



Multi-lingual Apps – A Methodology

NIRMAL GHORAWAT

NIRMAL.GHORAWAT@HOTMAIL.COM

The Internet's growth story in India is synonymous with the English language. As digital awareness and literacy is rising even in remote towns and villages, it is time to envision the structure and design of an Internet that supports the variety of regional languages India has.”

- INDIAAI.GOV.IN

Transcription vs Translation: What's the Difference?

PHONETIC (SOUND)



SEMANTIC (MEANING)



TRANSCRIPTION OF INDIAN LANGUAGES

A very good example of compatibility in Transliteration / Transcription between Indian languages is this sanskrit sloka transliterated in languages of Indian Subcontinent.

		śivo rakṣatu gīrvāṇabhāṣārasāsvādatatparān
Indian subcontinent	northern	
	Bengali	শিবো রক্ষতু গীর্বাণভাষারসাস্বাদতৎপরান্
	Devanāgarī	शिवो रक्षतु गीर्वणभाषारसास्वादतत्परान्
	Gujārātī	શિવો રક્ષતુ ગીર્વાણભાષારસાસ્વાદતત્પરાન્
	Gurmukhī	ਸ਼ਿਵੇ ਰਕ੍ਸਤੁ ਗੀਰ੍ਵਾਣਭਸ਼ਾਸ੍ਵਾਦਤਤ੍ਪਰਾਨ੍
	Oṛiā	ଶିବୋ ରକ୍ଷତୁ ଗୀର୍ବାଣଭାଷାରସାସ୍ବାଦତତ୍ପରାନ୍
	Tibetan	ཤི་ཁོ་རྒྱ་ཁྱེ་གླིང་མཁའ་ལྷ་སྐུ་དྲ་བ་རྒྱ
southern	Simhala	ශිවේ රාක්‍ෂතු ගීර්වාණභාෂාරසාස්වාදතත්පරාං
	Malayālam	ശിവോ രക്ഷതു ഗീര്വാണഭാഷാരസാസ്വാദതത്പരാന്
	Tamiḻ	ஸிவோ ரக்ஷது கீர்வாணபாஷாரஸாஸ்வாததத்பரந்
	Telugu	శివో రక్షతు గీర్వాణభాషారసాస్వాదతత్పరాన్
	Kannaḍa	ಶಿವೋ ರಕ್ಷತು ಗಿರ್ವಾಣಭಾಷಾರಸಾಸ್ವಾದತತ್ಪರಾನ್



UNSTRUCTURED TEXT

My name is Nirmal Ghorawat. My date of birth is 28th day in the month of December of the year 1986. My gender is Male. My father's name is Prasan Ghorawat. I am a resident of 404, Suntower Appartment, Jivkor Nagar, Swami Vivekananda Marg, Surat - 395 001, Gujarat. My Aadhar number is 9876 5432 1012.

STRUCTURED TEXT

TRANSLATE

TRANSCRIBE /
TRANSLITERATE

Aadhar #	9876 5432 1012
Name	Nirmal Ghorawat
Date of Birth	28 December 1986
Gender	Male
Father's Name	Prasan Ghorawat
Address	404, Suntower Appartment, Jivkor Nagar, Swami Vivekananda Marg, Surat - 395001 Gujarat.

For example my first name "Nirmal" transcribed & transliterated in all Indian languages without myself being intelligible in all the scripts / glyphs.

Language	English	Name [TRANSLATE]	Nirmal [TRANSCRIBE]
Hindi [Devanagri]	हिन्दी	नाम	निर्मल
Bangla [Assamese]	বাংলা	নাম	নিৰ্মল
Gurumukhi - Punjabi	ਪੰਜਾਬੀ	ਨਾਮ	ਨਿਰਮਲ
Gujarati	ગુજરાતી	નામ	નિર્મલ
Marathi [Devanagri]	मराठी	नाव	निर्मल
Kannada	ಕನ್ನಡ	ಹೆಸರು	ನಿರ್ಮಲ
Malayalam	മലയാളം	പേര്	നിർമല
Tamil	தமிழ்	பெயர்	நிர்மல
Telugu	తెలుగు	పేరు	నిర్మల
Odia	ଓଡ଼ିଆ	ନାମ	ନିର୍ମଲ

Can I type an Address in Gujarati and you receive in Kannada - but we are not mutually intelligible in either scripts / glyphs.

GUJARATI

ગુજરાતી

નિતિન કામત

ડાયરેક્ટર

જીરોધા બ્રોકિંગ લિમિટેડ

153/154, 4th ફ્લોર, 4th ફેઝ,

ડાઉનર્સ કોલોની, અપોજિટ ક્લેરેન્સ સ્કૂલ,

જે પી નગર, બંગલુરુ 560078

કર્નાટક ભારત

KANNADA

ಕನ್ನಡ

નિતિન કામત

ડાયરેક્ટર

જીરોધા બ્રોકિંગ લિમિટેડ

153/154, 4th ફ્લોર, 4th ફેઝ,

ડાઉનર્સ કોલોની, અપોજિટ ક્લેરેન્સ સ્કૂલ,

જે પી નગર, બંગલુરુ 560078

કર્નાટક ભારત

Sample Transliteration – Travel Portal

English	Surat	Ahmedabad	Guwahati	Gondia	Indigo	Vistara
Hindi (हिन्दी)	सूरत	अहमदाबाद	गुवाहाटी	गोंदिया	इंडिगो	विस्तारा
Bangla (বাংলা)	સૂરત	અ અમદાવાદ	ગુ વાહાટી	ગોંદિયા	ઇન્ડિગો	વિસ્તારા
Punjabi (ਪੰਜਾਬੀ)	ਸੂਰਤ	ਅ ਅਮਦਾ ਘ ਟ	ਗੁਘਾ ਟਾ ਟੀ	ਗੋਂ ਟਿਘਾ	ਓਂਡਿਗੋ	ਵਿਸ਼ਤਾਰਾ
Gujarati (ગુજરાતી)	સુરત	અમદાવાદ	ગુવાહાટી	ગોંદિયા	ઇન્ડિગો	વિસ્તારા
Odia (ଓଡ଼ିଆ)	ସୁରତ	ଅହମଦାବାଦ	ଗୁବାହାଟି	ଗୋନ୍ଦିଆ	ଇନ୍ଦିଗୋ	ବିସ୍ତାରା
Telugu (తెలుగు)	సూరత్	అ హమదాబాద్	గు వాహాట్	గోండ్రి యా	ఇండి గో	విస్తారా
Tamizh (தமிழ்)	ஸூரத்	అహమదాబాద్	గువాహాట్	గోండ్రి యా	ఇండి గో	విస్తారా
Kannada (ಕನ್ನಡ)	ಸೂರತ್	ಅಹಮದಾಬಾದ್	ಗುವಾಹಾಟಿ	ಗೋಂಧಿಯಾ	ಇಂಡಿಗೋ	ವಿಸ್ತಾರಾ
Malayalam (മലയാളം)	സൂരത്	അഹമദാബാദ്	ഗുവാഹാടി	ഗോന്ദിയാ	ഇന്ഡിഗോ	വിസ്താര
Marathi (मराठी)	सूरत	अहमदाबाद	गुवाहाटी	गोंदिया	इंडिगो	विस्तारा

Sample Transliteration – Food / Grocery Delivery

English	Hindi (हिन्दी)	Bangla (বাংলা)	Punjabi (ਪੰਜਾਬੀ)	Gujarati (ગુજરાતી)	Odia (ଓଡ଼ିଆ)
Gobhi Manchurian	गोभी मंचूरियन	গোভী মংচুরিয়ন	ਗੋਭੀ ਮੰਚੂਰਿਯਨ	ગોભી મંચૂરિયન	ଗୋଭୀ ମଂଚୁରିୟନ
Hara Bhara Kabab	हरा भरा कबाब	হরা ভরা কবাব	ਹਰਾ ਭਰਾ ਕਬਾਬ	હરા ભરા કબાબ	ହରା ଭରା କବାବ
Malai Kofta	मलाई कोफ़ता	মলাই কোফ্তা	ਮਲਾਈ ਕੋਫ਼ਤਾ	મલાઈ કોફ਼તા	ମଲାଈ କୋଫ୍ତା
Navratan Korma	नवरातन कोरमा	নবরতন কোরমা	ਨਵਰਤਨ ਕੋਰਮਾ	નવરતન કોરમા	ନବରତନ କୋରମା

English	Telugu (తెలుగు)	Tamizh (தமிழ்)	Kannada (ಕನ್ನಡ)	Malayalam (മലയാളം)	Marathi (मराठी)
Gobhi Manchurian	గోభీ మంచూరియన	கோபீ மஞ்சூரியந	ಗೋಭೀ ಮಂಚೂರಿಯನ	ಗೋಡೀ ಮಂಚೂರಿಯನ	गोभी मंचूरियन
Hara Bhara Kabab	హరా భరా కబాబ	ஹரா பரா கபாப	ಹರಾ ಭರಾ ಕಬಾಬ	ಹರಾ ಭರಾ ಕಬಾಬ	हरा भरा कबाब
Malai Kofta	మలాి కోఫ్తా	மலாஈ கோப்தா	ಮಲಾಈ ಕೋಫ್ತಾ	ಮಲಾಀ ಕೋಫ್ತಾ	मलाई कोफ़ता
Navratan Korma	నవరతన కోరమా	நவரதந கோரமா	ನವರತನ ಕೋರಮಾ	ನವರತನ ಕೋರಮಾ	नवरातन कोरमा

*language is a means of
communication, not a
barrier to communication.”*

- NIRMAL GHORAWAT

NIRMAL.GHORAWAT@HOTMAIL.COM

A black and white logo with the words "Thank you" written in a cursive, script font. The word "Thank" is on the top line and "you" is on the bottom line, with a large, decorative flourish at the end of the word "you".

Thank
you