Annotation Guideline

1. **Category:** Causality

Labels:	Causal, Non-Causal
Explanation:	A sentence is causal if it contains a relation between two events e1 and e2, where e1 causes the occurrence of e2. In this context, e1 is called cause and e2 effect.

Examples:

- **Causal:** After pushing the button, an input window is shown.
- **Non-Causal:** The customer shall be able to save customer data.

2. Category: Explicit

Labels:	Explicit, Implicit
Explanation:	Causal relations that contain information about both causes and effects are called explicit.

Examples:

- **Explicit:** The pump starts when the water level rises.
- **Implicit:** A parent process kills a child process. (The effect “the child process is terminated” is not explicitly stated.)

3. Category: Marked

Labels:	Marked, Unmarked
Explanation:	A causal relation is marked when a specific phrase indicates causality.

Examples:

- **Marked:** The system restarts **because** of an error.
- **Unmarked:** Drive slowly. The highway is iced.

4. Category: Single Sentence

Labels:	Single Sentence Causality, Two Sentence Causality
Explanation:	Causal markers do not always occur in the same sentence as the causal relation, which means that marked causality can also extend over two sentences. This also applies to unmarked causality

Examples:

- **Single Sentence Causality:** He cannot attend class, because he has a cold.
- **Two Sentence Causality:** He has a cold. **Therefore,** he cannot attend class.

5. **Category:** Single Cause

Labels:	Single Cause, Multiple Causes
Explanation:	A single cause contains no conjunctions or disjunctions. Rather, the cause consists of one atomic expression.

Examples:

- **Single cause:** If the **user enters a wrong password**, the login is not successful.
- **Multiple causes:** If the **user enters a wrong password** or **the system detects an error**, a warning window is shown.

6. **Category:** Single Effect

Labels:	Single Effect, Multiple Effects
Explanation:	A single effect contains no conjunctions or disjunctions. Rather, the effect consists of one atomic expression.

Examples:

- **Single effect**: If the user enters a wrong password**, the login is not successful**.
- **Multiple effects:** If the user enters the right credentials, **the system makes a sound** and **registers the user**.

7. **Category:** Event Chain

Labels:	Event Chain, No Event Chain
Explanation:	In some cases, causal relations may be linked. This means, for example, that the effect of one causal relation is the cause in another relation. We call such causal relations event chains.

Example:

Due to **potential impacts in battery performance** caused **by service life and manufacturing variability**, it is recommended **that pass/fail voltage criteria exceed mission requirements** during qualification testing.

→ **potential impacts in battery performance** represents the effect in the first causal relation as well as the cause in the second relation.