TEXTBOOK PROBLEM DEPENDENCY WEB

An Undergraduate Research Scholars Thesis

by

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ABSTRACT

Textbook Problem Dependency Web

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After a textbook has been written and published, one may want to customize it for a particular audience; it may be desirable to delete or reorder some of the chapters or sections. However, there may be dependencies among the chapters, sections, examples and exercises which make it very tedious to rearrange the order of not only the chapters but also, the associated exercises. Martinsen is building a graph database to describe the dependencies among the chapters and sections in a portion of the online Calculus book, MYMathApps Calculus, being written by Yasskin. In addition there will be a database of examples and exercises which describes their dependencies on the chapters and sections. Further, he is building a GUI for an instructor or institution to reorder the chapters and sections by drag and drop and have the examples and exercises automatically reorder.

1

DEDICATION

To my mother, my father, my grandfather, and my grandmother. To see what happens with multiple lines, I extend this next part into a second line.

ACKNOWLEDGMENTS

This section is also optional, limited to four pages. It must follow the Dedication Page (or Abstract, if no Dedication). If listing preliminary pages in Table of Contents, include Acknowledgments. Heading (ACKNOWLEDGMENTS) is bold if major headings are bold. It should be in same type size and style as text. So does vertical spacing, paragraph style, and margins. Also, ensure that the spelling of "acknowledgments" matches throughout the text and the table of contents.

NOMENCLATURE

B/CS Bryan and College Station

TAMU Texas A&M University

SDCC San Diego Comic-Con

EVIL Every Villain is Lemons

EPCC Educator Preparation and Certification Center at Texas

A&M University - San Antonio

FFT Fast Fourier Transform

ARIMA Autoregressive Integrated Moving Average

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- 1.1 Background Info
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2. THE ALGORITHM

- 2.1 The Motivation
- 2.2 The Design

3. THE IMPLEMENTATION

4. CONCLUSION

Some text/figure here

4.1 Results

4.2 Challenges

Section here is to test toc display only.

4.3 Broader Impact

Section here is to test toc display only.

4.4 Future Plans

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REFERENCES

FIRST APPENDIX

Text for the Appendix follows.



Figure 4.1: TAMU figure

A SECOND APPENDIX WHOSE TITLE IS MUCH LONGER THAN THE FIRST

Text for the Appendix follows.



Figure 4.2: Another TAMU figure.