



**PROJECT REPORT  
VISUALIZATION OF COUNTING AND RADIX  
SORT ALGORITHMS USING HTML 5 AND  
JAVASCRIPT**

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2018**

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VISUALIZATION OF COUNTING AND RADIX SORT ALGORITHMS  
USING HTML 5 AND JAVASCRIPT

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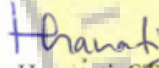
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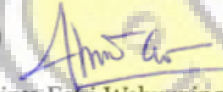
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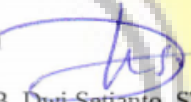
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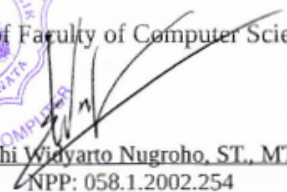
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## STATEMENT OF ORIGINALITY

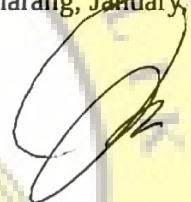
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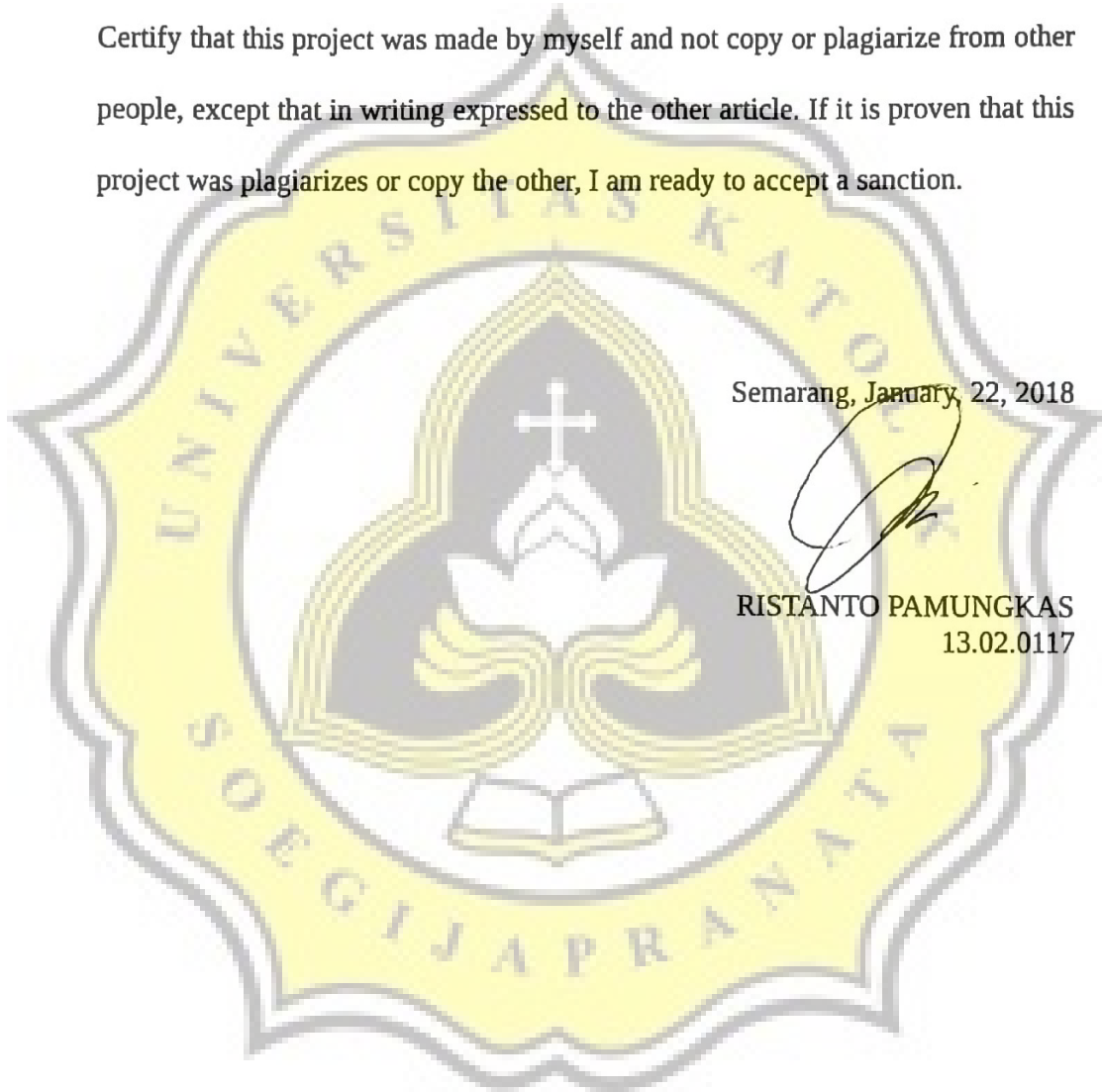
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## ABSTRACT

*Counting and Radix sort algorithms are examples of basic sorting algorithms which have non-comparisional technique in their data processing. In learning both of algorithms, to know how each algorithm works is important. Algorithms will not be easily understood only with theory in text form. Visualization is one of communication method to provide it.*

*This project result is to make Counting and Radix sort visualization media. Visualization are creates using HTML 5 as main programming language. Animation of data movement on each sorting process is using Canvas API. Algorithm function is create on Javascript. Adjusting timeout, delay, and coordinate are becomes another challenges.*

*Main objective to be reached is to visualize counting and radix algorithms processing unordered data. Application is running algorithms with numerical data, which were obtained by user input. Entire process from each sorting algorithms were displayed in form of animation.*

*Keywords: visualization, animation, counting, radix, sorting, web-application.*



## PREFACE

Project report entitled “*Visualization of Counting and Radix Sort Algorithms using HTML 5 and Javascript*” are written in six chapters. First chapter is contain introduction of this project. This chapter precisely contain about how this project will be done, what are scopes and objectives that exist in this project.

Second chapter containing literature study which are describing about report from previous research and some references that related with this project. Explanation about some differences between this project and literature study also included.

In third chapter, outline from step in composing application were descibed. Meanwhile, analysis and design about how this project will be executed shown in fourth chapter. Design of application which is containing flowchart diagram, also included.

Fifth chapter explain about algorithms implementation which can accomplish purpose of application and discuss about application testing. Final chapter explaining about conclusion, including suggestion about how this application will be developed on another further research.

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