Assessment 1 Description

1 Introduction

A common, and easy, mistake to make, when developing a solution to a problem, is to jump straight to generating solutions; however, it is important, as engineers, that we, first, understand the underlying problem or need, and, then, think about what we could do to address this; how we might go about it; and why what we propose to, and how, is appropriate. In this way, we can develop, over time, more effective solutions to whatever problems we need to solve.

As such, reflecting on our problem-solving techniques and our methodologies is an important activity for engineers.

In this assessment, you are to reflect on your own work and write a critical review of your own problem-solving techniques and methodologies.

Some prompting questions are as follows:

- What project/s have I worked on?
- What was the/their problem/s or need/s?
- How did I approach addressing this/these problem/s or need/s?
- What worked for me?
- What would I do differently?
- How will I effect these different approaches?

2 Aim

The aim of this assessment is to:

- "Apply the principles and technologies in industrial systems' design and integration".

3 Objective

The objective of this assessment is to:

- Write a critical review of your problem-solving techniques and methodologies.

4 Necessary Competencies

This assessment relies on the following competency:

- None.

5 Requirements

This assessment has the following requirement:

- None.

6 Resources

For this assessment, the following resource is available:

- None.

7 Submission

Figure [1] illustrates the recommended file structure for this assessment.

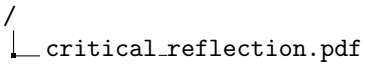

Figure 1: Recommended submission file structure.

It is expected that the submission includes:

- A critical reflection.

Upload the submission as a single .pdf file.

8 Grading

This assessment corresponds to "Test 1" and accounts for 10% of the course's final grade.

The following rubric will be used to mark this assessment:

Table 1: Marking Rubric.

E Range (0-39.99)	**D Range (40-49.99)**	**C Range (50-64.99)**	**B Range (65-79.99)**	**A Range (80-100)**
Inadequate	*Poor*	*Adequate*	*Good*	*Excellent*
A reflection of previous project work and activities is presented.	A reflection of previous project work and activities is presented. What was done is described. A problem solving technique and methodology is described.	A reflection of previous project work and activities is presented. What was done and how is described. A problem solving technique and methodology is described. Proposed changes are presented.	A reflection of previous project work and activities is presented. What was done, how, and why is described. A problem solving technique and methodology is described and its advantages and disadvantages discussed. Proposed changes are presented and their rationale discussed.	An in-depth reflection of previous project work and activities is presented. What was done, how, and why is clearly, and succinctly, described. A problem solving technique and methodology is clearly described and its advantages and disadvantages discussed in detail. Proposed changes are presented and their rationale discussed.