

# Machine Learning Assignment Part-1

## Pilot-Study Proposal

Words: 711

Here I am supplying this file to test and are expecting a worthwhile result for the enterprise of the motel. As the manager of a big motel's chain touch me to apply Machine Learning to discover and permit understand if she opens the brand new motel in this region then what is going to be the final result either profit or loss.

Here I am going to tell you about all the factors and which all types of Predictive tasks we will be going to use in this project. They are:

**REGRESSION:** If we are going to use Regression for this project then we will be checking the given data first. As after taking the proper knowledge of data then only we can use find out whether we have to use regression or not. In Regression, we use mathematical methods. It helps us to let us know how much profit we are going to make either monthly or annually.

**CLUSTERING:** Clustering is another type of predictive task we can use for this project. There are some conditions if we are going to use clustering in this then we have to keep in mind all those conditions. If we found out that the data given by the company to us have some relation with each other then only we will be using this. This predictive task makes the groups of the data all have some relation with each other.

**CLASSIFICATION:** It is a type of predictive task which is used to predict the output for the given inputs. We will use this accordingly the data which you will be providing us after you like this proposal. As in Classification, we have so many models which we will be using to get the best output. As in my views, I will be suggesting the best models use and that can help the owner to find it whether the opening of the new hotel will be profitable or not.

Examples of in all likelihood informative functions that we would love to be furnished with a form of statistics that the employer ought to gain approximately the region are probable to be a very good predictor and I need that the underneath stated are the important thing factors I need to get records for:

1. Number of Hotels available.
2. Type of Place according to the per capita.
3. Type of Locality to see the place is sea-side or hill area.
4. Types of food available near the location.
5. Number of hotels only providing accommodation.
6. Number of hotels providing both food and accommodation.
7. Cabs service availability.
8. Price of hotels present in the area where we are going to open our hotel.

And many more points we have to keep in consideration to work on this project.

In learning manner I am suggesting to provide the excellent final results. They can be obtained by using the following models:

Firstly if we are only going to check whether we have to open the motel over there or not then we will be using only Classification of Machine Learning. In this, we will be using Decision Tree, kNN, Random Forest, and SVM. After using all these then we will check which is giving us the best output for opening the hotel.

Secondly, if we want to find out whether opening the motel will make a profit or not. For this, we are going to use Regression. In Regression, we will be using Linear, Logistic, and lasso regression. After using these algorithms we will be getting the values and we will use these values to compare the result and the best model will be selected for predicting the output it will make.

At last, I need to mention that when after checking all of the above matters stated I make usage of all of the required strategies and techniques of Machine Learning to get the excellent final results for the employer which I may be checking it via way of means of comprising the output I get via way of means of those strategies. From this, the approach that allows you to provide us the excellent output may be our very last aspect to assess the overall performance of the machine earlier than deploying it.

References:

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