Tamader AboAlhassan - Afrah Almoutiri - Moneera Alfulaij
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أكاديمية سدايا
SDAIA Academy

customer satisfaction measurement

Background

Company Info:

Saudi Airlines aims to become one of the top 5 airlines internationally through improving its services, and one of the key success factors for organizations is measuring customer satisfaction. Furthermore, one of the many possible indications of customer satisfaction is facial expressions, hence, Saudi Airlines decided to look for someone capable of capturing and processing their customers' facial expressions.

Problem Statement:

Saudi Airlines wants to measure the satisfaction of its customers so that it could use it as a performance indicator to assess the quality of its services, which will be done through capturing images of the faces of its customers and feeding them to trained models which are constructed using deep learning algorithms.

Dataset Description:

The dataset used for training was obtained from Kaggle, and it contains 48*48 pixel grayscale face images, the images are centered and each of them occupies an equal amount of space. The dataset consists of facial emotions of the following categories: anger, disgust, fear, happiness, sadness, surprise and neutrality.

Main technologies and libraries used:

1. **Technologies**:
    - Python
    - Visual Studio
    - Google colab
2. **Libraries**:
    - Pandas
    - Keras
    - OpenCV
    - NumPy tkinter
    - tkinter