**In-vehicle Coupon Recommendation Project Proposal**

Problem statement formation:

In what driving scenario, a person would accept the coupon from a restaurant, coffee shop, bar etc recommended to him/her?

Context:

We have an in-vehicle coupon recommendation data set collected from a survey on Amazon Mechanical Turk. The survey describes different driving scenarios including the destination, current time, weather, passenger, personal information, etc. and then asks the person whether he/she would accept the coupon from a restaurant, coffee shop, bar etc. if he/she was the driver. Based on the data set, we are trying to create a predictive model to predict whether a person would use the coupon recommended to him/her in a certain driving scenario.

Criteria for success:

Achieving at least 80% accuracy.

Scope of solution space:

Try different classification models(SVM, Random Forest, Logistic Regression etc.) to classify the data set into two categories(use or don’t use the coupon). Find the one that has the highest accuracy.

Constraints:

1. There are some missing values.
2. The thoughts of some people may be not inconsistent with their actions sometimes. Some people may think they would accept the coupon when they are taking the survey but sometimes they are not in the actual situation.

Stakeholders:

Manger form restaurant, coffee shop, bar etc

Data Sources:

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