

•

IYALAMAIVI

(இயலமைவி)

Thangavelu C

Pathivar, Seyalmantram

Introduction:

This presentation is useful for Tamil web design development by pointing out the importance of Tamil Grammar and transliterating the old Tamil scripts with the local spoken language.

The Sound echoed from our mouth was the vital in our body organ for expressing our opinion and several signs we showed the transactions with our relationship to others, during the ancestral period.

After understanding the signs from others, our vocal expression is being developed upon with the natural language from the areas where the people is living in with conglomeration.

The word express in any native language is to be used in Computational Linguistics model in the Intra-active Voice Response(IVR) in the web design.

In the Tamil language also, Unicode can be designed in such a way that by transforming the Computational framing with the basic Tamil Uyir Mei (alphabet) letters.

KURIKODARAN(குறிக் கோடறன்)

As We all know that the ' Code ' is the main tools in Computer Software Development.

Similarly, In Designing the Tamil Web, the CODE is the main tools for Tamil Computational Linguistics into Oral Response.

The Word 'kurikodaran' title is using in this article for the purpose of Website maintenance in Tamil Language.

•

The Word 'code' is being used in Computer language Programme for generating useful meaning in any natural language in the website. The Tamil word 'kurikod'(குறிக்கோடு) is also having the same meaning as 'code' in English.

Aran(அறன்) in the above title with the word 'kurikotaran' is denoting for performing our duty with the good intentional cultural identity in The Tamil Language.

Code User Interface (CUI):

The Code User Interface in any programmable in the Web design is being used in the Natural Language Tools.

* In any Natural Language, a Letter is being used for framing words.

e.g; Tamil Spoken Language Morphological letters can create for framing a word as noted below:

Anil-அணில்(அ+ணி(ண+இ))+ல்(ல+ஃ)

*The Word 'Anil' can frame for Tamil Computational language with any Natural Language code for using in the web design.

*A Word can connect with the linking letters of the same word, also with some other words which is denoting different meaning in its usage.

We call it a word-unit for the same which does not show anything by itself.

A Tamil word can be classified with the structure of the Tamil word into two as

1. 'பகுபதம்' Paghupatham(Divisible Word-DW)
2. 'பகாப்பதம்' Paghapatham(Indivisible Word-IW)

Paghupatham(DW) will have 6 Parts

*Paghuti(பகுதி)Head part

*Vighuti(விகுதி)End Part

*Idainilai(இடைநிலை)Middle Part

•

*Santhi(சந்தி)Connection

*Sariyai(சாரியை)Aligning Part

*Vigaram(விகாரம்)Change

e.g.

அறிஞன்-Paghupatham Word

அறி+ஞ+அன்=அறிஞன்

Paghupatham:

A word which cannot classify into

Head Part(பகுதி)

End Part(விகுதி) is called as Indivisible Part-IW

e.g; தேன்(தேன்), மரம்(maram)

A word is also grammatically classified into classes

Name(பெயர்)Noun

Verb(வினை(அ)செயல்)Action

Preposition(இடை)Connection

Adjective(உரிச்சொல்)Noun Phrase

Adverb(வினை அடை)Verb Phrase

In a sentence, a relationship between a Noun and a verb is the case(வேற்றுமை உருபு).

It is represented by a suffix or post position

The above such classification in Tamil letters with the words can be modified with the code procedures by incorporating with any other natural languages, by framing in computational technology for network.

Vowels(Uyirum-உயிரும்) Consonants(Meiyum-மெய்யும்) is bonding with ' m ' sound, for some words pattern.

*Machine Translation is difficult to identify the silent signs and for certain Morpheme(கட்டுருபன்) and it is very easy divide the words with the alphatical letters, by joining with the consonants(me) and Vowels(uyir) in Tamil Letters.

•

*Natural Language of the sound can notify in the Tamil transliteration also.

* Interfacing with the letters and sound are to be classified and coded.

* Programmable codes are to be framed with the sound and morphemes in the Tamil Unicode.

The Interactive Voice Response(IVR) can also generate with the Kurikotaran (Iyalamaivi).

The following input code in the Computational Checks can produce fruitful results in the output with the following Processing compilations.

Morphemes Code Compilation in IVR:

Grammatical Language Analysis Creation

(இலக்கண மொழி பகுப்பாய்வு உருவாக்கம்)

Natural Language Process Steps in Tamil

(இயற்கை மொழி ஆய்வில் பங்கு)

Spelling Checkers(உச்சரிப்பு சரிபார்ப்பு)

Search Engine(தேடல் இயந்திரம்)

Information Retrievals & Extractions

(மீட்டும் பிரித்தெடுத்தலும்)

Machine Language Transliteration Process)

Grammar Checks in Local Language

with its root words.

Tools Using in Natural Language Process:

The following Process in the tools are helpful to have input in the frame so as to get the results in the output format.

* Content Analysing Processing

* Question and Answer Processing

•

- * Sentence Automation Processing
- * Discussion Processing
- * Morphology Learning Processing
- * Language Learning Processing

IYALAMAIVI -Expanded Word Format(in Tamil):

இயலமைவி (IYALAMAIVI)-

The above *Iyalamaivi * word is describing as follows:

The machine translation is the numerical changes of 0,1 into Tamil Consonants and Vowels (Uyir and Mei) Letters by changing into written and spoken format with the following Tamil formats activational levels.

இ-இயந்திர

ய-யதார்த்த

ல-(இ)லக்க 0,1 குறியீட்டில்

மை-மையத் தானியங்கி

வி-விவரப்பேசி

Iyalamaivi Functions:

The following Iyalamaivi functionalities is improving the natural language formation with Computational and Digital setup

- * Computing Chipsets
- * Transforming Chipsets from 0,1
into 'Natural Language' forms in Hardware setup,
- * Programmable Code formation
- * Forming Chipsets
- * Changing Natural Functions.

Kurikodaran-குறிக்கோடு+அறன்=குறிக்கோடறன்(Hackathan)

•

The Kurikodaran Projects are involving in the following steps for framing the Tamil letters directly into the Digital formats.

* Code Structures-Understanding

* Explaining the sound format with Video

* Forming the Morphemes with the Uttering

Sound and Seeing through the Pictures.

* Morphemes Formation

(with Tamil Uyir, Mei, Uyirmei Letters).

Interfaced(இடைமுக அகப்படுத்துதல்)

* The Tamil Vowels, Consonants(Uyir, Mei)Letters Can Join with the below mentioned methods.

e.g., The Tamil word ' Anil ' is being written as

' அணில்=அ+ணி(ண+இ)+ல்(இ+ல்)'

* The Tamil word Morphemes is being expressed

by coining the Tamil Letters into Tamil Phoneme

(ஒலிக்கப்படும் தமிழ் சொற்களின் ஒலியன்

தமிழ் எழுத்துக்களில் உருவடைந்து

எழுத்துருவாக மாற்றம் அடைதல்)

ஒலியன் =

'செய்நேன்' என்ற சொல்லை-செ(ச+எ)ய்(ய+ஃ)நே(ற+ஏ)ன்(ன+ஃ), எனவும்

சொல்=

'செய்கிநேன்' என்ற சொல்லை-

செ(ச+எ)ய்(ய+ஃ)கி(க+இ)நே(ற+ஏ)ன்(ன+ஃ)

என்ற தமிழ் குறிகளை உள்ளீடு செய்து,

அச்சொல்லுக்கு உண்டான ஒலிக்குறிகளையும்

எழுத்துருவையும் உள்ளீட்டை சரியான குறிக்கோடுகளை நிர்ணயம் செய்கிறோம்.

•

Polysemy :

A Symbol, word or Phrases means many different things called as Polysemy

e.g, Bank means Financial Institution, River Bank

In Tamil word such as Padi(படி) is also denoting the relevant meaning in accordance with the the circumstances of the speeches and writings. Polysemy word is required to be analysed and the output of the tools should define the related meanings with the 'Kurikodaran' methods as explained in the above.

When we express the circumstances in which we express the above we understand the related meaning of the objects.

Conclusion:

This Iyalaimaivi Presentation is helpful to have a meaningful 'Porunmai ' with English to Tamil, Tamil to English Translation in both written as well as oral format. It also explains Synonyms, Antonyms, Entailment(முற்கோள்) etc ., by framing with Ascii code to Tiscii Code.

Reference

Tamil Virtual University

(தமிழ் இணைய பல்கலைக் கழகம்-குறிப்பு)

Anna University Internet Conference NLP Tools

Prof.Rajendran Sanakaravelayuthan

Tools Configuration with Tamil Unicode Characters-

Kalyanasundaram Tools for Word-Processing Tamil