

# **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.

## **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. INTRODUCTION AND LITERATURE REVIEW**

## **1.1 Background Info**

## **1.2 Existing Technology**

## **1.3 Introduction**

## **2. THE ALGORITHM**

### **2.1 The Design**

### **2.2 The**

### **3. THE IMPLEMENTATION**

## **4. CONCLUSION**

**\*\*Some text/figure here\*\***

### **4.1 Challenges**

Section here is to test toc display only.

### **4.2 Broader Impact**

Section here is to test toc display only.

### **4.3 Future Plans**

asd

## 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.