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| Name Of The Student | Vaishnavi G |
| Internship Project Topic | Build a Classification Model for Drug Trials Dataset |
| Name of the Organization | TCS iON |
| Name of the Industry Mentor | Himdweep Walia |
| Name of the Institute | SRM Institute of Science and Technology |

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| Date | Day # | Hours Spent |
| 25/11/2022 | 45 | 3 hours |
| Activities done during the day:  **Project Hands on - Test multiple model and finalize the best one**  **Final Model**   * A final machine learning model is a model that you use to make predictions on new data. * That is, given new examples of input data, you want to use the model to predict the expected output. This may be a classification (assign a label) or a regression (a real value). * Confusion matrix, precision, recall, and F1 measures are the most commonly used metrics for classification tasks. * Scikit-Learn's metrics library contains the classification\_report and confusion\_matrix methods, which can be readily used to find out the values for these important metrics. * Model finalization is the last step in the experiment. * A normal machine learning workflow in PyCaret starts with setup(), followed by comparing all models using compare\_models() and shortlisting a few candidate models (based on the metric of interest) to perform several modeling techniques such as hyperparameter tuning, ensembling, stacking etc. * This workflow will eventually lead you to the best model for use in making predictions on new and unseen data. * The finalize\_model() function fits the model onto the complete dataset including the test/hold-out sample (30% in this case). * The purpose of this function is to train the model on the complete dataset before it is deployed in production. * The predict\_model() function is also used to predict on the unseen dataset   **Code:**   |  | | --- | |  |   **Output:**   |  | | --- | |  |   **Code:**   |  | | --- | |  |   **Output:**   |  | | --- | |  | | | |