**Project Batch Details**

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| **Reg. No of Students** | **Name of the student** | **Batch Number** | **Guide Name** |
| **18B91A12F7** | **Varigonda Sai Nirmal Vignu** | **18** | **Sri P.R.S.S.V. Raju** |
| **18B91A12F8** | **Vasanth Chelpaka** |
| **19B95A1212** | **Pathiwada Venkata Sita Ramaswamy Naidu** |
| **19B95A1205** | **Gadiraju Pavan Kumar Varma** |

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| **Details of Project Proposal (project 1)** | |
| **Title of the Project Proposal** | **Data Science Toolkit** |
| **Abstract** | At present, data is a very crucial aspect of any study or business. To convert the data into a business decision or future prediction or analysing we use machine learning or data analysis. But for an individual who is not familiar with the underlying functionalities of different technologies like machine learning, or for individuals who cannot put time into learning these technologies. The Data Science Tool Kit will help them to analyse their data to get useful business decisions or future predictions from their raw data.  In this Data Science Toolkit, the user can upload this data and utilize functionalities like Raw data summarizing, univariate analysis, bivariate analysis, regression, classification, clustering |
| **Problem Statement** | Any person who doesn't know how to use machine learning on his data to convert it into resourceful information or future prediction can use this Data Science Toolkit. The person just must know what he wants to learn from this data and how to use the Toolkit |
| **Existing System** | The tools for data science are for analysing data, creating aesthetic and interactive visualizations, and creating powerful predictive models using machine learning algorithms these are available as modules we can use them in code. |
| **Proposed System** | Data Science Toolkit which includes a website for users to interact with all the functionalities directly from UI and backend has all the functionalities written in python. This Toolkit will be hosted in a cloud-based environment, Heroku. |
| **Technology using** | React JS, HTML, CSS, Flask / Dash Framework, Python machine learning models |

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| **Details of Project Proposal (Project 2) (Accepted)** | |
| **Title of the Project Proposal** | **Insurance Claim Fraud Detection** |
| **Abstract** | Insurance fraud is one of the major problems facing many insurance companies of the world and some loopholes during the traditional manual fraud investigation process have been identified as a major culprit. This is one of the motivations for this research, to deploy computing techniques in creating a barrier to fraud claims to not only provide a trustworthy environment to the customers, but also to reduce the percentage of such illegal fraud activities to a greater extent. We presented our research by automating the whole insurance claiming process using different technologies in its design, development, and implementation |
| **Problem Statement** | To build a classification methodology to determine whether a customer is placing a fraudulent insurance claim |
| **Existing Problem** | Traditionally, insurance companies have been relying on expert judgment of agents, adjusters, and special investigation units to detect and deal with frauds. This approach worked to a certain degree in the past as the agents of fraud themselves were not as evolved as they are now. Also, the number of claims were relatively small which made it humanly possible to keep a track on fraud. |
| **Proposed System** | The system used machine learning and data analytics to automate the process of identifying fraudulent claims and can develop heuristics  around fraud indicators. Thus, implementation of this model has a good impact on insurance company’s reputation in the market and on the customer’s satisfaction. |
| **Technology using** | Python Frameworks, Machine Learning |

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| **Details of Project Proposal (project 3)** | |
| **Title of the Project Proposal** | **Predicting Diabetes with machine learning techniques** |
| **Abstract** | Diabetes is considered as one of the deadliest and chronic diseases which causes an increase in blood sugar. Many complications occur if diabetes remains untreated and unidentified. The tedious identifying process results in visiting a patient to a diagnostic centre and consulting doctor. But the rise in machine learning approaches solves this critical problem. The motive of this study is to design a model which can prognosticate the likelihood of diabetes in patients with maximum accuracy. |
| **Problem Statement** | It may cause many complications. According to the growing morbidity in recent years, in 2040, the world’s diabetic patients will reach 642 million, which means that one of the ten adults in the future is suffering from diabetes. There is no doubt that this alarming figure needs great attention. With the rapid development of machine learning, machine learning has been applied to many aspects of medical health |
| **Existing System** | Based on test results by observing the range of values for each test Ex: glucose, bp etc; Doctors can predict whether patient is diabetic or not |
| **Proposed System** | In this proposed system, we were able to train the machine from the various data points from the past to make a future prediction. We took data from the previous year stocks to train the model. |
| **Technology using** | Python, Machine Learning |