

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..