

10.11 Wireless/Mobile Computing

- **Wireless Communication:** Data communication without the use of landlines (e.g., cellular, WiFi, satellite). The device is often continuously connected.
- **Mobile Computing:** The computing device is not continuously connected to a central network (e.g., a laptop used on the go).

Wireless/Mobile Technologies

- **GSM (Global System for Mobile communications):** A leading digital cellular standard. It uses TDMA (Time Division Multiple Access) to allow multiple calls on the same frequency. Uses a removable **SIM (Subscriber Identity Module)** card to store user information.
- **CDMA (Code-Division Multiple Access):** A digital cellular technology that uses spread-spectrum techniques. It doesn't assign a specific frequency to each user; instead, all users transmit over the full available spectrum, with each conversation encoded with a unique digital sequence.
- **WLL (Wireless in Local Loop):** A system that connects subscribers to the public telephone network using radio signals as a substitute for copper wires, providing "last mile" connectivity.
- **GPRS (General Packet Radio Service):** A packet-based wireless communication service that provides "always-on" data connections for mobile devices, with speeds from 56 to 110 kbps.