

- **Case study of some operating systems:**

- **The Linux:** Design Principles, Kernel Modules, Process Management, Scheduling, Memory Management, Inter-process Communication, Network Structure, Security.
- **Windows:** Design Principles, System Components, File System, Networking, Programmer Interface.
- **The MAC System:** Design Principles, System Components, Process Management, Inter-process Communication, Memory Management, Programmer Interface.
- **Android Operating System:** Features of Android Operating System, Architecture of Android OS, Privacy Leakages in Android, Privacy Leakage Identification Methods, Permissions in Android, Permission vs. Privacy Leakage, Trusted vs. Untrusted Apps, Privacy Risks vs. Trusted & Untrusted Apps, Privacy Risk Assessment, and Risk Assessment Methods.