

# Project 3 Requirements

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## Abstract

The objectives, requirements, and relevant information for Project 3 are stated here. Submission of your files is done through course website.

## 1 Purpose

The purpose of this project is for you to demonstrate the following:

**Capabilities:** Basic functional programming skills as evidenced by:

- Code solutions to Exercises 4.6.3, 4.6.4, 5.3.4, and 5.3.5
- Session transcripts showing execution results of required test cases
- Explanations as required by each problem
- All source code for each exercise in the appendix

**Use of Relevant Tools and Techniques:** L<sup>A</sup>T<sub>E</sub>X, AUCTeX, emacs, and ML

**Deliverables and Evidence:** a pdf of your report with *all source files allowing others to reproduce your report, functional programs, and test results.*

## 2 Project Requirements

Your report shall have the content as illustrated by *Sample Report for Simple ML Example*. Your report will have the following content, in addition to the Title, Author, Date, Abstract, Acknowledgments, Table of Contents, and report chapters and sections covering:

**Chapter 1: Executive Summary** stating either

1. All requirements are satisfied with a summary of what was done, or
2. Some requirements are not satisfied due to incorrect or incomplete results, with a summary of what is satisfied, what is incomplete, and/or what is incorrect.

**Chapter 2: Exercise 4.6.3** with the following sections

- 2.1 Problem Statement
- 2.2 Relevant Code
- 2.3 Test Cases
- 2.4 Execution Transcripts

**Chapter 3: Exercise 4.6.4** with the following sections

- 3.1 Problem Statement
- 3.2 Relevant Code
- 3.3 Test Cases

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**Chapter 4: Exercise 5.3.4** with the following sections

- 4.1 Problem Statement
- 4.2 Relevant Code
- 4.3 Test Cases
- 4.4 Execution Transcripts

**Chapter 5: Exercise 5.3.5** with the following sections

- 5.1 Problem Statement
- 5.2 Relevant Code
- 5.3 Test Cases
- 5.4 Execution Transcripts

**Appendix A: Exercise 4.6.3 Source Code**

Source code is input to the report using `\lstinputlisting`.

**Appendix B: Exercise 4.6.4 Source Code**

Source code is input to the report using `\lstinputlisting`.

**Appendix C: Exercise 5.3.4 Source Code**

Source code is input to the report using `\lstinputlisting`.

**Appendix D: Exercise 5.3.5 Source Code**

Source code is input to the report using `\lstinputlisting`.

## 3 Relevant Information

### 3.1 Specific Tests

**Exercise 4.6.3** Use the tests in `ex-4-6-3Tests.sml`

**Exercise 4.6.4** Use the tests in `ex-4-6-4Tests.sml`

**Exercise 5.3.4** Use the tests in `ex-5-3-4Tests.sml`

**Exercise 5.3.5** Use the tests in `ex-5-3-5Tests.sml`

### 3.2 Submission Guidelines

**Deadline:** check course website

**Content & format:** gzipped tar file of your Project 3 sub-directory containing a pdf of your report and all source files allowing complete reproduction of your report

**How submitted:** through course website

**Other information:** you will be allowed an unlimited number of attempts to submit your files up to the deadline. Your grade is based on the last submission.

### 3.3 Grading Criteria

Deliverable Item	Problem Statement	Relevant Code	Tests	Code in Appendix	Total
Chapter 1: Executive Summary	4 points for summary	N/A	N/A	N/A	4 points max
Chapter 2: 4.6.3 (a)–(f)	1	6	6	1	14 points max
Chapter 3: 4.6.4	1	1	1	1	4 points max
Chapter 5: 5.3.4	1	1	1	1	4 points max
Chapter 5: 5.3.5	1	1	1	1	4 points max
Appendices A–D	N/A	4	N/A	N/A	4 points max
Subtotal	8 points max	13 points max	9 points max	4 points max	34 points max
Folder with all necessary components to reproduce report and all ML results					34 points max
<b>TOTAL</b>					68 points max