

# SOFTWARE ENGINEERING ETHICS

## 1. ETHICS PRINCIPLE

- 1.1 Accessibility-:** Ensuring that EV charging sockets are accessible to all the drivers. Installing EV stations at such place which can be reached easily.
- 1.2 Equity-:** Equal access to all members of the community, regardless of their socio-economic status.
- 1.3 Sustainability-:** Minimizing the environmental impact by prioritizing renewable energy.
- 1.4 Safety-:** Ensure that charging station meet the safety standards to protect drivers from any potential hazards.
- 1.5 Transparency-:** Clear information should be provided to the drivers about the location, availability and charging station.
- 1.6 Privacy-:** Ensuring the privacy of EV drivers by implementing robust security measures.
- 1.7 Long-term planning-:** Adopting a long-term planning to accommodate future growth in electric vehicles.

## 2. SOFTWARE QUALITY CHARACTERSTICS

- 2.1 Functionality-:** The extent to which software system meet intended function effectively and accurately. It includes all the features.
- 2.2 Reliability-:** Ability of the software to perform consistently, effectively and accurately. It involves error handling and system stability.
- 2.3 Usability-:** How easy is to use the software system depends on the user interface, design, navigate and interact efficiently.
- 2.4 Efficiency-:** It refers to the availability of a software system to perform its functions timely and efficiently.
- 2.5 Maintainability-:** It refers to the ease with the which the software can modified or updated over a period of time.
- 2.6 Scalability-:** It refers to the ability of the software to work with proper efficiency inspite of increased work-load and user demands.
- 2.7 Security-:** It involves authentication and authorization. It refers to protection of the system from the unauthorized access.

REFERENCE – Deakin website example (From slides)