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# LANGUAGE TRANSLATOR

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## ABSTRACT

Machine Translation (MT) software today provides adequate conversion of foreign languages to one's native tongue; however, dialects, slang, and character conversion errors result in partially successful translations. For an accurate translation, a native speaker is often required to correct the translation by using sentence structure and word use cues to capture the true meaning. MT character conversion from Cyrillic, Asian, and Arabic languages to western characters induce errors in the translated text which can change the meaning or result in characters being associated together that do not form words. The authors present a solution using open source MT and the International Organization for Standardization (ISO) character mapping. The solution provides proper character conversion to achieve greater translation accuracy for web-based content.

Machine translation is an ongoing field of research from the last decades. The main aim of machine translation is to remove the language barrier. Earlier research in this field started with the direct word-to-word replacement of source language by the target language. Later on, with the advancement in computer and communication technology, there was a paradigm shift to data-driven models like statistical and neural machine translation approaches.

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Keywords: Language Translator.

## 1. INTRODUCTION

This project is a web based shopping system for a local shop. The project objective is to provide a platform for small vendors to sell their products and expand their small business over the district via internet.

Online shopping is the process whereby consumers directly buy products from a seller in real-time, without an intermediary service, over the Internet. It is a form of electronic commerce. This project is an attempt to provide the advantages of online shopping to customers of a real shop. It helps buying the

products in the shop anywhere through internet by using an android device. Thus the customer will get the service of online shopping and home delivery from his favorite shop. As well as it also provide a platform for small businesses.

## 2. PROBLEM STATEMENT

Machine generated translation is much more accurate than Human translation. Travelers often rely on Human translators that result in increase in expense when the person is trying to communicate in a foreign language. Some seek help from their friends or relatives in these situations. This issue will be addressed using social media. A social network brings people together to help each other and exchange experiences. The ultimate goal is to eliminate language barriers for travelers by connecting them to interpreters through Text Boxes and Voice Assistant. This will help the user get the trusted translation from various grades of translators, basic to fluent, affecting the price rate of the translated information. Also, providing a way for the app makers to make some extra money.

## 3.SCOPE

Machine Translation can increase translators' capabilities by 3-5 times in some cases, allowing for more content to be localized in a shorter amount of time. With increased productivity and reduced costs, companies will be able to translate more content into more languages. Machine translation technology and products have been used in many application scenarios, such as business travel, tourism, cross-language information retrieval and so on. In terms of the object of translation, there are written language-oriented text translation and spoken language-oriented phonetic translation.

## 4.LITERATURE SURVEY

To make the Language translation process truly easy and competent wireless and web technologies are used. The possibility of right, easy and understandable way to translate languages. This system is developed using Java, XML, and Firebase. Though product is stand-alone it requires webhost. The user has to download the application to translate the text from one language to another.

## 5.METHODOLOGY OF IMPLEMENTATION

The main objective of the project is to develop an android application that will provide a platform which can translate over 25 languages anytime from anywhere.

Specific Objectives:

1. Reduce language barriers in various countries
2. Improve communication in foreign languages
3. Provide a platform to translate many languages at one place
4. The application translates text from one language to another.

## 6. TECHNOLOGY USED

Frontend: XML  
Others: Android, Firebase  
Backend: Java

## 7.CONCLUSTON

Each machine translation approach has its advantages and disadvantages. What one approach possesses, the other one seems to be lacking and vice versa. Rule-based methods focus on trying to understand the grammar rules while the statistical approach pays very minimal or no attention to the grammar of a particular language. The rule-based machine translation approach has been implemented in computational linguistics since its very

early days. Human involvement in this approach is significant as it is the human agent who creates the rules. In other words, the humans use their knowledge and experience to prepare the rules.

## **8.FUTURE SCOPE**

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