VLDB 2015
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Reviews For Paper

Track	Demonstrations
Paper ID	2155
Title	VIIQ: auto-suggestion enabled visual interface for interactive graph query formulation

Masked Reviewer ID: Assigned_Reviewer_1

Review:

Question	
Overall Rating	Accept
Detailed Comments and a brief justification for your rating	Query formulation in schema-less data is always hard, whether graphs or any other kinds of data. This tool assists in query formulation with ranked suggestions.
Three (or more) strong points about the demo/paper (Please be precise and explicit; clearly explain the value and nature of the contribution).	The techniques and the interface could make for a nice demo at the conference.
Three (or more) weak points about the demo/paper	None - great for demo.
Relevant for PVLDB	YES
Novelty (Please give a high novelty ranking to demos on new topics, opening new fields, or proposing truly new ideas)	Novel
Significance	Improvement over existing work
Technical Depth and Quality of Demo	Solid work
Presentation	Reasonable: improvements needed

Masked Reviewer ID: Assigned_Reviewer_2

Review:

Question	
Overall Rating	Neutral
	The paper describes VIIQ, which is a graphical query system and query formulation assistant. I like the system and I think it would generate considerable discussion and would be a good demo. Therefore, I would like to recommend acceptance. However, there are a few issues: 1) The paper talks about "heterogeneous graphs" but never defines it. I must admit, I don't know

Detailed Comments and a brief justification for your rating	what that means. 2) In Section 3, graph definition is for a directed graph, but all of the example figures show undirected graph. What is going on? 3) The examples all show queries that involve entity classes (e.g., Person, Country). This (a) assumes that there is a schema definition (e.g., RDFS) which restricts its use since many RDF datasets either do not have RDFS definitions or have only partial RDFS definitions; (b) it is not clear how to specify values -- what if I want to query to specify node "Joe Blow" rather than "Person"? 4) Many of the graphs are property graphs where each vertex has a number of attributes. How can attribute values be specified or are you not allowing value-based restrictions and instead focusing solely on structural queries?
Three (or more) strong points about the demo/paper (Please be precise and explicit; clearly explain the value and nature of the contribution).	See above.
Three (or more) weak points about the demo/paper	See above.
Relevant for PVLDB	YES
Novelty (Please give a high novelty ranking to demos on new topics, opening new fields, or proposing truly new ideas)	With some new ideas
Significance	Improvement over existing work
Technical Depth and Quality of Demo	Solid work
Presentation	Reasonable: improvements needed

Masked Reviewer ID: Assigned_Reviewer_3

Review:

Question	
Overall Rating	Accept
Detailed Comments and a brief justification for your rating	Describes a system to auto-suggest in query construction for graph queries which advances the state of the art in graph query languages.
Three (or more) strong points about the demo/paper (Please be precise and explicit; clearly explain the	* The demo addresses a novel problem of how to aid users to formulate visual graph queries easily and accurately by providing suggestions of node/edge labels and edges that may be added to a query. * The paper is easy to read and the motivation of the tool is well articulated by positioning with the state-of-the-art.

value and nature of the contribution).	* The problem addressed by the tool is important and timely as usability of graph querying platforms is paramount. GUIs and visual query languages are an historically under-researched area.
Three (or more) weak points about the demo/paper	* The technical solution is weak in a sense that it depends heavily on the availability of query logs for providing top-k suggestions. This makes the system impractical for ad hoc queries. Furthermore, the benefit of such suggestions is not apparent to the end users unless "sufficient" amount of query logs is available. It is advisable for the solution to leverage the underlying graph data directly and use query logs whenever "possible". Cardinality would be a possible way to rank, highest count is best. * It is highly desirable for a demo paper to provide a description of the system architecture. This is natural as you are presenting a software tool. Unfortunately, the paper reads more like a short research paper (first three sections) rather than a demo paper. * The passive mode of the solution is unclear. The authors mention that it kicks in whenever a user is idle and there is a connected partial query graph on the canvas. How does VIIQ know when a user is idle? How do you distinguish the scenario where the user has finished formulated a query (and checking it again before clicking the "search" button) with that of the case where he/she has taken a break (e.g., attending a phone call)? * The performance of the suggestion mechanism is important. Any long delay will render the system impractical. Any results to demonstrate its efficiency (since the technical details of the work does not seem to be published yet in any major venue)?
Relevant for PVLDB	YES
Novelty (Please give a high novelty ranking to demos on new topics, opening new fields, or proposing truly new ideas)	Novel
Significance	Improvement over existing work
Technical Depth and Quality of Demo	Solid work
Presentation	Excellent: careful, logical, elegant, easy to understand