Vision Document

Overview & Grading Rubric

This document contains two sections: the first section provides a description of why we are making it and how to produce a well-written Vision Document. The second section describes the grading rubrics used to assess your learning and provide formative feedback.

# Overview

## Description

The vision document is the starting point of your documentation set. It details the vision for the Capstone Project.

## Why are we making the vision document?

Please review the Vision Document learning materials on OLI Torus (access through Canvas).

## How to produce a well-written deliverable

Make sure your writing is brief and easy to understand, with 1 to 3 paragraphs per section. The entire document (not including references and appendix) should be about 2 to 5 pages, although this is not a strict requirement and is adaptive to the variety and differences among projects. Each section should follow the guidelines as outlined in the template. In addition, you should structure the paragraphs and build effective connections between them. By setting out your ideas and arguments with a natural flow, you will increase the readability of your work.

# Grading Rubric

## Introduction (6 points)

* The title conveys a brief overall scope, and description of the project
* The introduction summarizes the real-world problem your project addresses
* The introduction includes current solutions and their limitations
  + Include references to the current solution or prior literature
* Does the introduction convey the proposed solution or method that addresses the problem?
* Is there a social or business motivation described in the introduction?
* Is the summary/introduction relevant to the project title?
* Is there "too much" technical terminology?
  + Example of possible point deduction: introduction contains excessive mathematical equations or technical terminology with overwhelming information
* Are points explained concisely and not dragged on?
* The introduction should not exceed two paragraphs in length

## Problem Description (5 points)

* The section discusses the problem your solution will solve
  + You can also include current solutions and their limitations or refer to them if you have already mentioned them in the introduction
  + Usecase examples are mentioned if suitable
* The rest of the documents are well-introduced
* The section is easy to follow and free of “fancy” technical terms
* The section should not exceed two paragraphs in length

## Proposed Product/Solution (5 points)

* The proposed product/solution provides an overall framework that addresses the described problem(s) (workflow or data flow architecture)
* Does the solution relate to the problem statement?
* Does the solution clearly address the problem statement?
* Does the section contain a comparison to the previous solution and address why such a solution will work?

## Scientific Hypotheses (5 points)

* This section should state the assumption underlying the proposed solution
* Are the hypotheses **testable** assumptions?
* Are evaluation metrics elaborated to validate the hypotheses?
* It is possible that the proposed solution and its evaluation change as the project progresses. While we want them to be developed early and mentioned in the vision document, we do not penalize if the proposed solution and evaluation metrics change in future deliverables
* Hypotheses can be constructive, formative, or empirical

## Major Features (6 points)

* The section is a well-written technical document
* Features should not be technical constraints:
  + (Bad example) System will use an Amazon AWS load balancer to manage traffic
  + (Good example) System will use a cloud-based load balancer to manage traffic
* Features are distinct (i.e., two features do not overlap)
* Features are traceable (i.e., numbered so that they can be referenced in future documents)

## Scope (3 points)

* Outline (to a reasonable degree) what is being delivered in the capstone project
* Clear justification for items omitted in the deliverable (if any)

## References (3 points)

* References are property provided where credit is due
* All in-text citations are referenced in this section
* The format of individual references are consistent throughout
  + This is not a strict requirement, but this is the general format for papers of a specific domain: NLP: ACL, EMNLP; ML: NeurIPS, ICML, etc.

## Writing, Style, and Formatting (5 points)

* The document is free of spelling errors
* Proper sub-heading style is used if the document contains subsections
* Auxiliary information, such as URLs, reference numbers, or external documentation are included in footnotes; lengthy supplemental information is included in the appendix
* The written work is brief and easy to understand without unnecessarily long statements and paragraphs
* The document should be versioned (e.g., V1 Vision Statement) with proper use of major and minor versions
* Citations take the proper form and are properly inserted in the text

## Terminology, Definitions, Acronyms, and Abbreviations (5 points)

* Necessary definitions, acronyms, and abbreviations are included
* It is important to have if the document contained excessive technical terminologies, acronyms, and abbreviations
* Always mention the full name of abbreviations/acronyms when first introduced, and consistently use abbreviations or acronyms throughout the document to maintain consistency

## Timeline (2 points)

* The document contains a proposed schedule of the proposed work
* A rough plan is ok!
* The proposed work and its proposed deadline are reasonable
* The timeline can include information on how the project will progress throughout the year and take into consideration the timeline of the Capstone sequence (if applicable)

## Reflection (3 points)

* A reflection or lessons learned from completing this document is included.
* The reflection recollects the learning experience of the team as a whole by answering at least all the suggested questions listed in the template.

## Appendix (0 points)

* Additional information for context is mentioned
* Glossary for terms is included