



**PROJECT REPORT**  
**The Ladder Word Game**

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11.02.0028

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**APPROVAL AND RATIFICATION PAGE**

**PROJECT REPORT**

The Ladder Word Game

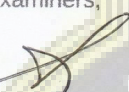
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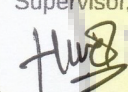
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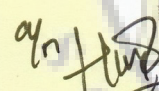
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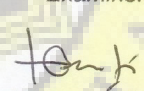
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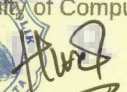
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### STATEMENT OF ORIGINALITY

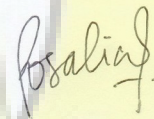
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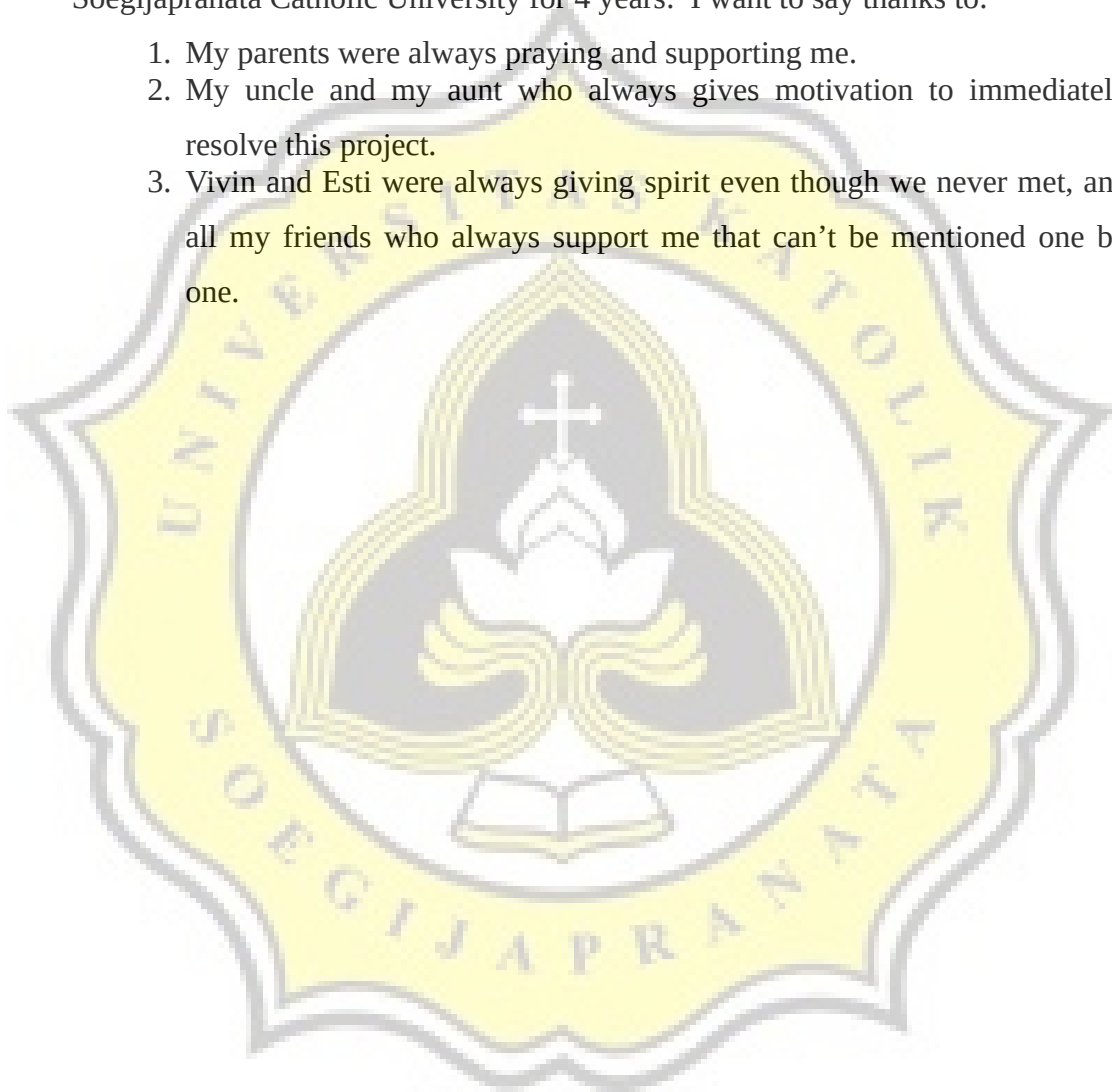
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## FOREWORD

Finally, I can finished my project for my graduation with the title is The Ladder Word Game after I studied at the Faculty of Computer Science in Soegijapranata Catholic University for 4 years. I want to say thanks to:

1. My parents were always praying and supporting me.
2. My uncle and my aunt who always gives motivation to immediately resolve this project.
3. Vivin and Esti were always giving spirit even though we never met, and all my friends who always support me that can't be mentioned one by one.



## PREFACE

Ladder word application is an application to aid the user in performing the randomization of the letters. This letter also randomization process reduction letter to create new words. After all the letters of the alphabet and randomization reductions completed in the process and then perform a search word meanings of each word that is already formed. more explanation detailing can be seen in chapter I that contains about course applications globally on a sub chapter background, whereas in the scope describes the limitations that will be done in making the application.

In chapter II talks about the literature study covering about random letter, factorial, and recursive. The process of random letters that can help users get new words. Then about calculating factorial that is useful to the user in order to find out the number of possible new words that will be formed in accordance with the number of the letters. It also talks about recursive, that is, the function that calls itself. Next on chapter III contains about research methodology that explains the plans to make the program and about project management.

In chapter IV with the title describes the analysis and design of program analysis that includes Initialization, factorial, recursive, and less letters. Whereas, in the design describes the use case diagram, diagram class, explanation of diagram class, and design GUI. And then, in chapter V describes the implementations that describe main program of the program made by explaining some of the methods used in carrying out the program of random letters, besides the chapter also talks about testing program. the last is chapter VI which contains about conclusions that answer from the destination point in chapter I and further research to answer from the point the scope that has a problem.

## ABSTRACT

*At this time many types of games for children. Of the various types of games, which one is a words game, for example is hangman, scrabble, cross words, word search, etc. Sometimes appears kind of word game that actually play the same way but have a different name of the game. Users play games word does not understand the meaning of the word. When users enter a word then the word may appear a variety of new words. Therefore, this project will help the user know what words have and which has no meaning.*

*The project will be created to do the randomization of letters to help users find new words quickly and easily which is computer-based. the making of the project using function recursion, function can call itself, and use a factorial to count the number of possible words that will be formed in accordance with the number of the letters. Not only that, the user can also find out what words have meaning by checking into a dictionary.*

*This project will write with java programming and array for data structure to handle the value of random letters and will then be shown. And the results will show in Graphical User Interface (GUI).*

**Keyword:** Recursive, Factorial, Ladder Word

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