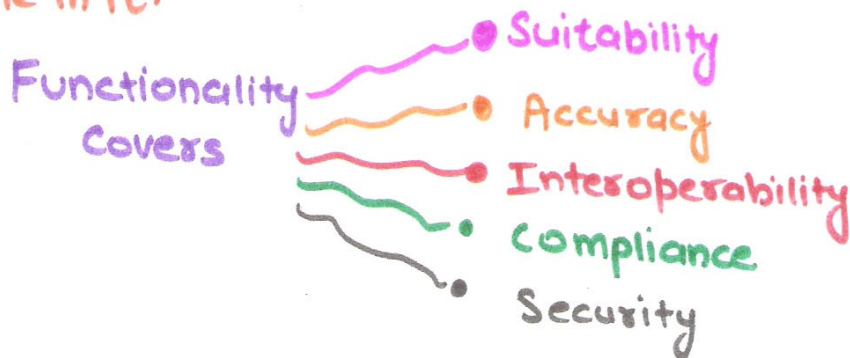# Software Characteristics

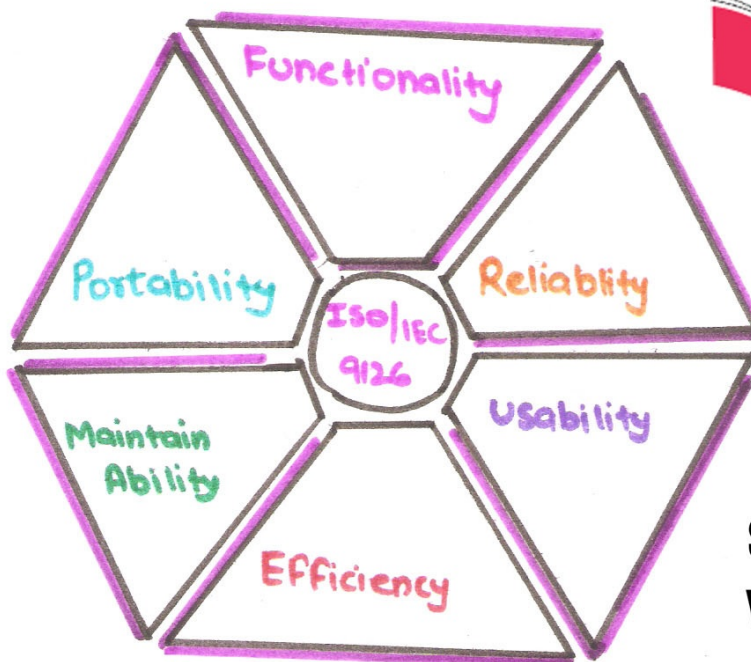Software Characteristics are classified into Six major Components.

- **Functionality**

It Refers to the degree of performance of the software against its intended purpose. It basically means Are the Required functions available in it?

Functionality Covers
- Suitability
- Accuracy
- Interoperability
- Compliance
- Security

Functionality

Portability

Reliablity

ISO/IEC 9126

Maintain Ability

Usability

Efficiency

Software Characteristics

- **Reliability :-** A set of attributes that bear on the Capability of Software to maintain its level of performance under stated Conditions for a stated period of time.

Reliability Covers
- Recoverability
- Fault Tolerance
- Maturity

- **Efficiency :-**
Refers to the ability of the Software to use **System Resources** in the most **Effective** and **Efficient Manner**. The Software should make effective use of **storage space** and **executive Command** as per desired **Timing Requirement**.

Efficiency Covers
- In time
- In Resources

- **Usability :-**
Refers to the extend to which the Software Can be used **with Ease**. OR the amount of **Efforts or time** required to learn how to use the Software Should be less.

Usability Covers
- Understandability
- Learnability
- Operability

- **Maintainability :**
Refers to the ease with which the modifications Can be made in

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a software system to extend its functionality, improve its performance, or correct errors.

Maintainability
- Testability
- Stability
- Changeability
- Analyzability

- **Portability :-** A set of attributes that bear on the ability of software to be transferred from one Environment to Another, without or minimum changes.

Portability Covers
- Adaptability
- Installability
- Replaceability

- **Robustness And Integrity** are also important

Robustness

It refers to the degree to which the software can keep on functioning inspite of being provided with Invalid Data.

Integrity

It Refers to the degree to which UNAUTHORIZED ACCESS to the software or data can be prevented.

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