

A photograph of a modern restaurant terrace at dusk. The terrace is furnished with dark wooden tables and chairs, some with cushions. There are several tables set with white linens, glassware, and plates. The terrace overlooks a body of water and a distant shoreline under a twilight sky. The text "Auto Complete Systems in Restaurants" is overlaid in white, with a thin orange line underlining the word "Systems".

Auto Complete Systems in Restaurants



HEADLINES

- *Introduction*
- *What is an Auto Complete System?*
- *The Frustrations of Traditional Ordering*
- *The Frustrations The Power of an Auto-Complete System in Restaurants of Traditional Ordering*
- *The benefits of auto complete system in Restaurants*
- *Our Program*
- *Conclusion*

INTRODUCTION

Have you ever gone to a restaurant and wished there was an intelligent system to order your food instead of waiting for waiters to get your order, and waiting for some suggestions from them on what to order? That's where auto complete systems come in. These intelligent technologies suggest the next words as you type, making writing faster and more efficient.

The Frustrations of Traditional Ordering



Traditional ordering at restaurants can be a frustrating experience for customers. The process of ordering food can be time-consuming and prone to errors, especially during busy periods. Customers may have to wait in long lines, struggle to communicate their orders to the server, or deal with mistakes in their orders.



For example, imagine you are at a restaurant and want to order a burger with specific toppings. You tell the server your order, but they mishear you and write down the wrong toppings. When your burger arrives, it's not what you wanted, and you have to send it back, causing further delays and frustration.

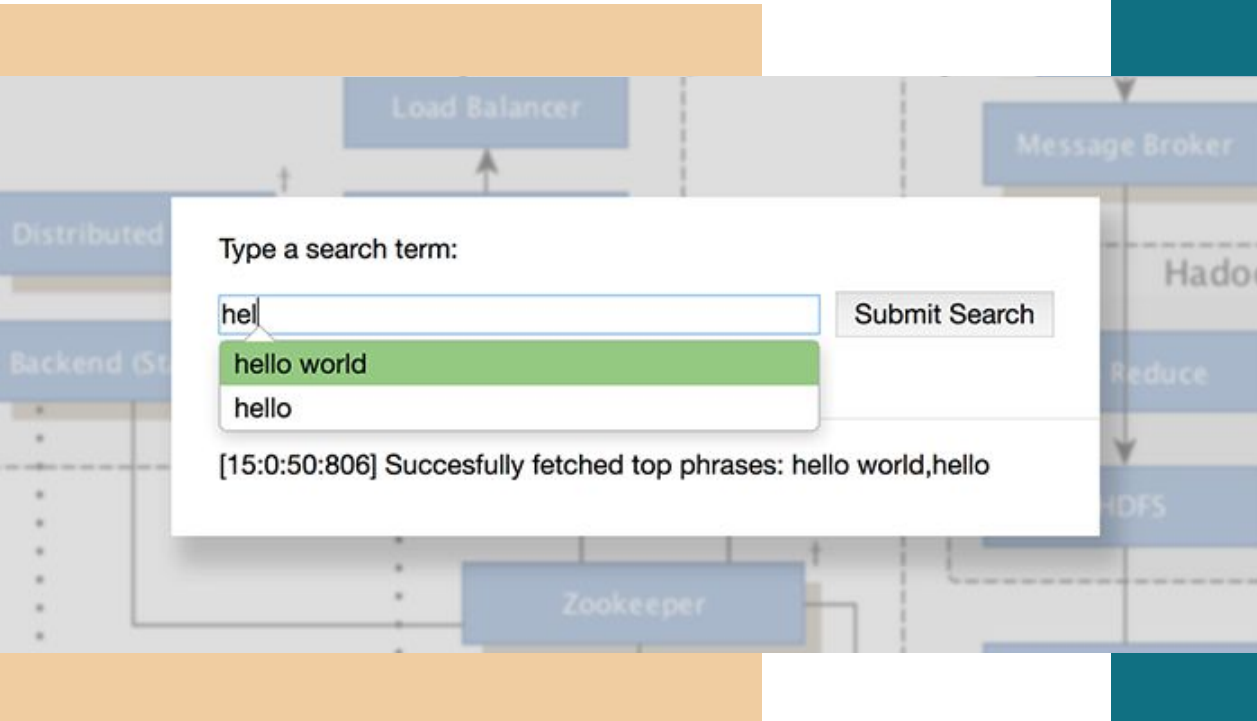


That leads to the need for auto-complete systems in restaurants.

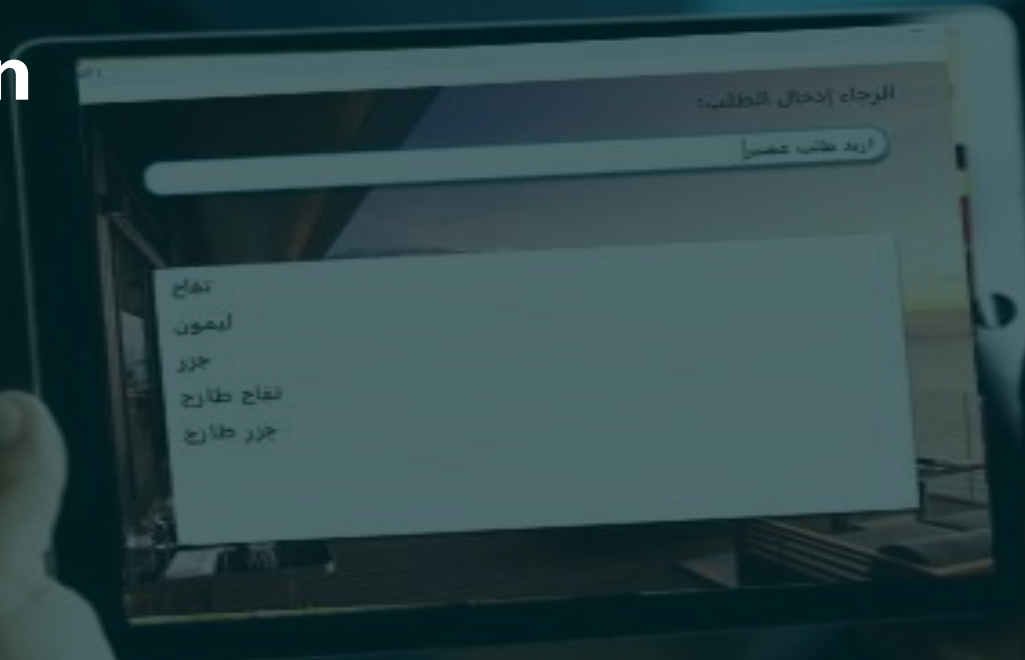
What is an Auto Complete System?



An auto-complete system is a software program that predicts and suggests the words or phrases a user might be typing in real-time. It can even improve accuracy by predicting what you're going to say before you even finish typing. This technology has been widely used in search engines, web browsers, and messaging applications to simplify and speed up the process of data entry.



The Power of an Auto-Complete System in Restaurants



- Auto-complete system is a revolutionary technology that uses advanced algorithms to predict what the customer wants to order and completes the order automatically. It allows customers to quickly and easily order their food by simply typing a few letters on a tablet or smartphone. As they write their order, the system suggests additional items based on any relevant data, such as other customers' data or popular pairings.

The benefits of auto complete system in Restaurants

auto-complete system

Customers benefit

restaurant owners

- *An auto-complete system in restaurants can provide numerous benefits for both customers and restaurant owners.*

- *Customers benefit from faster ordering, as the system can predict and suggest items based on popular menu items, it also reduces mistakes, leading to increased satisfaction. This results in a more pleasant dining experience and encourages repeat visits.*

- *For restaurant owners, an auto-complete system can increase efficiency and improve customer service. It can reduce wait times allowing staff to focus on other tasks, and errors in orders, which leads to fewer complaints and returns. This improves customer satisfaction and loyalty, ultimately resulting in higher profits for the restaurant. In fact, studies have shown that implementing an auto-complete system can increase sales by up to 20%.*

Data Gathering

- In gathering the data process, we wrote a file that has the orders and questions in Arabic that customers might order or ask in a restaurant, and gave the file to the system.
- The system normalizes the given data by lower casing all letters, and removes any other characters than letters as (@#\$%&-+), then it uses the N-gram algorithm that counts the frequency of the words sequence, to estimate the probability of the data, and saves it in a dataset that is later given to the system.

اريد طلب ساندويتش لحم بالخضار
اريد طلب وجبة سوشي
اريد طلب تشكيلة مقبلات
اريد طلب بيتزا بيروني مع الفطر
اريد طلب ستيك لحم مشوي ودرجة نضج متوسطة
اريد طلب ساندويتش دجاج مقلي مع صوص الباركيو
اريد طلب طبق باستا بالصلصة البيضاء
اريد طلب وجبة سمك مشوي مع صوص الليمون
اريد طلب وجبة برغر نباتي
هل لديكم بطاطا حلوة مقلية؟
هل لديكم بطاطا حلوة مشوية؟
اريد طلب حساء الفطر
اريد طلب حساء الخضار
اريد طلب حساء الطماطم
اريد طلب طبق سلطة خضار مع الدجاج
اريد طلب سلطة سيزر مع الدجاج
هل تقدمون خبز مع المقبلات؟
هل يمكنني الحصول على صلصة اضافية للوجبة؟
هل يمكنني الحصول على خبز اضافي مع الطعام؟
هل توفرين طعام خاص لمرضى السكري؟
هل تقدمون طعام خاص لمرضى القلب؟
هل يمكنني الحصول على وجبة الافطار في اي وقت من اليوم؟
هل يمكنني الحصول على الحساء كطبق جانبي؟
هل توفرين طعام خاص للنباتيين؟
هل توفرين طعام خاص لمن يعاني من حساسية غذائية؟
هل توفرين مشروبات بدون كافيين؟
اريد طلب كوب قهوة خالي من الكافيين
هل توفرين وجبات مشوية على الفحم؟
اريد طلب قطعة ستيك مشوية على الفحم
هل يمكنني الحصول على قائمة الحلويات؟

Our Program

- In our autocomplete system, we gave it the dataset file to use it to predict the next word. The system reads what the user writes in the real time, and compares it to the phrases in the dataset to find the predicted next word.
- And to make it easier the system can be done on a tablet or a smartphone to help customers order what they want.



Conclusion

- In conclusion, an auto-complete system can revolutionize the restaurant industry by improving customer satisfaction, increasing efficiency, and ultimately leading to higher profits.
- By eliminating common frustrations like mistakes in orders and long wait times, customers are more likely to return and recommend your restaurant to others. And for restaurants, an auto-complete system can streamline operations, and provide valuable data insights.