Scalable Processing of Dominance-Based Queries

Skyline query and *top-k* dominating queries

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ABSTRACT

The information age has brought about unprecedented amounts of data, which has in turn led to the development of big data and the use of analytics to make sense of it. Data management has become a critical aspect of this process, as it involves organizing and storing data in a way that makes it accessible and usable. Query operators are a type of tool that allow users to retrieve specific data from a database by specifying certain criteria. Overall, the proliferation of data and the ability to analyze it has had a huge impact on a variety of fields and is likely to continue to shape the way we live and work in the future. In this paper, we study the skyline query, a decision support mechanism, and *top-k* queries, a rank-aware approach. Skyline query retrieves the value-for-money options of a dataset by identifying the objects that present the optimal combination of the dataset’s characteristics [1]. On the other hand, Top-K queries define a cumulative scoring function in order to retrieve the best results of a dataset since this will reduce the potential multidimensional comparisons of data to a single scalar value.

KEYWORDS

Scala; Spark; Big Data; Dominance; top-k; skyline; queries

1 INTRODUCTION

The updated template, user manuals, samples, and required fonts, all are available at the URL <https://www.acm.org/publications/proceedings-template>. It contains said information for all three versions of MS Word (Windows and 2 versions of Mac). There are also separate links to the user guide, which can be referred to by the user. This URL also contains some useful video links, which describe how to add the template, structure the paper, and generate the layout, in different clips. **Display Formula with Number**

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Figure 1: Figure Caption and Image above the caption [In draft mode, Image will not appear on the screen]

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1.1 Skyline

1.2 *Top-k* dominating query

2 IMPLEMENTATION

2.1 Task 1

2.2 Task 2

2.3 Task 3

3 RESULTS

4 CONCLUSION

In the below paragraph, it is explained how alt-txt value is placed in **MS Word 2010**. To add alternative text to a picture in Word 2010, follow these steps:

1. In a Word 2010 document, insert a picture.
2. Right click on the inserted picture and select the **Format Picture** option.
3. Select the **Alt Txt** option from the left-side panel options.
4. In the "Title:" and "Description:" text boxes, type the text you want to represent the picture, and then click "Close".

Below are steps to place alt-txt value in **MS Word 2013/2016**. To add alternative text to a picture in Word 2013/2016, follow these steps:

1. In a Word 2013/2016 document, insert a picture.
2. Right click on the inserted picture and select the **Format Picture** option.
3. In the settings at the right side of the window, click on the "Layout & Properties" icon (3rd option).
4. Expand **Alt Txt** option.
5. In the "Title:" and "Description:" text boxes, type the text you want to represent the picture, and then click "Close".

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