**Craft a rough project plan for how you will accomplish each milestone and task, what your project work schedule will look like, etc.**

I am planning to work on the Term project individually. As I am a working professional, I will be busy during the initial days of the week; I will start work on my assignments and project on Wednesday and will be completing most of the work over the weekends; with this schedule, it will be tough to work as a group with other members.

However, to make sure my peer reviews are helpful to my friends, I will make sure that I complete them during the initial days of the week.

When it’s time to work on my project, I will complete them at night once I finish my professional work.

**Milestone Schedule:**

**Milestone 1:** Draft Project Plan preparation

**Milestone 2:**

* Data Selection:
  + In my previous courses, I mainly worked on COVID-related datasets. This time around, I am planning to choose a topic related to the health domain and am interested in choosing related to Cancer-associated data. In case of any issues with datasets and the unavailability of required data, I suggest looking at the COVID dataset or something related to Strokes.
* Model Selection and Evaluation:
  + Earlier I worked on Decision Tree and Linear Regression, as I am planning to work on the dataset to predict cancer depending on various symptoms of patients; I will be using Decision Tree. However, if this fits my idea, I might look at any other model. Depending on the dataset, I might take up multiple datasets to get a larger dataset to work on.
* Learnings:
  + I am hoping to learn to build a model that will be helpful and be used as Self Checker to assess if the symptoms are a possible case for Cancer.
* Risks or Ethical Implications:
  + I will work to see if my model creation or dataset has any ethical implications. Also, I will be raising risks and mitigation plans every week.
* Contingency plan:
  + In case of any issues or risks involved in the dataset selection or model evaluation, I will be choosing data related to any other topic in the Health field or something related to Fraud identification (This might have ethical implications as this might have some sensitive data – if required, I will mask the data to avoid any further issues).
* Data Cleansing and Data transformation:
  + As I will be sourcing data from public websites like Kaggle, data might not be in the format we need; I will be using Data Cleansing and Data Transformation techniques.

**Milestone 3: Preliminary Analysis**

* Can I answer the questions I want to respond to with the data I have?
  + In case of insufficient data, I will explore ways to get the required data and proceed with the analysis. I might source data from other websites to make my research fruitful.
* What visualizations are especially useful for explaining my data?
  + I had issues with visualization earlier, I am more comfortable with basic visualizations such as Bar graphs, Pie charts, Line charts, etc., so I will mainly use these only. However, if there is a requirement, I will learn through other visualizations and implement them as and when required.
* Do I need to adjust the data and driving questions?
  + I might have to adjust data or add additional questions to be answered depending on the progress of my analysis.
* Do I need to adjust my model/evaluation choices?
  + Model creation and evaluation adjustments might be required per my experience in the earlier course. I had to use SMOTE techniques as my data was imbalanced. I might have to choose any such methods to mitigate such issues.
* Are my original expectations still reasonable?
  + I still want to stand by my original expectations. However, I might tweak the expectations a little if there is any requirement.

**Milestone 4: Finalizing Results**

This will be an exciting part of the project. I will finalize my presentation by choosing one of the models best suit my project. I will complete model building and evaluation and will be presenting the results. I will also be explaining the results and their accuracy.

Finally, I will provide a conclusion and any recommendations to improve the model, how it will be beneficial, and if it's ready to be deployed for public use.

**Milestone 5: Final Project Paper and Presentation**

This will be the time to show my presentation skills using Microsoft Powerpoint. I will be concluding the course with a final paper and presentation. I will ensure the terms used are easily understandable to a person not from a technical background. I will provide an Introduction, Methods/Results, Conclusion, and References. I will include the results and visualizations required for the final paper.

**Identify another project (group or individual) to perform your Milestone Peer Review:**

I am choosing one of the below persons for Peer Review:

* Sophie Weidner
* Alexis Zimmer