

## CS544 Final Project

### Picking the Data Set

Look into the following sites as an example and select a data set that interests you.

1. <https://www.kaggle.com/datasets>
2. <http://www.kdnuggets.com/datasets/index.html>
3. Any other source of your choice

### Registering the Data Set

Use the following link to register your dataset for the project.

Please make sure your data set is different from any of the ones already selected in your Group.

<http://kalathur.com/projects/cs544.php>

### Preparing the data

- Import the data set into R.
- Document the steps for the import process and any preprocessing had to be done prior to or after the import. Any R code used in the process should be included.

### Analyzing the data

- Do the analysis as in Module3 for at least one categorical variable and at least one numerical variable. Show appropriate plots for your data.
- Do the analysis as in Module3 for at least one set of two or more variables. Show appropriate plots for your data.
- Pick one variable with numerical data and examine the distribution of the data.
- Draw various random samples of the data and show the applicability of the Central Limit Theorem for this variable.
- Show how various sampling methods can be used on your data. What are your conclusions if these samples are used instead of the whole dataset.

### Presenting the Project

- **You will do your project presentation in the Live class with your facilitator. Your facilitator will provide the signup sheet.**
- **Each presentation is for at most 10 minutes. The presentations will be scheduled during the last week based on facilitator's schedule.**

### Submitting the Project

Upload a zip file (CS544Final\_lastName.zip) containing all the code (R file), the presentation document (PDF or PPT), and all the results in a Word/PDF Document.

### **Grading Rubric:**

- **Preparing the Data and documenting the data preparation (15 points)**
- **Analyzing the Data and documenting the same (50 points)**
- **Implementation of any feature(s) not mentioned in the specification (10 points)**
- **Presenting the project in the Live Classroom with Facilitator (25 points)**