USB {Universal serial Bus}

Host ⇒ The organizer or master of all traffic on the bus.

Device/Peripheral ⇒ A slave device that connects to the host.

OTG ⇒ On the go, indicates limited Host functionality.
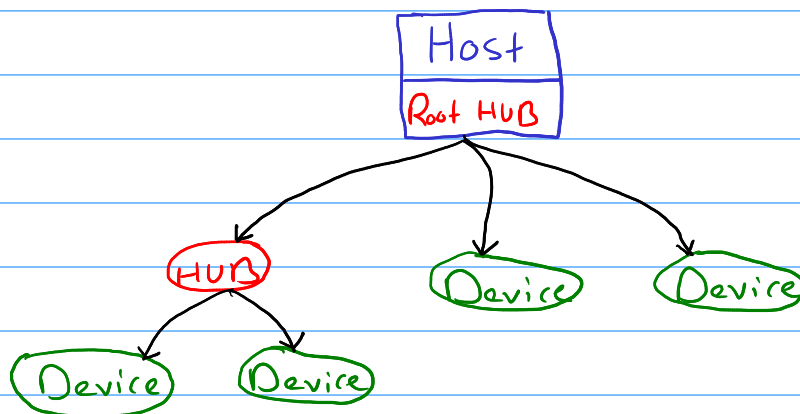
Hub ⇒ Expands the initial host device's number of available Ports and acts as a repeater.

Frame ⇒ Time-based grouping with fixed timing.

Packet ⇒ A bundle of data organized into a group for transmission.

Enumeration ⇒ Handshaking process between device and host.

Descriptor ⇒ Firmware structure containing USB information.


```
                    ┌─────────┐
                    │  Host   │
                    ├─────────┤
                    │ Root HUB│
                    └─────────┘
              ┌──────────┼──────────┐
          ( HUB )    (Device)   (Device)
          ┌───┴───┐
      (Device) (Device)
```

★ <u>Speed</u>

① Low Speed (USB 1.0) {1.5 MBPS}

② Full Speed (USB 1.1) {12 MBPS}   { The Speed determines all the bus timings }

③ High Speed (USB 2.0) {480 MBPS}

★ **Transfer types**

① Control
② Bulk
③ Interrupt
④ Isochronous