The Easy Approach to Requirements Syntax: The Definitive Guide

Why use EARS?

Despite the emergence of a range of formal, graphical and model-based approaches to requirement specification, the vast majority of requirements documents today are still written in natural language (NL). In fact, even when MBSE is used, the initial, high-level specifications for the system are always written in natural language.

Unfortunately, unconstrained natural language requirements can often be vague, ambiguous, overly wordy and confusing. Such requirements can lead to unexpected interpretations, erroneous implementations, costly scrap and rework and – in the worst cases – disaster.

EARS helps solve that problem by bringing just enough rigour to the process of writing requirements in natural language.

His answer: "Because people like natural language, and they like things easy. Most people don’t want to learn a specialized notation for writing requirements. EARS uses natural language, and it’s easy."

Besides being easy to use, EARS provides several other basic benefits.

First, EARS makes a big impact on requirements quality for very little overhead. With less than a day of training, most engineers’ and analysts’ skill in writing requirements improves dramatically. With some follow-on coaching, the techniques are quickly mastered. One training class – and some practice – can transform an organization’s RE culture.

Second, the five, compact EARS syntax patterns – which we’ll look at shortly – greatly simplify NL requirements. “In trying to improve something, we often add to it – make it larger,” says Mavin. “Rarely do we take the time to remove. It’s like that famous quote often attributed to Blaise Pascal: ‘I have made this letter longer than usual, only because I have not had time to make it shorter.’” Such was the case of the oft-updated CS-E with which Mavin and his colleagues had to wrestle.