

M1 - Project 2

Structure: Issues with Domain, Stakeholders, Functional and Non-Functional Objectives

1.1 Lack of Clarity in Stakeholders

- **Issue Description:** Unclear identification of stakeholders and their roles in the cooperative car maneuver project.
- **Options:**
 - Conduct stakeholder interviews to gather insights into their expectations, concerns, and responsibilities.
 - Organize stakeholder workshops to facilitate communication and collaboration.
- **Decision and Rationale:**
 - Choose stakeholder interviews as they allow for one-on-one discussions, which might encourage stakeholders to express individual concerns more openly.

1.2 Ambiguity in Non-Functional Objectives

- **Issue Description:** Non-functional objectives (e.g., performance, security) are vaguely defined.
- **Options:**
 - Research industry standards and benchmarks to establish clear non-functional criteria.
 - Conduct workshops with technical experts to outline specific non-functional requirements.
- **Decision and Rationale:**
 - A combination of research and workshops is chosen to ensure a comprehensive understanding of industry standards and to capture expert insights.

Discussion: Additional Requirements

1. User Interface Requirements:

- Specify the design and features of the user interface for both automated systems and human drivers to ensure effective communication.

2. Data Security and Privacy:

- Define protocols for secure communication between vehicles and the central server to protect sensitive data. Ensure compliance with privacy regulations.

3. Scalability Requirements:

- Specify how the system will handle an increasing number of vehicles and infrastructure components to ensure scalability.

4. Training and Familiarization:

- Consider including requirements for user training and familiarization with the cooperative car maneuver system, especially for human drivers interacting with automated features.

5. System Monitoring and Auditing:

- Define requirements for real-time monitoring of system performance and auditing capabilities to review and analyze critical events or incidents.

Elicitation Methods:

- **Interviews:**

- Effective for understanding individual stakeholder perspectives, concerns, and expectations.

- **Workshops:**

- Facilitate group discussions to uncover shared goals, conflicts, and synergies among stakeholders.

- **Research:**

- Explore industry standards, best practices, and benchmarks to ensure that the project aligns with established norms.

Design Rationale:

- **Stakeholder Interviews:**
 - Chosen for their ability to provide deep insights into individual stakeholder perspectives, which may not be fully captured in group settings.
- **Combination of Research and Workshops for Non-Functional Objectives:**
 - Research ensures alignment with industry benchmarks, while workshops involve key technical experts to address specific project needs.

Conclusion:

By addressing the identified issues and incorporating additional requirements through a combination of interviews, workshops, and research, the project basics can be refined to provide a more comprehensive and clear foundation for the development of a cooperative car maneuver system.