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# Topic: Survival Analytics

**Instructions**

Please share your answers filled inline in the word document. Submit Python code and R code files wherever applicable.

Please ensure you update all the details:

**Name:**

**Batch Id:**

**Topic: Survival Analytics**

1. **Business Problem**
   1. **Objective**
   2. **Constraints (if any)**
2. **Work on each feature of the dataset to create a data dictionary as displayed in the below image:**



**2.1 Make a table as shown above and provide information about the features such as its Data type and its relevance to the model building, if not relevant provide reasons and provide description of the feature.**

**Using R and Python codes perform:**

1. **Exploratory Data Analysis (EDA):**
   1. **Summary**
   2. **Univariate analysis**
   3. **Bivariate analysis**
2. **Model Building**

**4.1Build the model on the scaled data (try multiple options)**

**4.2Perform Survival analytics on the given datasets.**

**4.3Briefly explain the model output in the documentation.**

1. **Share the benefits/impact of the solution - how or in what way the business (client) gets benefit from the solution provided.**

# Note:

The assignment should be submitted in the following format:

* R code
* Python code
* Code Modularization should be maintained
* Documentation of the model building (elaborating on steps mentioned above)

**Standard Grading Guideline :**

Grade A: All assignments submitted correctly on Time (with all mentioned content like: python code, r code, documentation)

Grade B: All assignments submitted but post the due date. Or Partial assignments are submitted.

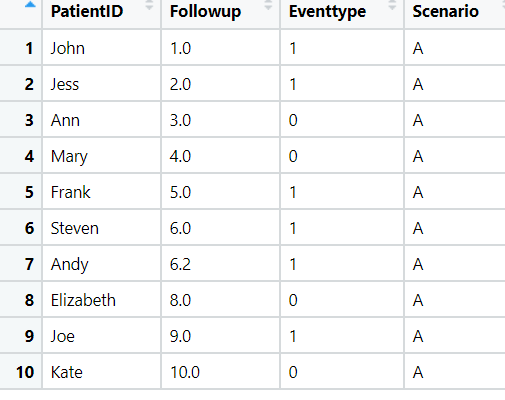
Grade C and Grade D: Partial assignments submitted with incorrect answers, or worked on only R or Python or not all the content is submitted.

Grade F: Partial assignments submitted with incorrect answers and not all the content is submitted.

**Business problem**: the following dataset contains PatientID Follow up Event type

Scenarios. survival analysis model has to be built on the patient’s ID

\***important note**: -R and python code to be done



A picture containing shape, arrow

Description automatically generated**Problem Statement: -**

ECG of different age group of people has been recorded, the survival time in hours after operation and the event(death) occurred is denoted by 1 and 0 represent still alive. Perform survival analysis on the dataset given below and provide your insights in the documentation.

A large room

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