**Project**: Predictive Modeling for Attorney Involvement in Claims

**Business Objective:**

The goal of this project is to develop a model that predicts whether an attorney will be involved in a claim based on various claim-related factors. This will help insurance companies optimize their processes, reduce legal costs, and better allocate resources

**Data Set Details:** The dataset contains 1,340 rows and 13 columns

1. CASENUM:
   * Type: Numerical (Integer)
   * Description: Unique identifier for each case in the dataset.
2. ATTORNEY:
   * Type: Binary (0 or 1)
   * Description: Indicates whether an attorney was involved in the claim (1 = Yes, 0 = No).
3. CLMSEX:
   * Type: Categorical (0 or 1)
   * Description: Gender of the claimant (1 = Male, 0 = Female).
4. CLMINSUR:
   * Type: Binary (0 or 1)
   * Description: Indicates whether the claimant was insured at the time of the accident (1 = Yes, 0 = No).
5. SEATBELT:
   * Type: Binary (0 or 1)
   * Description: Indicates whether the claimant was wearing a seatbelt at the time of the accident (1 = Yes, 0 = No).
6. CLMAGE:
   * Type: Numerical (Integer)
   * Description: Age of the claimant.
7. LOSS:
   * Type: Numerical (Float)
   * Description: The financial loss associated with the claim (in unspecified currency).
8. Accident\_Severity:
   * Type: Categorical (Minor, Moderate, Severe)
   * Description: Indicates the severity of the accident based on internal criteria (e.g., damage, injuries).
9. Claim\_Amount\_Requested:
   * Type: Numerical (Float)
   * Description: The initial amount requested by the claimant for their claim (in currency units).
10. Claim\_Approval\_Status:
    * Type: Binary (0 or 1)
    * Description: Indicates whether the claim was approved (1) or denied (0).
11. Settlement\_Amount:
    * Type: Numerical (Float)
    * Description: The amount ultimately paid to the claimant after settlement (in currency units).
12. Policy\_Type:
    * Type: Categorical (Comprehensive, Third-Party)
    * Description: Indicates the type of insurance policy held by the claimant.
13. Driving\_Record:
    * Type: Categorical (Clean, Minor Offenses, Major Offenses)
    * Description: Driving record of the claimant, indicating their history of traffic violations or offenses.

**Acceptance Criterion:** Need to deploy the end results using Streamlit etc.

**Milestones:**30 days to complete the Project

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| **Milestone** | **Duration** | **Task start - End Date** |
| Kick off and Business Objective discussion | 1 day |  |
| Data set Details | 1 Week – 1 ½ week |  |
| EDA | 1 Weeks – 1 ½ week |  |
| Model Building | 1 Week – 1 ½ week |  |
| Model Evaluation | 1 Week |  |
| Feedback |
| Deployment |  |
| Final presentation | 1 day |  |

Protocols:

1. All participants should adhere to agreed timelines and timelines will not be extended.
2. All the documentation – Final presentation and R/python code to be submitted before the final presentation day.
3. All the participants must attend review meetings.