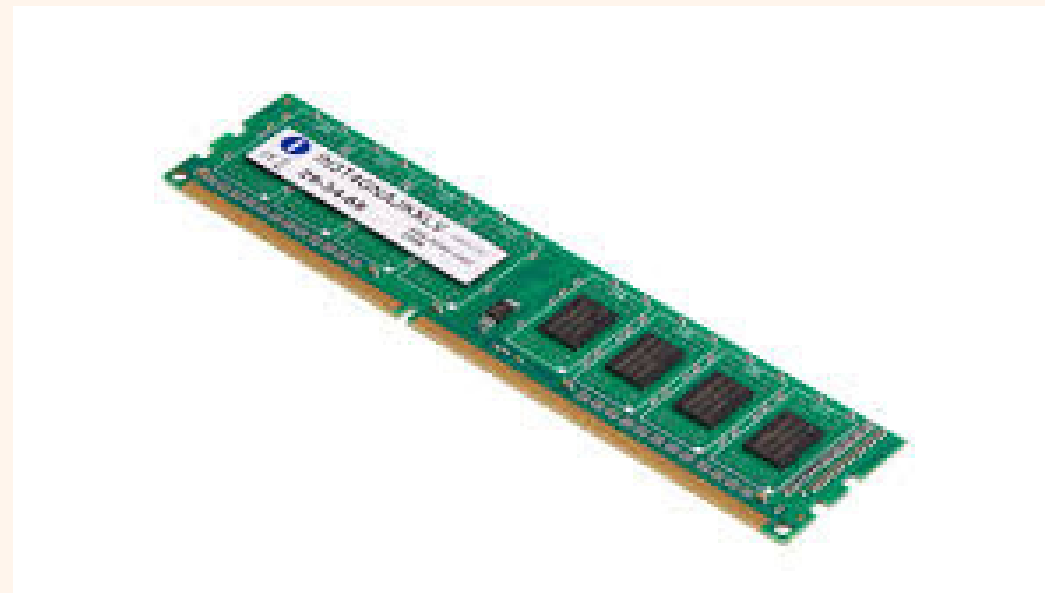central processing unit (CPU)   Graphic processing unti (GPU)   Motherbord

Processing Devices

Memory RAM

Random Access memory RAM

Real life examples and function of computer system and hardware

Personal Computer

The CPU processes commands from software applications. RAM temporarily stores data for quick access, while the hard drive/SSD holds long-term data like documents, photos, and videos. Graphics Card (GPU) renders visuals for the monitor. The keyboard and mouse act as input devices to control the system.

Smartphone

The mobile processor (CPU) runs apps and manages device functions. The RAM enables fast switching between apps, and the storage (usually an SSD) holds apps, photos, and other data. The touchscreen is the primary input method, while the camera and GPU help with image capture and rendering

Medical Equipment (MRI, X-Ray Machines)

The central processing unit (CPU) controls the data flow and processing of images. Sensors collect data from the body, and displays show the results. The storage holds patient data and scanned images.

Quiz timeee

1.What are the main components of a computer system

2. Give an example of output device