**TASK 4.1P**

1. **Ethics Principles for "Locate a Socket" Use Case:**

* **Public:**
* Verify that the app promotes sustainability by reducing its negative effects on the environment, advancing public welfare, and facilitating EV charging.
* Provide precise, understandable details regarding the price, accessibility, and security measures of charging stations.
* **Client and Employer:**
* Maintain the confidentiality of any proprietary information obtained from charging station operators and related parties.
* Ensure that the application's objectives align with the general welfare while delivering results that satisfy users.
* **Product:**
* Verify that the software is user-friendly, reliable, and free of significant errors that could confuse or irritate EV drivers.
* Provide dependable features that meet strict requirements, like secure payment processing and user-friendly navigation.
* **Judgment:**
* All decisions should be supported by well-documented facts to maintain equity and avoid biases in station recommendations or reward systems.
* Regularly review features' technological and ethical implications, including data sharing with third parties.
* **Management:**
* Provide the development team with clear directions, ensuring that their work conforms with ethical standards and project objectives.
* Foster a collaborative environment that respects stakeholder opinions and promotes ethical conduct.
* **Profession:**
* To maintain professional standards and follow best practices when creating and testing software.
* Check for compliance with industry regulations such as PCI DSS for payment security and GDPR for data privacy.
* **Colleagues:**
* Encourage team members to collaborate, respect, and support one another to create a high-quality result.
* Share knowledge to improve the team's moral and technical competence.
* **Oneself:**
* To be informed about relevant technology and make ethical choices, pursue continual professional development.
* Be truthful and accountable in all aspects of the project.

1. **Software Quality Characteristics for "Locate a Socket" Use Case:**

* **Maintainability:**
* Future changes, like the addition of new languages or charging networks, should be considered when developing the software.
* Use modular code and relevant documentation to facilitate debugging and enhancements.
* **Correctness:**
* Verify that the app meets its requirements, which include accurately locating nearby charging stations and displaying availability in real-time.
* **Reusability:**
* Make reusable modules to integrate with other services or apps, such as the payment gateway and mapping services.
* **Reliability:**
* Make sure that the app functions flawlessly with little downtime and provides accurate real-time information on charging stations.
* Errors such as unsuccessful payment transactions or missing GPS signals should be addressed courteously.
* **Portability:**
* Make an application that functions well on a range of gadgets, including smartphones, tablets, and PCs.
* Check for compatibility with different operating systems and device configurations.
* **Efficiency:**
* To guarantee fast reaction times, make the most use of your resources, especially while loading maps and performing location searches.
* Lower the battery consumption of mobile devices without interfering with the needs of EV drivers.