A standard or protocol is established in a SMARTree by **embedding logic** within the elements of a tree. What does this mean? Basically, any or all elements (except for headers) can be given a condition that is checked during user interaction. The most simple condition is whether data exists in an element. Other examples include whether a value or date is within a certain range or is an exact match. Check out the **YouTube Video** that describes how logic works in the SMARTree client

When a user is tasked with populating, say, a set of test results then a tree can be built with the proper set of logic conditions so as to ensure a complete set of data is obtained. This is especially useful to ensure that the trees are fully populated and meet specific standards defined by the original builder of the tree. This feature is also useful for populating inputs to a model or when building a test or standard that comply with ASTM. The feature also ensures that all users adhere to policies regarding data capture and reduction.

Examples of data often forgotten or not bundled with test data include temperature in the lab during testing, modes of failure, make and model of instron, technician name etc. With SMARTree, a master model template can be built with all the logic conditions preset so that no data is omitted.

Details on how to apply logic conditions to your tree can be found here