(AI-Powered Loan Approval Prediction Model)

(Team Details)

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(Objective)

Our objective is to train the data by using train.csv and using that we have to predict the values by giving the tes.csv in our model to get the desirable output (loan_status)

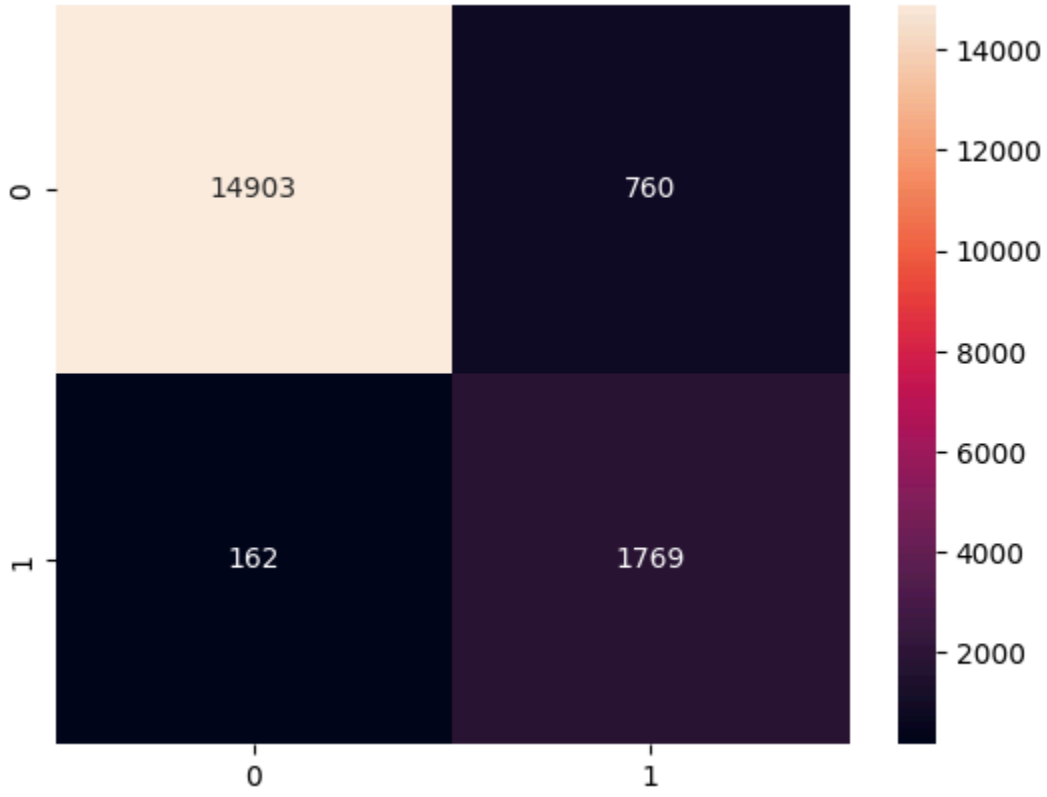
(Approach)

We had used random forest classifier in this because we observe that data is mostly uncorrelated and we thought that it would be great to make small trees and vote between them so that we will get the majority voting classification for our model.

(Algorithm)

In this we had used relevant libraries (pandas, numpy, matplotlib, seaborn, sklearn) in this we had cleaned the data by changing all string values into integer by using dummy_variabvle as integer and then we had used correlation to get to know that there is any weak learner in it and according to the that we had used ensemble {RandomForestClassifier}.

(Confusion matrix)



Classification_report,F1_score

	precision	recall	f1-score	support
0	0.99	0.95	0.97	15663
1	0.70	0.92	0.79	1931
accuracy			0.95	17594
macro avg	0.84	0.93	0.88	17594
weighted avg	0.96	0.95	0.95	17594

Accuracy

```
print(accuracy_score(y_pred,y_test))
```

```
0.9488461975673526
```