Manual Testing
Session-1

What is software?

- A Software is a collection of computer programs that helps us to perform a task.

- Types of Software:
  - System software

    Ex: Device drivers, Operating Systems, Servers, Utilities, etc.
  - Programming software

    Ex: compilers, debuggers, interpreters, etc.
  - Application software

    Ex: Web Applications, Mobile Apps, Desktop Applications etc.

What is Software Testing?

- **Software Testing** is a part of software development process.

- **Software Testing** is an activity to detect and identify the defects in the software.

- The **objective of testing** is to release **quality product** to the client.

Software Quality

- Quality: Quality is defined as justification of all the requirements of a customer in a product.
  - **Note:** Quality is not defined in the product. It is defined in the customer`s mind.

- Quality software is reasonably
  - Bug-free.
  - Delivered on time.
  - Within budget.
  - Meets requirements and/or expectations.
  - Maintainable.

Product Vs Project

- If software application is developed for specific customer based on the requirement then it is called Project.

- If software application is developed for multiple customers based on market requirements then it called Product.

Why do we need testing?

- Ensure that software is bug free.

- Ensure that system meets customer requirements and software specifications.

- Ensure that system meets end user expectations.

- Fixing the bugs identified after release is more expensive.

Error, Bug & Failure

- **Error:** Any incorrect human action that produces a problem in the system is called an error.

- **Defect/Bug:** Deviation from the expected behavior to the actual behavior of the system is called defect.

- **Failure:** The deviation identified by end-user while using the system is called a failure.

Why the software has bugs normally?

- Miscommunication or no communication

- Software complexity

- Programming errors

- Changing requirements

- Lack of skilled testers

Etc..