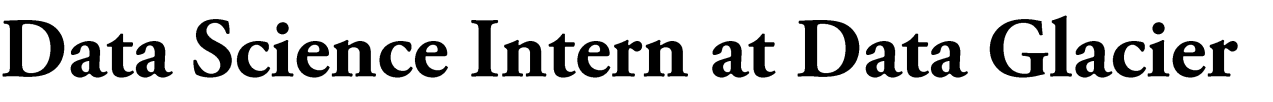
Graphical user interface

Description automatically generated



**Project:** Healthcare - Persistency of a drug (Data Science)

**Week 7:** Deliverables

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| --- | --- | --- | --- | --- |
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| **SPECIALIZATION** | Data Science | Data Science | Data Science |  |
| **BATCH CODE** | LISUM22 | LISUM22 | LISUM22 |  |
| **DATE** | 19 July, 2023 | 19 July, 2023 | 19 July, 2023 |  |
|  | **ALL SUBMITTED TO DATA GLACIERS** | | | |

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* 1. **Project Plan**

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| **WEEKS** | **DATE** | **PROGRESS** |
| Week 7 | July 19, 2023 | Problem Statement and Data Processing |
| Week 8 | July 26, 2023 |  |
| Week 9 | Aug 2, 2023 |  |
| Week 10 | Aug 9, 2023 |  |
| Week 11 | Aug 16, 2023 | EDA Presentation and proposed model technique |
| Week 12 | Aug 23, 2023 | Model Selection |
| Week 13 | Aug 30, 2023 | Final project report and code |

* 1. **Problem Statement**

The pharmaceutical industry faces numerous challenges in understanding the persistency of drugs as per physician prescriptions. Ensuring that patients adhere to prescribed medications is crucial for their health outcomes and overall treatment effectiveness. However, non-adherence to prescribed medications can lead to suboptimal results, increased healthcare costs, and potential complications. To address this critical issue, ABC pharma company has decided to take a data-driven approach and has approached us to automate the process of identifying factors impacting drug persistency.

Our task is to analyze a comprehensive dataset containing a diverse set of variables related to patient demographics, provider attributes, clinical factors, disease/treatment factors, comorbidities, concomitancy, and adherence information. The primary objective is to gather insights and build a robust classification model that predicts whether a patient will exhibit persistency with the prescribed drug or not. The target variable, "Persistency\_Flag," will serve as the ground truth for this classification task, where it is coded as 1 if the patient is persistent and 0 if the patient is non-persistent between variables. Then build a model that classifies the dataset.

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