Problem Statement:

- a. Select **one** of several problem options and available datasets with each task and detailed information as follows:
 - 1. Gait Classification Data Set
 - 2. Early-Stage Diabetes Risk Prediction Data Set
 - 3. Divorce Predictors Data Set
 - 4. <u>Cervical Cancer Behavior Risk Data Set</u>
 - 5. Al4I 2020 Predictive Maintenance Data Set
 - 6. APS Failure at Scania Trucks Data Set
- b. Assume the problem you selected in the previous section is a client request for you to solve and present the final results, recommendations in all possibilities, whether the final result is applicable or not.
- c. Apart from the main task in each problem, is there anything we as a consulting company engaged in IT and Data Science can do to help our clients' needs?
- d. In this technical test, in addition to assessing your ability to solve problems, you will also be assessed on how you present solutions to the problems you chose earlier.
- e. If you are notified that you can proceed to the next stage, you will be asked to make a presentation to the user as part of the user interview stage.

Additional information for the candidate

- The candidate is expected to finish the task given in this folder before 5th July 2021
- The candidate is expected to optimize the use of data sets given in this folder to finish the task.
- The candidate is allowed to use any other external and/or additional data sets and/or relevant information to finish the task
- The candidate is expected to find all information in the folder to finish the task. Otherwise, the candidate is allowed (i) to make any relevant assumptions; and/or (ii) to state his/her own definition or interpretation; and/or (iii) to find any complementary or supporting information somewhere else. In that case, we expect the candidate to state all those points on his/her report.
- Please kindly prepare a report (can be in .pdf and/or .ppt and/or tableau visualization and/or Jupyter notebook. Possible complimentary file: scripts (optional)) as such our fellow Data Team member would easily understand your techniques to solve your predetermined business problems. We would expect you to provide executable insights that are driven from the data analyses results and have high business values
- Please **do not** include all the files in this folder (i.e., data sets and instruction files) when you are submitting your report.