

**Department of Computer Science and Engineering**

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**MCA-203**

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# INTRODUCTION

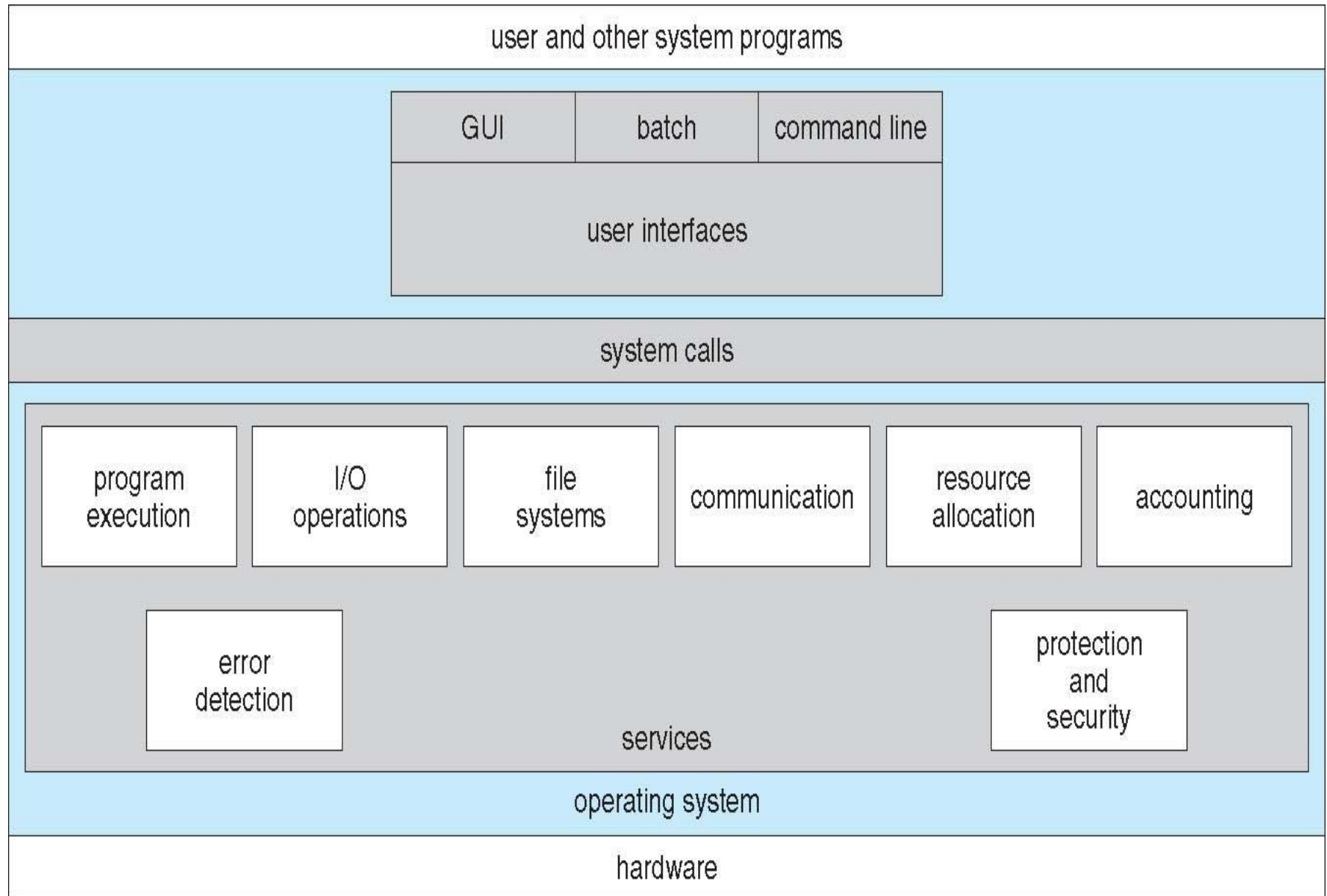
# Operating System Definition

- *OS is a resource allocator*
  - **Manages** all resources
  - Decides between conflicting requests for efficient and **fair** resource use
- *OS is a control program*
  - **Controls** execution of programs to prevent errors and improper use of the computer
- “The one program running at all times on the computer” is the **kernel**. Everything else is either a system program (ships with the operating system) or an application program.

# Operating System Functionality

- *Process Management*
- *Memory Management*
- *File Management*
- *Handling Input and Output*
- *Controlling Peripheral Devices (drivers/printers...)*

# Operating System Services



# Exercise

1. What is an operating system?
2. Describe the operating system functions.
3. List the objectives of an OS.
4. Explain four basic components of a computer system.
5. List various services provided by the OS.

# References

1. Silberschatz, Galvin and Gagne, “Operating Systems Concepts”, Wiley.
2. William Stallings, “Operating Systems: Internals and Design Principles”, 6<sup>th</sup> Edition, Pearson Education.
3. D M Dhamdhere, “Operating Systems: A Concept based Approach”, 2<sup>nd</sup> Edition, TMH.

**Thank You.**

