

INSY 4054 Group Project - Phase-I

In this project, you will leverage the topics covered in the AI, Automation, and Cloud Computing modules to propose and build a prototype of an AI product that can create value for your target customers by solving an important problem.

Requirements for Phase-I

Your Phase-I report should be **roughly 10 pages** and **should not exceed 15 pages** (double-spaced, font-size: 12, font type: Times New Roman, Arial, or Calibri) including all tables (tables are single-spaced, font-size: 9), graphs, forms, etc. The report should mainly cover the following points:

1. **Problem formulation:** Identify and explain the problem you want to solve (aka pain point). Describe the importance and impact of addressing this problem from the perspective of different stakeholders (to get a better understanding of the problem, talk with one or more individuals affected by the problem).
For example, watch [this video](#) to see how a real, impactful problem is identified and a solution is developed to address the specific problem.
This step is very important as **we never want to develop advanced technology such as artificial intelligence just because it is cool or trendy**. Every solution should be tied to a real and impactful problem. (~2 pages)
2. **Scope:** In real life, we always face some restrictions and limitations that make us limit the scope of our solution, no matter the importance of the problem. Discuss the timeline and available resources you have to work with. Accordingly, set some boundaries on the problem you are trying to solve in this project. (~1 page)
3. **Team:** Discuss your plan to review or learn machine learning, automation, and cloud topics that you might need to solve the problem at hand. In addition, discuss how you plan to avoid creating a biased AI. Can the level of diversity in your team influence the amount of bias in your AI? (~1 page)

4. **Data:** Discuss your plan to acquire the needed training data for your machine learning models. Will you have unique access to this data or everyone can easily find them on the internet? How can you make sure other companies cannot create similar models using the same dataset? (~1 page)
5. **Solution:** Discuss your proposed solution that will solve the discussed problem within the specified scope. Describe the functionalities your solution provides to address different aspects of the problem. Please note that in Phase II you will create a working version of your solution by selecting **a subset** of the proposed functionalities. So, do not limit the proposed functionalities just because you are afraid that you cannot create a working version of all of them in the next phase. (~3 pages)
In addition, discuss your plan to implement your AI solution. More specifically, explain how the end-user will access your AI solution and whether you prefer to implement your AI solution on the cloud or local machines. (~2 pages)

Note: use the emboldened titles above as the **headings** of your document.

Note: You can watch the first 25 minutes of [this video](#) by Allie Miller to learn more about how to address the requirements of this phase.