TITLE OF THE DESIGN PROJECT GOES HERE IN ALL CAPITAL LETTERS AND LONGER TEXT MAY BE SUBJECT TO AUTOMATIC LINE BREAKS

Senior Design Project I

Jony Ive   Charles Eames   Don Norman

2020

MEF UNIVERSITY
FACULTY OF ENGINEERING

DEPARTMENT OF COMPUTER ENGINEERING

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Jony Ive   Charles Eames   Don Norman

Advisor: Assoc. Prof. Steve Wozniak

2020

Project Title	: Title of the Design Project Goes Here in All Capital Letters and Longer Text May Be Subject to Automatic Line Breaks
Student(s) Name	: Jony Ive, Charles Eames, Don Norman
Date	: 07/01/2021

I hereby state that the design project prepared by Jony Ive, Charles Eames, Don Norman has been completed under my supervision. I accept this work as a "Senior Design Project".

07/01/2021
Assoc. Prof. Steve Wozniak

I hereby state that I have examined this senior design project by Jony Ive, Charles Eames, Don Norman. This work is acceptable as a "Senior Design Project".

07/01/2021
Prof. Alan Turing
Head of the Department of
Computer Engineering

ACADEMIC HONESTY PLEDGE

In keeping with MEF University Student Code of Conduct, I pledge that this work is my own and that I have not received inappropriate assistance in its preparation. I further declare that all resources are explicitly cited.

NAME	DATE	SIGNATURE
Jony Ive	07/01/2021	
Charles Eames	07/01/2021	
Don Norman	07/01/2021	

ABSTRACT

TITLE OF THE DESIGN PROJECT GOES HERE IN ALL CAPITAL
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Jony Ive   Charles Eames   Don Norman

MEF UNIVERSITY
Faculty of Engineering
Department of Computer Engineering

Advisor: Assoc. Prof. Steve Wozniak

JANUARY, 2020

Your abstract goes here. Make sure that you follow the guidelines. This
LaTeX template carries out much of the formatting for you. During the design of the template, it has been aimed to compensate for the user errors for formatting. However, it has not been tested rigorously.

First paragraphs also get indentation. You can't switch it off since the original template asserts.

Keywords: Finite State Machine, Natural Language Processing, Language Model, Word Semantics, Virtual Reality

ÖZET

KONU BAŞLIĞI HEPSI BÜYÜK HARF OLACAK ŞEKILDE BURAYA
YAZILIR EĞER BAŞLIK ÇOK UZUNSA OTOMATIK OLARAK YENI
SATIRA GEÇILIR

Jony Ive   Charles Eames   Don Norman

MEF ÜNİVERSİTESİ
Mühendislik Fakültesi
Bilgisayar Mühendisliği Bölümü

Tez Danışmanı: Doç. Dr. Steve Wozniak

OCAK, 2020

Özet buraya yazılır. Lütfen şablon yapısına uygun bir rapor hazırladığınızdan emin olunuz. Bu LaTeX şablonu formatlamanın büyük kısmını sizin için halleder. Bu şablon tasarlanırken kullanıcı hatalarını telafi edecek şekilde tasarlandı. Ancak, detaylı bir şekilde test edilmemiştir.

İlk paragraflarda da girdi olur. Asıl şablon gereği bu seçeneği değiştirebileceğiniz bir ayar bulunmamaktadır.

Anahtar Kelimeler: Sonlu Durum Makineleri, Doğal Dil İşleme, Dil Modeli, Kelimeden Anlam Çıkartmak, Yapay Gerçeklik

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List of Abbreviations

1. INTRODUCTION

First use: Support Vector Machines (SVM). Second use: SVM. The introduction section should include general information about the project, the motivation of choosing this project, which will cover the broad impact of the project in terms of global, economic, environmental, societal, legal, health, and security context, and the global and environmental impact of the solution proposed.

1.1. Motivation

In this part you should answer the following questions: "Why is it important to work on this project? How do people benefit from the outcomes of the proposed project?

1.2. Broad Impact

Explain the impact of the topic/solution method that you studied in terms of economic, societal, health, and security context.

Year	Method	Dataset
1974	Statistical Analysis	Human activity (100 persons)
1986	Structural Pattern Recognition	Text data (2000 words)
1986	Structural Pattern Recognition	Text data (2000 words)

Table 2 – This is a sample table caption. Use Insert/Caption to add table captions. Table captions are provided at the top of the table.

1.2.1. Global Impact of the Solution

What are the global and environmental impacts of the project?

1.2.2. Economic Impact of the Solution

What are the economic impacts of the project?

1.2.3. Environmental Impact of the Solution

What are the environmental impacts of the project?

1.2.4. Societal Impacts of the Solution

What are the societal impacts of the project?

1.2.5. Legal Issues Related to the Project

What are the legal consequences and issues related with health, security, and business? Does it have any violation of human rights or intellectual property rights?s

2. PROJECT DEFINITION AND PLANNING

Explain your project and provide details of your project planning in this section.
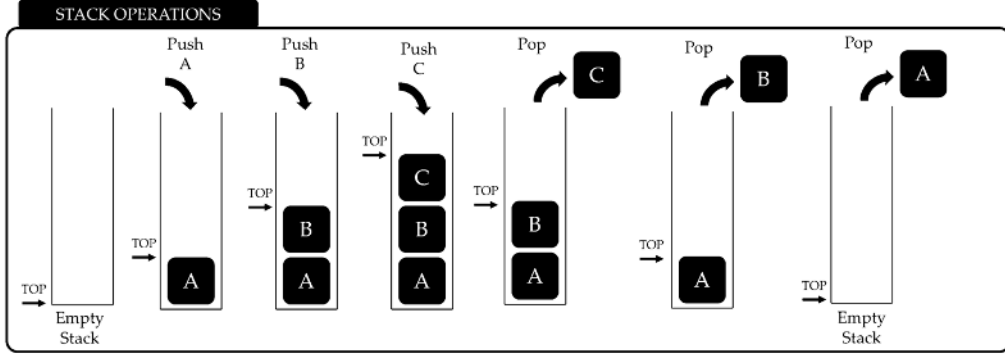
Figure 1 – Sample figure. Use Insert/Caption to insert figure captions

In one dimension, the Gaussian function is the probability density function of the normal distribution.

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{\frac{-(x-\mu)^2}{2\sigma^2}} \tag{1}$$

sometimes also called the frequency curve. The full width at half maximum for a Gaussian is found by finding the half-maximum points x_0.

2.1. Project Definition

Project definition. Describe your project in this section. Provide the project scope, functional and non-functional requirements of the project.

2.2. Project Planning

Apply Work Breakdown Structure (WBS) to determine tasks and subtasks. Provide a GANTT chart with a time table, identify responsible person(s) for each task.

Task	Responsible Person	Weeks													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Literature Survey	Student 1 Student 2	▪	▪	▪											
System Modeling and Analysis	Student 1 Student 2				▪	▪									
Design of System Part 1	Student 2					▪	▪	▪							
Design of System Part 2	Student 1					▪	▪								
Implementation of System Part 1	Student 1								▪	▪	▪				
Implementation of System Part 2	Student 2									▪	▪				
Testing	Student 1 Student 2										▪	▪			
Report and Project Presentation	Student 1 Student 2								▪	▪			▪	▪	▪

Figure 2 – Sample project plan for 14 weeks

2.2.1. Aim of the Project

Describe the aim of the project in one paragraph.

2.2.2. Project Definition

Describe the content of the project.

2.2.3. Use Cases

Provide UML use case diagrams by specifying systems, actors, use cases and relationships. Kahneman (2011)

2.2.4. Success Criteria

Describe the success criteria of the project.

2.2.5. Project Time and Resource Estimation

Provide time (Month) and effort (Person / Month) estimation of the project. Describe how you estimated them. Provide a cost estimate of the project by considering the human resources, hardware and software resources etc.

2.2.6. Solution Strategies and Applicable Methods

Describe the alternative approaches to solve the problem. After comparing their advantageous and disadvantageous, explain the method you decided to use to solve each sub problem in the project, together with why you selected this method. Deep Learning (DL) and DL

2.2.7. Risk Analysis

Describe what are the risks of completing the project successfully. Identify the risks, their impacts and likelihoods. Describe how to avoid these risks and what to do if the risk occurs. Duan et al. (2017)

2.2.8. Tools Needed

Describe which software and hardware tools you need in the project. Rothstein (2017)

3. Theoretical Background

You will define your problem in this section and add subheadings as needed. If you give your problem description and solution methodology in this section, you may need to change the title of this section. We usually write a couple of sentence in this part that explains what we will discuss in this section. For example: We will first provide the problem definition of our study (write you topic here), and then give the mathematical model that we propose as a solution method in this section.

3.1. Literature Survey

Provide a survey of the relevant literature. A bibliography (or references) is a selected list of all books, articles, and other source material related to the project and is always in alphabetical order, with the author's last name first. You have to cite a reference within the document as the authors last name (year). For example, "Jones (1969) show that ....". If the article has only one author, then the citation will be Jones (1969); if the article has two authors, then the citation will be Jones and Brown (1969); for all others, the citation will be Jones et al. (1969). For example; the first reference of this document is cited as Bass (1969), the second one is cited as Bass and Bass (2004), and the third one is cited as DeKimpe et al. (2000). If the citation is in parentheses, then the citations will be (Bass, 1969), (Jones and Brown, 1969) and (Bass et al., 1969) for the above example, respectively. Vaswani et al. (2017)

3.2. Solution Method (Change This Title According to Your Solution Method)

Provide detailed solution method here.

4. Analysis and Modeling

We first give details about the project that we selected. We define the scope of the project, functional and non-functional requirements. Then, we give details of the problem that the company was experiencing. Finally, we provide detailed analysis that we conducted by using real-life data obtained from the company.

4.1. System Factors

Explain factors that can affect the system.

4.2. How System Works

Explain how your system will work

4.2.1. Modelling

Explanation of system model.

4.2.2. System Architecture

Explanation of system architecture.

4.2.3. UML (Unified Modeling Language) Diagrams

5. Design, implementation and testing

Explain design, implementation and testing of your system in detail.

5.1. Design

Explanation of the design of your system.

5.2. Implementation

Explanation of the implementation of your system.

5.3. Testing

Explanation of the testing of your system.

6. Results

Explain your results.

7. Conclusion

Briefly explain the problem you studied, the solution method you proposed and your experience in the implementation. Then, please proceed to subsections and explain the requirements in details.

7.1. Life-Long Learning

Identify additional knowledge, skills, and attitudes that you needed to complete the project. In the context of the project, which tools and methods did you learn by yourself? From which sources did you learn them? How difficult was for you to learn these topics by yourself? How did you manage to collect the relevant information? Answer all the questions.

7.2. Professional and Ethical Responsibilities of Engineers

Define professional and ethical responsibilities you followed during your design process. What are the professional and ethical standards you used in the project? Is there an ethics code or code of conduct? Answer all the questions.

7.3. Contemporary Issues

Evaluate you project experience in terms of contemporary issues related to the problem that you studied. What kind of contemporary tools you have used throughout your project? Analyze the contemporary issues related to the future of the field that you work in this project. What will change in the products, services, or processes in the next ten, twenty, or fifty years, with emerging technologies such as 3D printers, big data analytics, nanotechnology, internet of things, quantum computing, biotechnology, artificial intelligence, cognitive science, and robotics?

7.4. Team Work

During your design project experience, describe the team work that you have participated. Give positions and majors of the people in the company that you worked with. Evaluate the composition, organization, and performance of your team. Describe how you shared the load in terms of the project tasks.

Appendix A

Your Appendix goes here

Appendix B

Your Appendix goes here

Acknowledgments

Your acknowledgments goes here

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