— Module *GraphUtils* –

A digraph is a pair of a set of nodes and a set of directed edges, each of which is a pair of nodes.

$$IsGraph(G) \stackrel{\triangle}{=}$$
 Represented by a record with node field and edge field.
 $\land G = [node \mapsto G.node, edge \mapsto G.edge]$

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$$EmptyGraph \stackrel{\triangle}{=} [node \mapsto \{\{\}\}, \ edge \mapsto \{\}]$$

$$g \oplus h \ \stackrel{\triangle}{=} \ \text{A union (in terms of set) of two graphs g and h.} \\ [node \mapsto g.node \cup h.node, edge \mapsto g.edge \cup h.edge]$$

 $[\]backslash * \ {\it Modification History}$

^{*} Last modified Tue Feb 05 11:52:34 CST 2019 by anonymous

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