Report of the Brain Storming Meeting on

Semantic web in Indian Languages

March 16th, 2012

W3C India Office
Electronics Niketan
6 CGO Complex Lodhi Road,
New Delhi 110003
W3C India office (www.w3cindia.in/) organized a Brain Storming meeting with Semantic Web experts on 16th March, 2012 at New Delhi. The list of participants are at Annexure I. The objective of this brain storming meeting was evolve the strategy for implementation of Semantic web in Indian Languages. The list of Presentation made at the meeting is as under:

1. Dr. Devika P. Madalli, Associate Professor, Documentation Research and Training Center Indian Statistical Institute (ISI), Bangalore- Semantic Web Research and applications.
2. Dr. Neeta Verma, Senior Technical Director, National Informatics Centre, New Delhi- Open GOVERNMENT Platform (OGPL).
3. Prof. Ravi Gorthi, Dept. of computer science, LNMIIT Jaipur- Service and Data Mediation on the Internet: Our Research Results.
4. Prof. Santanu Chaudhury, Dept. of Electrical Engg., I.I.T, Delhi- Semantic Web in Indian Languages
5. Prof. Navjyoti Singh, IIIT Hyderabad- Ontological Engineering and Semantic Web
6. Dr. Anup Kumar Das, JNU Delhi- South Asian Digital Libraries and Their Adherence to Semantic Web Principles
Deliberations

Swaran Lata, Country Manager, W3C India

Swaran Lata, Country Manager, W3C India addressed the participants and mentioned that, the objective of this brainstorming meeting is to evolve the opportunities for implementation of Semantic web in Indian Languages. She talked about the current status of Semantic Web research in India and highlighted the challenges of implementation of Semantic Web in Indian languages. She further elucidated that Semantic Web Standard of W3C need to be adapted for the implementation of Semantic Web in Indian languages. She told about the objectives of W3C India and standardization process of W3C. She also emphasized that beside Word Net project, which is already under development for all 22 languages, there is also need to identify how domain specific ontologies could be developed to aid the India specific semantic web work.

Dr. Devika P. Madalli Associate Professor

Dr. Devika presented experience of implementation of semantic web by ISI, Bangalore. In her talk she mentioned that in SW and Multilingual data Lexicons could be represented either in SKOS or OWL. She also spoke about the representation of words and their meanings in terms of hyponyms, hypernyms as could be represented as ontologies in Indian language.

Details may be referred from slides

Neeta Verma, Senior Technical Director

Dr. Neeta Verma talked about the open Government and open data in which data can be freely used, reused and redistributed by anyone. She also spoke about the OGPL Mandate in which she told about the solution for Open Government platform by using Best practices of USA data.gov & India.gov.in. She talked about joint collaboration initiative for Open Government and build completely on open source technology. She also stressed about the functions and features of OGPL and she also spoke about the Linked Data and methodology conversion of data from open data to linked data. Details may be referred from slides

Prof. Ravi Gorthi, Dept. of computer science

Prof. Ravi Gorthi elucidated about the goals and focus of the semantic web in Indian languages. He also talked about the graph specification which could be developed in semantic web based on his experience of doing it in a small domain while he was working at Infosys and also spoke about next generation solution of web using semantic web structure. Details may be referred from slides
Santanu Chaudhury, Professor

Prof. Santanu Chaudhury talked about the key issue and the challenges of representation of semantic web in Indian Languages. He also mentioned that existing ontology language like OWL do not support multimedia. Reasoning with uncertainties involved in multilingual resolution of concepts and explicit assignment of multi-lingual equivalents to concepts. He also talked about the experience of ontology linked heritage management.

Details may be referred from slides

Navjyoti Singh, IIIT Hyderabad

Prof. Navjyoti elaborated about the theory and application of Formal Ontology. He also talked about the graph case specification should be development in semantic web. He also mentioned that OWL can be used as syntax. He also spoke that community group may be formed which may defines next version for standard incorporating requirements of Indian languages.

Details may be referred from slides

Anup Kumar Das, Documentation Officer

Dr Anup Kumar spoke about the Major Digitization and Digital Library Initiatives in South Asia in which it provides access to multilingual/ Indic language documentary heritage collections. He also told us about the Onsite/ Offline Access to Digitized Collections and challenges which are faced by web developer and at last he told us about the semantic web principal.

Details may be referred from slides
1. Initiation of the formation of community Group of Semantic web in Indian languages to address the following.
   A: Review of present w3c standards in semantic web area and strategy for their adoption in Indian Language.
2. Feedback from participants on following points:
   A: Present state of the art semantic web research in India.
   B: How the existing wordnet data could be mapped into semantic web structure.
   C: Development of domain specific ontologies [e.g. Health, Tourism, E-governance, Education, Geospatial etc.]
   D: Development of automatic tools for semantic web/ontology development in Indian languages.
   E: Details of work done by you/your institution in the above mentioned area.
   F: Kindly sent 4-5 page of write up indicating expression of interest in the above area.
Annexure -I

1. J. Alan Bird, Global Business Development Leader, W3C
2. Swaran Lata, Country Manager, W3C India
3. Somnath Chandra, Dy. Country Manager, W3C India
4. Neeta Verma, Senior Technical Director, NIC
5. Sheila Anand Dean (Research) Computer Studies, Raja Lakshmi Engineering College, Chennai
6. Prof. Santanu Chaudhury, Dept. of Electrical Engineering, IIT Delhi
7. Navijyoti Singh, Professor, IIT Hyderabad
8. Ravi Gorthi, Dept. of computer science, LNMIIT Jaipur
9. Brijesh Kumar, Founder and CEO, DMI, Bangalore
10. Dr. Devika P. Madalli, Associate Professor, ISI, Bangalore
11. Anup Kumar Das, Documentation Officer, JNU Delhi
12. Dr. Susmita Chakraborty, Bengal Engineering and Science University
13. Dolly Bhasin, Managing Director, SPH Consultancy & E-Services PVT LTD
14. Prashant Verma, Sr. Software Engineer, W3C India
15. Raghu Arora, Software Engineer, W3C India
16. Naitik Tyagi, Software Engineer, W3C India
17. Swati Arora, Software Engineer, W3C India
18. Narender Parmar, Project Engineer, CDAC Pune
19. Quamar Alam Siddiqui, Project Engineer, CDAC Pune

The following couldn’t attend the meeting:

1. Niladri Chatterjee, IIT Delhi
2. Sanasam Ranbir Singh, IIT Guwahati
3. Arnab Bhattacharya, IIT Kanpur
4. Hiranmay Ghosh, TCS
5. Pabitra Mitra, IIT Kharagpur
6. Manish Kumar, Intra Health
7. Dr Sandeep Kumar Garg, IIT, Roorkee
8. Dr P Sreenivas Kumar, IIT Madras
9. S. Arun Kumar, IIT Delhi
10. Shyam Gupta, IIT Delhi
11. Sanjiva Prasad, IIT Delhi