David Molta Hernández

Alejandro Castro

Alexis Jaramillo

TAD : Graph

Representation: Adjacency list

Invariant: { V is a vertex ∈ G ∧ x is a vertex ∈ G → x != v }
{ V is a list of adjacency of U, then U ∈/ V}

Primitive operations

Operation Name	**Input**	**Output**	**Operation Type**
addVertex():	GRAPH X ELEMENT	GRAPH	MODIFIER
removeVertex(vertex):	GRAPH X ELEMENT	GRAPH	MODIFIER
addEdge(sourceVertex, destinationVertex):	GRAPH X SOURCE_ELEMENT X DEST_ELEMENT	GRAPH	MODIFIER
removeEdge(sourceVertex, destinationVertex):	GRAPH X SOURCE_ELEMENT X DEST_ELEMENT	GRAPH	MODIFIER
BFS(startVertex)	GRAPH X START_VERTEX	STRING	ANALYZER
DFS(startVertex)	GRAPH X START_VERTEX	STRING	ANALYZER
Dijkstra(starVertex,finalVertex)	GRAPH X START_VERTEX X FINAL_VERTEX	MAP	ANALYZER
Floydwarhsall()	GRAPH	INT [] []	ANALYZER