

Checklist for Developing and Reviewing AI-Machine Learning Software

Anticipated MOC EXP-09-5: Data Recording and Retrieval

Requirement	Yes/ No
Record data in a way that can be retrieved and used after an accident or incident.	✓
Capture the following minimum for AI/ML constituent requirements:	✓
- Safety requirements	
- Information security requirements	
- Functional requirements	
- Operational requirements (including ODD monitoring and performance monitoring)	
- Other non-functional requirements (e.g., scalability)	
- Interface requirements	
Define set of parameters pertaining to AI/ML constituent ODD, and trace them to corresponding parameters pertaining to OD when applicable.	✓

Data Management

Requirement	Yes/ No
Identify objectives to be satisfied at the level of each individual data point and at the level of data sets used later in the project development lifecycle.	✓
Capture data management requirements.	✓
Collect, label (only in supervised learning), prepare (pre-processing, data transformation, feature engineering), and verify accuracy, completeness, and representativeness of various data sets.	✓
Identify and eliminate unwanted bias inherent to the data sets.	✓

Data Point Identification

Requirement	Yes/ No
Capture unique identification of all requirements necessary to design and implement AI/ML constituent.	✓
Review derived requirements from a safety (support) perspective, determining which function they support so that the appropriate Failure Condition classification can be assigned.	✓

Purpose

Requirement	Yes/ No
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Define set of parameters pertaining to AI/ML constituent ODD, and trace them to corresponding parameters pertaining to OD when applicable. ✓

Note: The output is in human-readable Markdown format, with a focus on low-level checklist items that are relevant to the requirement and reference provided.