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MULTIMEDIA FOR SCIENCE MUSEUMS IN
INDIAN LANGUAGES

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Abstract

Visvesvaraya Industrial & Technological Museum, one of the units of National Council of Science Museums under the Ministry of Tourism & Culture, Govt. of India is located at Bangalore, Karnataka, India. The primary aim of the museum is to popularise science among students and general public through nonformal education. The museum has six permanent exhibition halls and a Dinosaur corner. Visitors from all over India and the world visit the museum.

The exhibition hall on "SPACE-Emerging Technology in the service of mankind" set up in an area of 7000 sq.feet was thrown open to the public on June 19th 1999.In this exhibition hall different multimedia software related to Space Science are displayed in English and in Indian languages.

The paper examines the necessity of development of multimedia in Indian languages in order to spread the benefits of information technology to the rural people also. A case study of the multimedia titled "Satellite Orbits" in the exhibit "Mission Control Center" of the Space Gallery of the museum developed in three languages (Kannada,Hindi & English) has been discussed in detail.

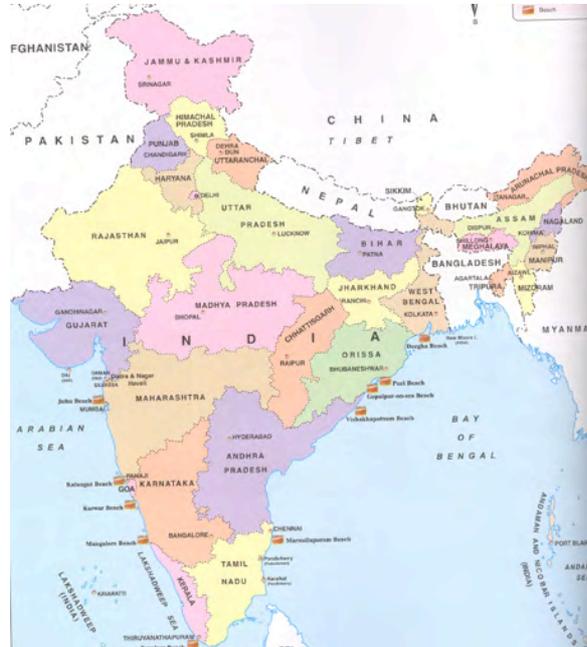**Keywords:** Satellite Orbits, Multimedia, Indian languages, Leap Office

India

India lies to the north of equator between 8 4' and 37 6' north latitude and 68 7' and 97 25' east longitudes. It is bound on the south west by the Arabian Sea and on the south east by Bay of Bengal. On the north, northeast and northwest lie the Himalayan ranges. Kanyakumari constitutes the southern tip of the Indian peninsula where it gets narrower and narrower loses itself into the Indian Ocean.

States & Union Territories

India has 28 states and 6 Union territories.

Capital   : New Delhi

Area   : 3287263 sq.km.

Population   : 1,027,015,247

India Map

Languages

India has 18 officially recognised languages since 1992.However India is believed to have 1652 mother tongues of which 33 are spoken by people numbering over 100,000. The scheduled languages are
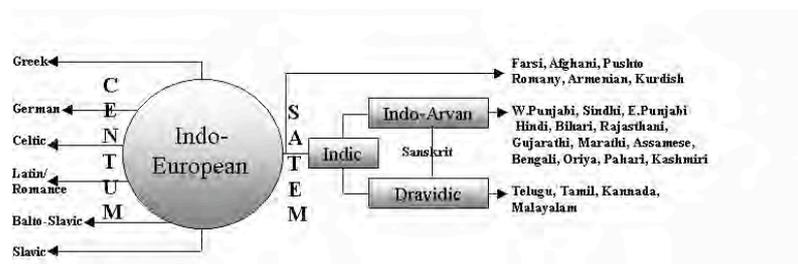
Assamese

Bengali

Gujarathi

Hindi

Kannada

Kashmiri

Konkani

Malayalam

Manipuri

Marathi

Nepali

Oriya

Punjabi

Sanskrit

Sindhi

Tamil

Telugu

Urdu

Evolution of Indian Languages

The Indian languages now in use have evolved from different language families corresponding more or less to the different ethnic elements that have been in India from the dawn of history. They may be divided into six groups.

1.Negroid

2. Austric

3. Sino-Tibetan

4. Dravidian

5.Indo-Aryan

6.Others

Evolution of Indian Languages

Indo- Aryan

Indo-Aryan, the Indic branch of the Indo-European family, came into India with the Aryans. It is the biggest of the language groups in India, accounting for about 74% of the entire Indian population.

Dravidian

Dravidian languages form a group by themselves and unlike the Aryan have no relations outside the Indian subcontinent, Pakistan and Bangladesh. The Dravidian family is the second largest group in India.

Common Language

India never had a common language, which was intelligible to the masses everywhere in India. For many years Sanskrit remained a common medium. But it was the language of the learned classes and not of the masses. Under the British, English became a sort of lingua franca. Again it was restricted to the educated few. After Independence Hindi was recognised as the National language of India. In the states the respective regional languages listed in the Constitution remained the official language. However English continued to remain as an additional official language.

Need for Multimedia development Indian Languages

Today computers are being used for a variety of applications. Automatic teller machines (ATM) let's us conduct banking transactions from virtually anywhere in the world. You can find computers in railway stations, airports, grocery shops, hospitals etc. Computers

have infiltrated almost every aspect of our society. In order to pass on the full benefits of information technology to the rural people of India it is necessary to develop multimedia in Indian languages.

Since most of the people in India cannot understand the single language English it isnecessary to develop the software in Indian languages. Development of multimedia software only in English will restrict its use only to the educated people and not to the masses. In every Indian State it is necessary to develop the software at least in three languages so that majority of the population could view the multimedia. In India Hindi being the national language and in Karnataka, Kannada being the official language it is necessary to develop the multimedia in at least three languages i.e. English, Hindi and Kannada. The multimedia software has been developed in Indian languages using C-DAC'S (Center for development of Advanced Computing) software "Leap Office".

Indian Language Software (Leap Office)

Centre for Development of Advanced Computing (C-DAC), India has developed Indian language software titled "Leap Office". It is based on Graphics and Intelligence based Script Technology (GIST). The real benefit of GIST is the ease with which it allows the use of an Indian language in the IT enabled world. The underlying architecture of all the GIST products uses the Indian Script Code for Information Interchange (ISCII), their representation on screen and printer (ISFOC), common keyboard layout for different scripts (INSCRIPT). It supports 12 Indian languages. The languages supported are

Assamese

Bengali

Gujarathi

Hindi

Kannada

Malayalam

Marathi

Oriya

Punjabi

Sanskrit

Tamil

Telugu

Case Study :

Multimedia on "Satellite Orbits" in Indian Languages developed at Visvesvaraya Industrial & Technological Museum

Visvesvaraya Industrial & Technological Museum, one of the units of National Council of Science Museums under the Ministry of Tourism & Culture, Govt. of India is located at Bangalore in Karnataka, India. The primary aim of the museum is to popularise science among students and general public through nonformal education. The museum has six permanent exhibition halls and a Dinosaur corner. Visitors from all over India and the world visit the museum.

Visvesvaraya Industrial & Technological Museum

SPACE-Emerging Technology in the service of mankind

The museum has a permanent Exhibition hall on "SPACE-Emerging Technology in the

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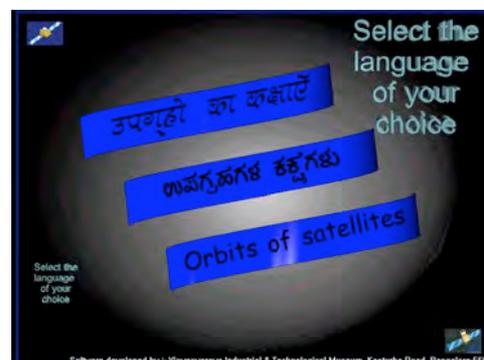
The multimedia titled "Satellite Orbits" in the exhibit "Mission Control Center" has been developed in three languages (Kannada,Hindi & English)
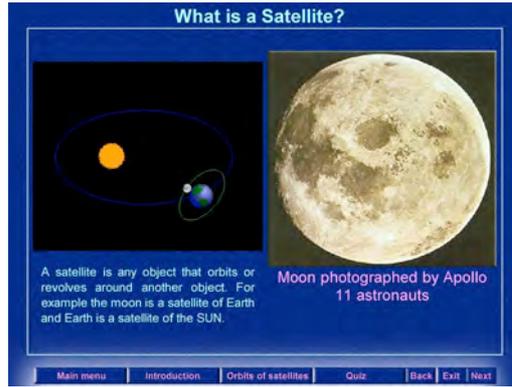

Mission Control Center exhibit in the Space Gallery of Visvesvaraya Industrial & Technological Museum

Glimpses of multimedia on "Satellite Orbits"

On the Home page the title of the multimedia "Satellite Orbits "is displayed in three languages. The visitor has to do the language selection. Once the language selection has been done the visitor can view the multimedia in the respective language chosen by him.
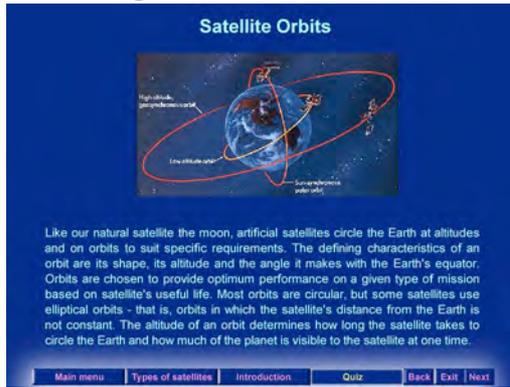

Title page of Multimedia on "Satellite Orbits"

"What is a Satellite" page of the Multimedia on "Satellite Orbits" in English

"What is a Satellite" page of the Multimedia on "Satellite Orbits" in Hindi

"What is a Satellite" page of the Multimedia on "Satellite Orbits" in Kannada

"Satellite Orbits" page of the Multimedia on "Satellite Orbits" in English

"Satellite Orbits" page of the Multimedia on "Satellite Orbits" in Hindi

"Satellite Orbits" page of the Multimedia on "Satellite Orbits" in Kannada

Quiz page of the multimedia on "Satellite Orbits" in English

Quiz page of the multimedia on "Satellite Orbits" in Hindi

attavar_fig.14: Quiz page of the multimedia on "Satellite Orbits" in Kannada

References:

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Malayala Manorama Year Book 2002

Website
www.cdacindia.org