

Sure! The image you shared is a **mind map of ISO 9126** – a standard that defines **software quality attributes**. These are the important characteristics that help us evaluate how good a software system is.

Let's go through **each quality attribute** (highlighted ones too) with **simple explanations and examples**



✅ 1. Functionality

How well the software does what it's supposed to do.

- **Suitability**
Is the software suitable for the purpose?
 - *Example:* A calculator app includes basic functions like addition, subtraction, etc.
- **Accuracy**
Does it give correct results?
 - *Example:* A weather app correctly shows temperature and rainfall predictions.
- **Interoperability**
Can it work with other systems or software?
 - *Example:* Google Docs allows importing from Microsoft Word.
- **Compliance**
Does it follow legal and industry rules?
 - *Example:* A hospital's system follows health data privacy laws (like HIPAA).
- **Security**
Is the system safe from unauthorized access?
 - *Example:* A banking app requires fingerprint login or OTP.

✅ 2. Reliability

How dependable is the software under various conditions?

- **Maturity**
How stable is the software over time?
 - *Example:* An app that's been around for years with rare bugs (like Gmail).
- **Recoverability**
Can the system recover from failure?
 - *Example:* A game that crashes but restores the last saved level when reopened.
- **Fault Tolerance**
Can it still work if something goes wrong?

- *Example:* A payment app continues working even if one of the servers fails.
-

✓ 3. Usability

How easy it is to use and learn the software.

- **Learnability**
How quickly can a new user learn it?
 - *Example:* Canva is easy for beginners to learn graphic design.
 - **Understandability**
Can users understand how it works?
 - *Example:* A dashboard with clear icons and tooltips for each button.
 - **Operability**
Is it easy to operate and control?
 - *Example:* A music app with simple play, pause, and skip buttons.
-

✓ 4. Efficiency

How well the software uses system resources and responds.

- **Time Behaviour**
Does it respond quickly?
 - *Example:* Google search results appear in less than a second.
 - **Resource Behaviour**
Does it use memory, CPU, battery efficiently?
 - *Example:* A note-taking app that runs smoothly without draining battery.
-

✓ 5. Maintainability

How easy it is to modify, fix or improve the software.

- **Stability**
How often does it crash when changes are made?
 - *Example:* Updating one module in a shopping app doesn't break the checkout.
- **Analysability**
How easily can you understand and analyze the code?
 - *Example:* Well-commented source code makes bug-fixing easier.
- **Changeability**
How easily can you make changes?

- *Example:* Adding a new feature to a modular app is easy.
 - **Testability**
Can you test it easily?
 - *Example:* A codebase with unit tests is easier to test after updates.
-

✅ 6. Portability

How easily the software can run on different systems or environments.

- **Installability**
How easily can it be installed?
 - *Example:* Zoom installs in a few clicks on Windows or macOS.
 - **Conformance**
Does it conform to portability standards?
 - *Example:* A Java app runs on any OS with Java installed (thanks to JVM).
 - **Replaceability**
Can one system replace another without issues?
 - *Example:* Switching from one PDF reader to another without losing settings.
 - **Adaptability**
Can it adjust to different environments?
 - *Example:* A website that adjusts layout for both phones and desktops (responsive design).
-

Let me know if you'd like a downloadable table or a PDF version of this summary!