What is System?

System is basically an architecture or a **collection of technologies** that **communicate with each** **other** to **serve a certain set of users** for certain **set of requirements**.

Ex: Computing Systems - WhatsApp, Netflix, Instagram,

Real World Systems - Hospital, Hotel, etc.

All systems have one thing in common.  
They are divided in several **components** that interact with each other to fulfill the purpose.

For Ex: all computing systems have similar components like – databases, cache, servers, message queues, applications, security, networking, etc. but all have different purposes.

What is Design?

Design is a process of **understanding user requirement, constraints and selecting** appropriate technologies and components and deciding on **how they will interact** with each other to fulfill the purpose of system.

System design is a skill which comes with experience but as an engineer one must know all the components that can be used, where a system can fail, pros and cons of any component. How to deal with system failure.