

## **Group Members:**

Diya Patel, Hannah Raju, Birava Savalia, Jessica Schatz, Prachi Yadav, Varshita Yarabadi

## **Introduction**

The data set we are looking at is about the credit card purchased which will allow us to get a more in depth understanding of how users spending habits and payment plans. We want to create clusters of users with similar spending habits and how frequently they will pay it off .

## **Data**

The data we are using is called Credit Card Dataset for Clustering by Arjun Bhasin.

<https://www.kaggle.com/datasets/arjunbhasin2013/ccdata>

## **Methodology Plan**

We plan on using clustering to try and identify patterns of behavior in credit card usage. We plan on trying at least two forms of clustering so far, PCA and K-means.

## **Evaluation Plan**

We will evaluate based on the clusters we create using PCA and K-means.

## **Github Repository and Initial Tasks**

Link: [https://github.com/HannahSRaju/ITCS3162\\_Group8\\_FinalProject.git](https://github.com/HannahSRaju/ITCS3162_Group8_FinalProject.git)

Task List:

- **Introduction: The Problem (11/30)**
  - Group Member(s): Jessica Schatz
- **Introduction: The Data (11/30)**
  - Group Member(s): Varshita Yarabadi
- **Data Pre-processing (12/2)**

- Group Member(s): Hannah Raju
- **Data Understanding/Visualization (12/2)**
  - Group Member(s): Hannah Raju
- **Modeling/Methods: Clustering, Exploration, Experimenting (12/7)**
  - Group Member(s): Jessica Schatz
- **Evaluation (12/7)**
  - Group Member(s): Diya Patel
- **Storytelling and Conclusion (12/7)**
  - Group Member(s): Varshita Yarabadi
- **Impact Section (12/7)**
  - Group Member(s): Diya Patel
- **Final Project Presentation Slides (12/8)**
  - Group Member(s): Prachi Yadav and Birava Savalia
- **Final Project Presentation (12/9)**
  - Group Member(s): all members

## **Group Expectations**

- Respect each other's ideas.
- All group members should do an equal amount of work.
- Group should have a common understanding of goals that need to be achieved.
- Effective communication.
- Time management.
- If someone is not participating and not communicating for multiple days, we will send a warning message to them first before bringing it to the TAs.
- If they continue to not communicate/contribute after being warned, we will come together with the contributing members of the group and discuss whether to put this person's name on the project or not.