**1. Please share with us (1) your role in the team, (2) what you want to achieve by completing the Sandbox project, and (3) what strategies will you and your team adopt to achieve the goals.**

1.1

My role within the team is Research Analyst. I will be responsible for providing insight from market research and data analysis to aid in pricing and model construction.

1.2

By completing this Sandbox Project I want to achieve:

* A strong understanding of the Data Analysis Cycle and refining our analysis to meet our question
* Practical experience implementing the class covered models (GLM, Random Forrest, Neural Networks and other Ensemble Methods)
* Improve my understanding of pricing considerations for an insurance startup which is a highly important role of an Actuary

1.3

The strategies myself and my team will adopt to achieve this goal are:

* LEAN methodology and Waterfall method
* Delegation of responsibilities, splitting into teams responsible for research and pricing
* Strong preparation and time lining of self-imposed milestones for the project
* Staying ahead on course content and implementing the ideas covered early giving time for improvement

**2. Please write a problem statement for this project and share any feedback you received from your teammates to refine your problem statement.  Note that this is an individual task for this week's StoryWall activity, but you are suggested to discuss your initial version with your teammates to receive feedback.  It is fine for students belonging to the same group to post the same final problem statements. By completing this activity, each team should be able to reach an agreement on the problem statement. Please refer to the "Assessment - Datathon Group Assignment" Moodle session for resources on how to write a problem statement.**

Problem Statement:

There has been significant growth of the number of entities entering the Pet Market and, as a startup, it is difficult to offer a unique and price-competitive product. Moreover, the coverage options available in the industry are limited and fail to meet all policyholders’ requirements. To successfully gain an edge as a new company in this space, there must be considerations to premium pricing various rating factors.

1. **Please provide useful references/tips/resources (links, academic papers, methodologies, ideas) that you think may be helpful for completing this industry project. Examples include but are not limited to**

These are various resources I have found to assist for the assignment. I think the biggest tip for the assignment would be to start early.

* How to do insurance pricing:
  + chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/<https://www.actuaries.asn.au/Library/Events/GIS/2012/GIS2012PaperAlinaPettifer.pdf>
  + chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/<https://actuaries.asn.au/Library/GI03paperdriussi.pdf>
* Tips for working in groups on coding-related tasks:

[Git Cheat Sheet.pdf](https://prod-files-secure.s3.us-west-2.amazonaws.com/7ee2003a-313f-4884-bef2-15cfa9bff8cd/1436981b-4a1c-444b-a77b-84ad7796ca46/Git_Cheat_Sheet.pdf)

* References and tips that may help with feature engineering:
* chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/<https://arxiv.org/pdf/1701.07852>