

Delphi

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1. Introduction

1.1 Purpose

The “Delphi”, is a solution proposed, which in future, could also be extended as smart engine that could automatically generate reports on next orders that are placed, as well could optimize and suggest the customers the articles or products they should buy (or) place order for.

1.2 Product Scope

The Delphi is a solution proposed for prediction of orders placed by customers based on purchasing data history and statistical patterns underlying in it. The main aspect of this product is to aid the company on manufacturing products in required quantity and to trace the behaviors of order placement by customers and demands based on data present and produced dynamically. It also focuses on optimizing search and order placement at customer end to avoid elusive experience of order placement and article search.

1.3 References

GIT-HUB Link:

2. Overall Description

2.1 Product Perspective

Again, Delphi is a solution intended to meet some tasks such as predicting orders placed by customers, the optimization of searches and order placements in _____. This product aims to aid the company by predicting orders in advance. It also aims at the reach and demand for existing articles, as well as the new ones introduced into markets, so that, to decide on manufacturing and rejecting certain brands, thus increasing productivity.

2.2 Product Functions

1. **Prediction Reports :** The future orders of each customer individually, the next article/brand they will order, based on the past purchase/ordering data and present demands that would have arose due to exemption.
2. **Optimized Ordering Engines :** Features and services, on customer end, such as suggestion of products based on past purchase history, auto-fill of user given material number (UGMN) based

on BTLF and Shades, sowing available Shades upon given Article number/series. These results are used by the servers to provide the search engine information of orders.

2.3 User Classes and Characteristics

- Can be used to predict the order placements continuously.
- Can be used to predict the various data other than the order placements.

This is a product, with a simple user interface and easily understandable functions to users.

2.4 Operating Environment

Can be executed on any operating system and also in MS-SSMS.

2.5 Design and Implementation Constraints

To design or modify this product, you must need, Python 3.x, Pandas, Keras, Numpy, and Tensor Flow, and Python packages for Microsoft SQL Engine.

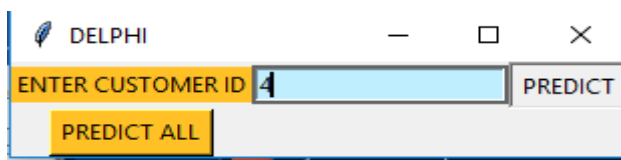
2.6 Assumptions and Dependencies

The data with considerably low amount of features and customers with low amount of orders have been eliminated as their predictions are nearly impossible, incorrect or inaccurate.

To run you may need, Python 3.x, Pandas, Keras, Numpy, and Tensor Flow, and Python packages for Microsoft SQL Engine.

The Servers, Databases and Queries related to them must be correct. External Interface Requirements

2.7 User Interface



*The original code is intended to be installed in the SQL Engine itself.
The product can also be executed to give out graphical representation.
It can also be used to analyze the evolving patterns.*

This task, doesn't needed any of the neural network level of approaches, because we execute the process with selected features.

The future versions of this product can be extended for greater purposes.