

---

---

# Mobile Platforms and Applications

UNIT 5  
RAJASEKARAN AP/IT

---

---

# Overview

- ❖ Mobile Device Operating Systems
- ❖ Special Constraints & Requirements
- ❖ Commercial Mobile Operating Systems
- ❖ Software Development Kit
  - iOS, Android
  - BlackBerry, Windows Phone
- ❖ M-Commerce
  - Structure
  - Pros & Cons.
- ❖ Mobile Payment System
- ❖ Security Issues.

# Mobile Device Operating Systems

- ❖ Grown user needs and technology plays vital role in a development of internet and depended systems.
- ❖ Smartphones are essential requirement that is targeted to every user must have access to daytoday things in technology.
- ❖ Two types of phones
  - Feature phone
  - Smart phone
- ❖ Smartphone requires an operating system and it must have some responsibilities too.

# Operating System Responsibilities

## ❖ Managing Resources

- Efficient use of resources and devices by multiple tasking.
- OS must manage multiple devices.
  - Processor, RAM, Storage, Camera, Speaker, Keyboard and Screen.
- OS must run multiple applications at a same time that applications contains multiple threads.

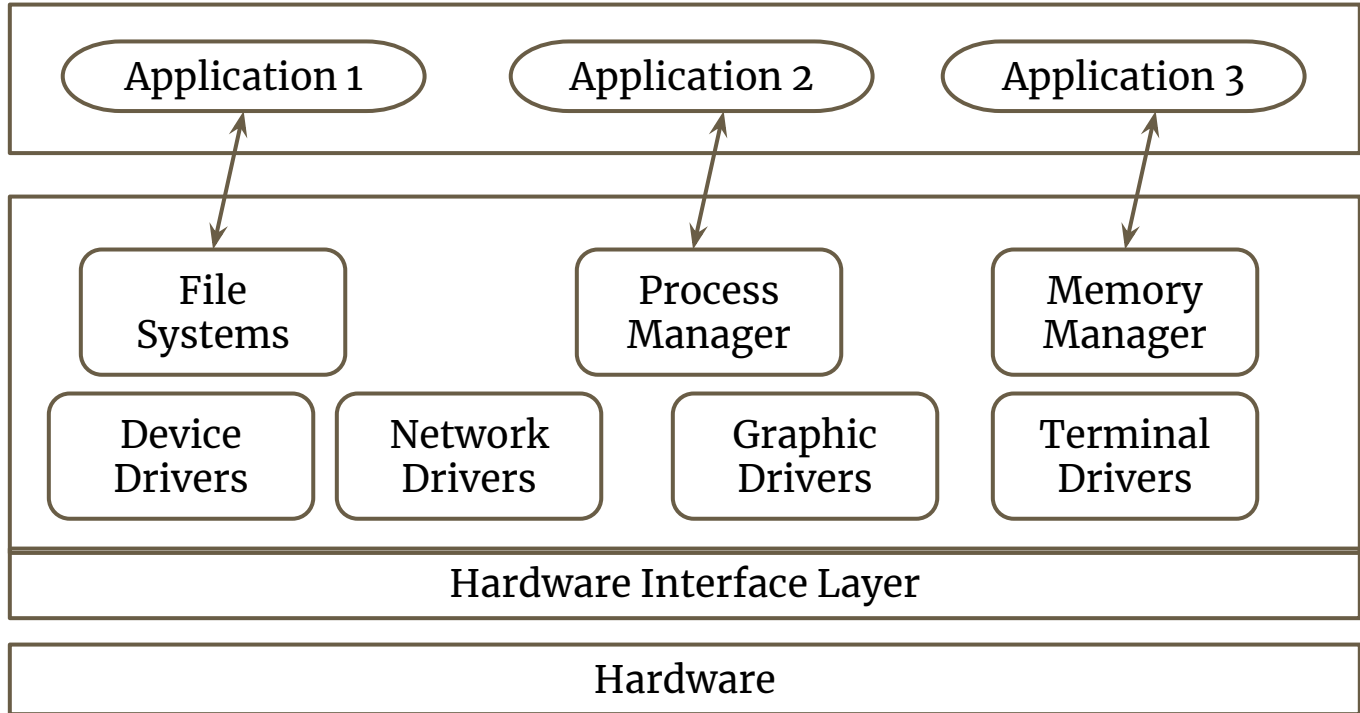
## ❖ Providing Different Interface

- OS must able to handle Interactive interface as well network interface.
- Must able communicate with mobile network at the same time it must interact with user too.

# Mobile Operating System

- ❖ OS must have 2 parts Kernel and Shell.
- ❖ Kernel is core that actually interacts with hardware.
- ❖ Kernel Types:
  - Monolithic Kernel.
  - Microkernel.
- ❖ Two mode of Operations
  - Kernel Mode.
  - User Mode.

# Monolithic Kernel



# Microkernel

