CSCE 5310: Methods in Empirical Analysis

Project Proposal Analysis on Store sales and Customer Data Spring 2023

CSCE 5310: Methods in Empirical Analysis	Issue:	Spring 2023
Project Workbook	Issue Date: February 10, 2023	
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Summary Of Research

Introduction

This document is used to explain the analysis of the dataset which contains the data related to the Customer details who have membership in a shop. The data explain about the details of customers with few fields like profession, Annual income.

The dataset which will shop owner to understand about the business in the store.

Motivation and Background

The dataset includes 2000 records and 8 columns which will explain about the customers who has membership with the store. The details include Customer ID, Gender, Age, Annual income, Spending Score-Score assigned by the shop, based on customer behavior and spending nature, Profession, Work experience, Family Size.

With this data the shop owner will have complete details about his business. There comes the analysis about the purchases and profits in the business. The dataset will play a key role in understanding the business, which is very important for the store owner, includes increasing the stocks based on the spending score of the customers, selling different types of items based on the customers need, etc.

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Dataset and details

The Dataset includes the details of customers of a store.



The research includes data of customer as the sample data to analysis the business of the store.

We got this dataset from below URL.

https://www.kaggle.com/datasets/datascientistanna/customers-dataset?resource=download

Research questions and Results

- From this research we have question to find which profession customers are having the membership with age above 25.
 - A. Actor, Doctor, Engineer, Entertainment, Executive, Healthcare, Homemaker, Lawyer, Marketing professions are having the membership with age above 25.
- Question to find the Max, Min, Average of family size who's spending score is Max, Min, Average.
 - A. For min spending score 0 is having Min family size of 5

 For Average spending score 50 is having Average family size of 4

 For Max spending score 100 is having Average family size of 6
- Question to Customers of which professions are having highest spending score?
 - A. Artist, Doctor, Entertainment, Healthcare, Homemaker, Lawyer, Marketing professions customers are having spending score 100.
- Question What is the highest annual income of the customer who is having the highest spending score? And what is the lowest annual income of the customer who is having the highest spending score?

175254

A. 175254 is highest annual income of customer who's spending score is 100.

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- B. 59163 is lowest annual income of customer who's spending score is 100.
- Question what gender is having the highest spending score with annual income above 50000.
 - A.1106 Female gender is having highest spending score of 100 with annual income above 50000.