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**YAŞAR UNIVERSITY**

**FACULTY OF ENGINEERING**

**DEPARTMENT OF COMPUTER ENGINEERING**

**COMP4920 Senior Design Project II, Spring 2020**

**Advisor: Mehmet Ufuk Çağlayan**

**XYZAPP: XYZ Application**

**Final Report**

**(Bachelor of Science Thesis)**

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# PLAGIARISM STATEMENT

This report was written by the group members and in our own words, except for quotations from published and unpublished sources which are clearly indicated and acknowledged as such. We are conscious that the incorporation of material from other works or a paraphrase of such material without acknowledgement will be treated as plagiarism according to the University Regulations. The source of any picture, graph, map or other illustration is also indicated, as is the source, published or unpublished, of any material not resulting from our own experimentation, observation or specimen collecting.

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# ACKNOWLEDGEMENTS

The acknowlodgements are here

# KEYWORDS

A list of keywords that relate to your project and your final report

# ABSTRACT

The abstract goes here

# ÖZET

Türkçe özet için ayrılmış bölümdür

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# LIST OF FIGURES

List of figures, if any, that appear in the main body of final report. Those in appendices must not be listed here.

Figure x.y. Title of the figure …………………………………………………………Page Number

# LIST OF TABLES

List of tables, if any, that appear in the main body of final report. Those in appendices must not be listed here.

Table x.y. Title of the table …………………………………………………………Page Number

# LIST OF ACRONYMS/ABBREVIATIONS

List of acronyms and abbreviations, if any, that you used in the main body of final report. Those in appendices could also be listed here or be separetly listed in appendices.

CPU Central Processing Unit

AI Artificial Intelligence

UML Unified Modeling Language

………

# 1. INTRODUCTION

# 1.1. Description of the Problem

* Give an overview of the problem area and your specific problem that you aim to solve.
* If necessary, provide a literature survey, that is who has done what in this specific problem area, with references to bibliographic resources.
* If there already exists a number of solutions/products related to your specific problem, present a comparative evaluation of these solutions/products.
* State that a detailed description of the problem is provided in Appendix A: Requirement Specifications Document, v3.0.

# 1.2. Project Goal

Goal(s) of your project, for example develop a prototype, a model, a software product, a hardware product, a hardware/software product, a process etc in ……, basically extracted from Section 1.1 of this report.

# 1.3. Project Output

Your project outputs in this course are a software product or a hardware product or a hardware/software product, with all the associated documents such as RSD’s, DSD’s and PM. Also, a poster of your project, a web site and a presentation are prepared. Give a list of all project outputs.

# 1.4. Project Activities and Schedule

Your project activities and schedule starting with COMP 4910 activities, then 4920 activities, that is,

* The first version of problem definition, 4910 project form, is first produced, then RSD v1.0, then RSD v2.0, then DSD v1.0 as high level design
* In COMP 4920, first design is finalized and , DSD v2.0 detailed design is produced, in the mean time RSD v2.0 is revised and RSD v3.0 is produced, then implementation and testing activities, then PM, etc

# 2. REQUIREMENTS

* Requirements have mostly been determined during the Fall semester, as part of the COMP 4910 and at least Version 2.0 of RSD is produced. In the Spring semester, while you are progressing with design and implementation, it is possible that you revise the RSD based on
  1. New ideas resulting in new requirements, as agreed upon with your project advisor and your team members
  2. Requirements you give up, for example, you or your advisor have found out that it is almost impossible for your team to design/realize/implement certain requirements with the resources of the Spring semester (Remember: the Traveling Salesmen Problem and you have only 14 week)
  3. Incomplete, incomprehensible requirements, re-specified so that people reading your RSD will be able to understand what a specific requirementis.
  4. Badly structured RSD, so you re-write the RSD for a better structure, conforming to COMP 4910 and COMP 4920 standards.
* State that your final requirements are provided in Appendix A: Requirements Specifications Document, v3.0,

# 3. DESIGN

# 3.1. High Level Design

* Briefly describe what you have done as high level design
* State that your high level design is provided in Appendix B: Design Specifications Document, v2.0, sections ……...Of course, your high level design must exist in the referenced sections of this appendix.

# 3.2. Detailed Design

* Briefly describe what you have done as detailed design
* State that your detail design is provided in Appendix B: Design Specifications Document, v2.0, sections ……...Of course, your detailed design must exist in the referenced sections of this appendix.

# 3.3. Realistic Restrictions and Conditions in the Design

* Briefly describe restrictions in your high level/detailed design. For example, no security, limited passwword enforcement, serves only up to 1000 users simultaneosly, does not support distributed files, etc.etc.
* If you have already written about your design decisions related to restrictions and conditions in your design, then you can simply reference the related sections in Appendix B: Design Specifications Document, v2.0, sections ……...Of course, your design decisions must exist in the referenced sections of this appendix.

# 4. IMPLEMENTATION, TESTS and TEST DISCUSSIONS

# 4.1. Implementation of the Product

* Give an overview of your implementation, basically a short overview of what you have written in Product Manual in Appendix C..
* State that a detailed description of your implementation is provided in Appendix C: Product Manual, v1.0.

# 4.2. Tests and Results of Tests

* As in 3.1, an overview of your tests, your test results and a discussion of your test results should be in Product Manual in Appendix C.

# 5. CONCLUSIONS

# 5.1. Summary

* Summary of your project, what you have promised and what you have achieved

# 5.2. Cost Analysis

* Manpower spent in your project, in man-days, for each team member, per month and total. Assume one man-day means “actually working” for 8 hours, excluding any tea/coffee/lunch breaks. Provide a detailed table showing manpower for each month (i.e. February, March, April, May) and for each team member and also totals for each month, each team member and overall manower effort.
* Any hardware and/or software bought for your project. Provide a detailed table item, brand name,model, properties and cost.
* Perform a simple cost analysis based on information you provide

# 5.3. Benefits of the Project

* What are the benefits of your product to its users, to human kind, animals, plants, to nature, etc..

# 5.4. Future Work

* What could be added to your project in future, in terms of additional functionality, more performance, larger or different data, etc..

# References

1. References to bibliographic sources, like professional books, textbooks, handbooks, patents, standards, technical reports, journal/conference papers, etc. that you have used in your project.
2. References to organizational design process procedure document(s), or a generic design process procedure document(s), if any (i.e. any documents you have used during your summer practice in a company and were also useful in your project.
3. References to organizational design product specification document(s), or a generic design product specification document(s), if any. Similar to (1).
4. Other references to additional documents, like other internal organizational documents, software project management documents, software design tool documents, etc, if any. Similar to (1).

# APPENDICES

# APPENDIX A: REQUIREMENTS SPECIFICATION DOCUMENT

(Note that

* the full RSD Final Version, cover, etc. should appear following this separation page,
* RSD must have its own internal page numbers, 1, 2, 3, etc. For example, if APPENDIX A separation page, that is this page, is numbered 5 and RSD is 10 pages long, then RSD pages are (1/10, 2/10, 3/10 etc), **NOT** (6, 7, 8, …, 15) and APPENDIX B separation page will numbered 16, that is, 5+10+1.)
* Above page numbering could be achieved in MS Word by placing each Appendix in a ne document section, as in this example.

# APPENDIX B: DESIGN SPECIFICATION DOCUMENT

(Note that

* the full DSD Final Version, cover, etc. should appear following this separation page,
* DSD must have its own internal page numbers, 1, 2, 3, etc. For example, if APPENDIX B separation page, that is this page, is numbered 16 and DSD is 10 pages long, then DSD pages are (1/10, 2/10, 3/10 etc), **NOT** (17, 18, 26) and APPENDIX C separation page will numbered 27, that is, 16+10+1.)
* Above page numbering could be achieved in MS Word by placing each Appendix in a ne document section, as in this example.

# APPENDIX C: PRODUCT MANUAL

(Note that

* the full Product Manual, cover, etc. should appear following this separation page,
* PM must have its own internal page numbers, 1, 2, 3, etc. Page numbering is similar to is described before, assuming PM is 10 pages long.
* Above page numbering could be achieved in MS Word by placing each Appendix in a ne document section, as in this example.

# APPENDIX D: SOURCE CODE/EXECUTABLES/SCRIPTS IN CD/DVD

CD/DVD in Envelope