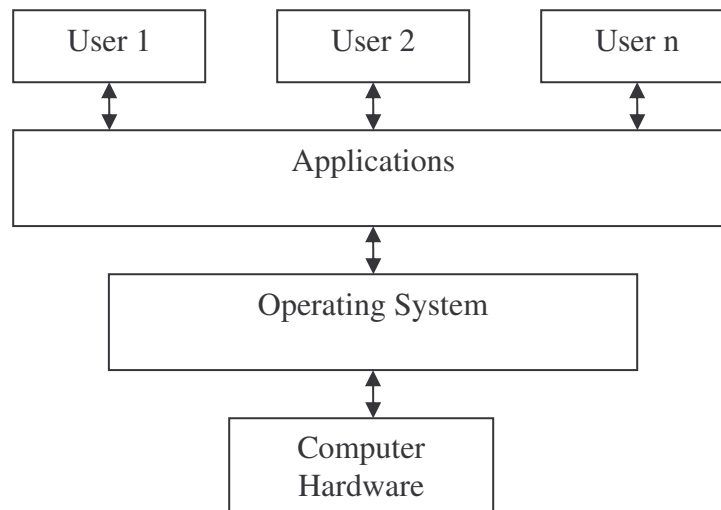## List the three categories of computer systems
- Embedded computers
  - Largest category
- Personal computers
  - Desktops, laptops (including tablet), PDAs
- Workstation servers

Embedded computer – an application-specific, special purpose computer that is placed in another product

```
┌──────────┐     ┌──────────┐     ┌──────────┐
│  User 1  │     │  User 2  │     │  User n  │
└────┬─────┘     └────┬─────┘     └────┬─────┘
     ↕                ↕                ↕
┌──────────────────────────────────────────────┐
│                 Applications                   │
└────────────────────┬───────────────────────────┘
                     ↕
        ┌──────────────────────────────┐
        │       Operating System        │
        └──────────────┬────────────────┘
                       ↕
              ┌──────────────────┐
              │     Computer      │
              │     Hardware      │
              └──────────────────┘
```

Define Operating System
Program(s) that manages hardware resources.

Originally was defined to include the OS kernel but has blurred to include each of the following elements:

- **OS Kernel –** control program – heart beat – of the OS
- **Device Driver Modules –** subroutines that respond to and control hardware devices
- **User Interface**
  - In an elevator, it is the buttons
  - On a laptop, the keyboard, mouse, screen, etc.