

Graph Theory for Testers - Software Testing

Graph theory is a branch of topology that is sometimes referred to as “rubber sheet geometry.” Curious, because the rubber sheet parts of topology have little to do with graph theory; furthermore, the graph in graph theory do not involve axes, scales, points and curves as you might expect. Whatever the origin of the term graph theory is probably the most useful part of mathematics for computer science – far more useful than calculus – yet it is not commonly taught. Our excursion to graph theory will follow a “pure math” spirit: definitions are as devoid of specific interpretations as possible. Postponing interpretations results in maximum latitude in interpretations later. Much like well defined abstract data types promote reuse. Two basic kinds of graphs are used: undirected and directed. Because the latter are a special case of the former, we begin with undirected graphs. This will allow us to inherit many concepts when we get to directed graphs.