



# REPORT on NATIONAL WORKSHOP on WEB accessibility

Christ Nagar International School, Thiruvananthapuram  
September 25-26, 2009

[The Centre for Internet and Society](#) (CIS) and [Society for Promotion of Alternative Computing and Employment](#) (SPACE) organized a workshop on web accessibility for web developers from the public and private sector on September 25 to 26, 2009. The workshop took place at **Christ Nagar International School**, Kowdiar, Thiruvananthapuram.

## About the Host Organizations

### [The Centre for Internet and Society](#)

The Centre for Internet and Society (CIS) is a Bangalore based non-profit, bringing together a team of practitioners, theoreticians, researchers and artists to work on the emerging field of Internet and Society in order to critically engage with concerns of digital pluralism, public accountability and pedagogic practices, with particular emphasis on South-South dialogues and exchange. We focus on areas such as Anonymity/Privacy, Censorship, Surveillance, Free and Open Source Software, Open Standards, Open Access, Family, Sexual practices, Addiction, Intellectual Property Rights and Trade, Piracy, ICT4D, Digital and Participation Divide and Digital Communities and Movements.

### [Society For Promotion of Alternative Computing and Employment](#)

Society For Promotion of Alternative Computing and Employment (SPACE) is a registered society that has members from academia, the IT industry, professional societies such as IEEE and Computer Society of India, and the IT Administration of the Government of Kerala. The vision of SPACE is to promote the use of Free and Open Source Software (FOSS) in academics, governance, corporate and individual use, and to support the use FOSS for employment generation in Kerala. The primary thrust are of the intervention are:

- Promote the use of FOSS in the public, private, and governmental sectors as well as for personal/home use
- Develop a model for FOSS- based employment generation that is appropriate to Kerala's context, by identifying appropriate business opportunities and providing support services including training and micro business incubation
- Carry out R & D activities for the development of essential prototypes that bridge existing gaps in software, so as to enable widespread use of FLOSS
- Ensure that Kerala is able to develop sufficient numbers of high-quality human resources in the FLOSS domain

### [Kerala State IT Mission](#)

Kerala State Information Technology Mission (KSITM) is a Society registered under the Travancore Cochin Literary Scientific & Charitable Societies Registration Act. It is an autonomous nodal IT implementation agency for Department of Information Technology, Government of Kerala which provides managerial support to various initiatives of the Department.

## About the Resource Persons

### Rahul Gonsalves

Rahul has been building accessible websites since 2005 (sample work at <http://rahulgonsalves.com/projects/> [1] ). He has been actively involved in promoting web and accessibility standards. He spoke at the first international accessibility and technology conference in India, Techshare 2008, where he made out a case for accessibility and conducted a workshop on retrofitting accessibility to existing websites, a concern for most large institutions with an existing online presence (slides available at [http://www.barrierbreak.com/events-conference/techshare\\_presentations200...](http://www.barrierbreak.com/events-conference/techshare_presentations200...) [2])

In September 2008, he presented a paper examining ways in which People with various impairments - both physical and mental - engage with online content, and demonstrated practical ways in which authors can make online content accessible at the National Conference on ICT for Differently Abled People. He is a supporter of the push for having a national policy for governing electronic accessibility in India.

### Srinivasu Chakravartula

Srinivasu Chakravarthula - graduated in Computer Science and is certified in 'assistive technologies'. He started his career as Head of the Braille Production Unit at National Association for the Blind, Bangalore. He then moved on and taught Computer Science at the Manik Public School, Bidar and also set up the Computer Training Centre at Hyderabad and Maniknagar, Bidar.

In the year 2005, he began to specialize in accessibility and started working for Net Systems Informatics and its subsidiary - BarrierBreak Technologies, Mumbai. During his stint at Net Systems, he was instrumental in setting up an accessibility process, imparting accessibility training to Corporates, creating awareness about accessibility and assistive technologies. Srinivasu played an innovative role in organizing Techshare India 2008 - India's 1st Accessibility and Assistive Technologies Conference and Exhibition. He was also Program Coordinator for Magazine, a3 that talked about Ability, Accessibility and Adaptability.

Srinivasu is currently working for Yahoo! India as Accessibility Manager and is responsible to lead and evangelize accessibility and its initiatives across Yahoo! India and South East Asia. He is also a member of the core committee for Yahoo! Employee Foundation India (YEFI). Srinivasu is associated with the social sector through the National Association for the Blind, India; Enable India, Shri Manik Prabhu Sikshan Samiti and Success World. His hobbies include blogging, tweeting, listening to classical music, playing chess and swimming.

# Schedule of the Workshop

## Day I

### Introductory Session

- Disability - 5 major types
- The W3C and the WCAG
- How people with disabilities use computers

### Group Exercise/Discussion

- Split participants into small groups and give them questions/problems to talk about and solve
- Example: If your friend is deaf, how do you make sure that she/he understands what a video is about? OR How does someone who can't see or hear answer/check their email? OR X lost his hands in a car accident. How does he do a Google search?

### Session 1 - Building an Accessible Website

- Laying Accessible Foundations
- Table-less layouts
- Well-structured markup
- Valid Code

*Lecture/Demonstration of Accessibility Features under GNU/Linux by Arky*

*Lecture/Demonstration of NVDA Screen Reader*

### Lunch

### Session 2 - Building an Accessible Website

- Removing Barriers
- Guideline 1 - Perception
- Non-text content
- Audio/Visual content
- Adaptability
- Contrast

*Group Exercise: Guideline 1 - Translate a offline newspaper into an online one, and ensure that structure and information are retained when the content is adapted.*

*Wrap Session - Feedback and Clarifications*

## Day II

*Lecture/Demonstration of ARIA features on selected websites*

### Session 3 - Guideline 2

- Operable
- Keyboard Access
- Enough Time
- Seizures
- Navigable

## **LUNCH**

### **Session 4 - Guideline 3 and 4**

- Understandable
- Natural Language
- Predictable
- Input Assistance
- Robust
- Compatible

### **Session 5 - Accessibility Testing**

- Automated Testing + Tools
- Manual Testing

*Wrap Session - Feedback and Clarifications*

## Participants List

1. *Mr. Vibeesh P*  
Team Leader, Rainconcert
2. *Mr. Sunil S*  
Computer Programmer, ANERT
3. *Mr. Vineet Pratap*  
Parallel Programmer, NIIST
4. *Mr. Binsun N T*  
Software Engineer, Keltron
5. *Mr. M.L. Antony*  
Manager (Software/Web Services), Keltron
6. *Mr. Rojilal M. L*  
Programmer, KSEB
7. *Ms. Dhanya Balakrishnan*  
Graduate Apprentice, Kerala State IT Mission
8. *Ms. Indu Reghunath*  
Developer, SPACE
9. *Mr. Jithin Babu B*  
Web Programmer, Freelance
10. *Mr. Hareesh Mohan*  
Developer, SPACE
11. *Mr. Sujith Sureshan*  
Developer, SPACE
12. *Mr. Vinu C R*  
Web Programmer, IT@School
13. *Mr. Cherian P Thomas*  
Programmer, KSEB
14. *Mr. B Vijayakumar*  
Programmer, KSEB
15. *Mr. Sunil Kumar*  
Government Employee, Kerala Khadi and Village Industries Board
16. *Mr. Anil Kumar*  
Akshaya, PA-MIS
17. *Mr. Shanavas Khan*  
Programmer, Freelance
18. *Ms. Shatti Raj*  
Scientist 'C', National Informatics Center
19. *Ms. Rameena M*  
Developer, SPACE

20. *Ms. Gita Brajesh*  
PSA, National Informatics Center
21. *Ms. Indusekhar M S*  
System Analyst, National Informatics Center
22. *Ms. Somi P Thomas*  
Scientist 'B', National Informatics Center
23. *Ms. Nissy George*  
System Analyst, National Informatics Center
24. *Ms. Susy M*  
Software Development, National Informatics Center
25. *Ms. Jisy V K*  
Technical Apprentice, Kerala State IT Mission
26. *Ms. Sandhya Devi T*  
Project Associate, IT@School
27. *Ms. Saritha D R*  
Project Associate Executive, IT@School
28. *Mr. Shaik Mohamed*  
System Analyst, National Informatics Center
29. *Mr. Shibin Shah K J*  
Student, RSCS
30. *Mr. Aneesh Bhadran*  
Student. RIT
31. *Mr. Thomas K S*  
Assistant Manager, Camputec
32. *Mr. Anil S*  
Member, SDS
33. *Mr. John Panicker*  
Website Designer
34. *Ms. Teenamol L*  
Information Kerala Mission
35. *Mr. Shine A R*  
Information Kerala Mission
36. *Mr. Jayahari K V*
37. *Mr. Naveen P L*
38. *Mr. Jijo Mathew*
39. *Mr. Antony Rodrugues*
40. *Mr. Satheeh S*
41. *Mr. Sajeevan C*  
Student, INSIGHT

## Feedback

Session I

Title: **Building an Accessible Website**

Topics Covered: *Laying Accessible Foundations, Table-less layouts, Well-structured markup, Valid Code*

### Content

	Excellent	Good	Need Improvement	Not Applicable
Covered Useful Materials	11	12	0	1
Practical to my needs and interest	9	11	3	1
Well Organized	12	9	1	2
Presented at the right level	14	9	0	1
Use Visual Aids	12	10	0	2

### Presentation

	Excellent	Good	Need Improvement	Not Applicable
Instructor's Knowledge	20	3	0	1
Instructor's Presentation Style	16	7	0	1
Instructor Covered Materials Clearly	12	11	0	1
Instructor Responded Well to questions	18	5	0	1

Title: *Lecture/Demonstration of Accessibility Features under GNU/Linux by Arky*

### Content

	Excellent	Good	Need Improvement	Not Applicable
Covered Useful Materials	12	8	1	3
Practical to my needs and interest	7	13	2	2
Well Organized	12	10	0	2
Presented at the right level	11	11	0	2
Use Visual Aids	9	11	1	3

### Presentation

	Excellent	Good	Need Improvement	Not Applicable
Instructor's Knowledge	13	10	0	1
Instructor's Presentation Style	9	14	0	1
Instructor Covered Materials Clearly	9	14	0	1
Instructor Responded Well to questions	13	10	0	1

**Title : Lecture/Demonstration of NVDA Screen Reader**

*Content*

	Excellent	Good	Need Improvement	Not Applicable
Covered Useful Materials	7	14	1	2
Practical to my needs and interest	7	10	3	4
Well Organized	8	11	2	3
Presented at the right level	8	10	3	3
Use Visual Aids	7	12	3	2

*Presentation*

	Excellent	Good	Need Improvement	Not Applicable
Instructor's Knowledge	10	12	0	2
Instructor's Presentation Style	9	11	1	3
Instructor Covered Materials Clearly	7	14	1	2
Instructor Responded Well to questions	11	10	0	3

Session II

**Title : Building an Accessible Website**

Topics Covered : *Removing Barriers, Guideline 1 - Perception, Non-text content, Audio/Visual content, Adaptability, Contrast*

*Content*

	Excellent	Good	Need Improvement	Not Applicable
Covered Useful Materials	12	10	1	1
Practical to my needs and interest	11	11	1	1
Well Organized	12	9	2	1
Presented at the right level	15	8	0	1
Use Visual Aids	12	10	1	1

*Presentation*

	Excellent	Good	Need Improvement	Not Applicable
Instructor's Knowledge	15	7	0	2
Instructor's Presentation Style	11	11	0	2
Instructor Covered Materials Clearly	11	11	0	2
Instructor Responded Well to questions	13	9	0	2



Session III

**Title :Guideline 2**

Topics Covered: *Operable, Keyboard Access, Enough Time, Seizures, Navigable*

*Content*

	Excellent	Good	Need Improvement	Not Applicable
Covered Useful Materials	11	10	0	3
Practical to my needs and interest	10	11	0	3
Well Organized	9	12	0	3
Presented at the right level	8	12	1	3
Use Visual Aids	9	11	1	3

*Presentation*

	Excellent	Good	Need Improvement	Not Applicable
Instructor's Knowledge	12	9	0	3
Instructor's Presentation Style	10	11	0	3
Instructor Covered Materials Clearly	9	11	1	3
Instructor Responded Well to questions	11	10	0	3

Session IV

**Title : Guideline 3 and 4**

Topics Covered : *Understandable, Natural Language, Predictable, Input Assistance, Robust, Compatible*

*Content*

	Excellent	Good	Need Improvement	Not Applicable
Covered Useful Materials	10	11	2	1
Practical to my needs and interest	9	13	0	2
Well Organized	12	11	0	1
Presented at the right level	14	8	0	2
Use Visual Aids	12	10	1	1

*Presentation*

	Excellent	Good	Need Improvement	Not Applicable
Instructor's Knowledge	13	8	0	3
Instructor's Presentation Style	11	10	0	3
Instructor Covered Materials Clearly	12	9	0	3
Instructor Responded Well to questions	13	8	0	3

Session V

**Title :Accessibility Testing**

Topics Covered: *Automated Testing + Tools, Manual Testing*

*Content*

	Excellent	Good	Need Improvement	Not Applicable
Covered Useful Materials	15	9	0	0
Practical to my needs and interest	14	9	1	0
Well Organized	13	11	0	0
Presented at the right level	13	11	0	0
Use Visual Aids	14	9	1	0

*Presentation*

	Excellent	Good	Need Improvement	Not Applicable
Instructor's Knowledge	17	7	0	3
Instructor's Presentation Style	14	10	0	3
Instructor Covered Materials Clearly	14	9	0	1
Instructor Responded Well to questions	16	7	1	3

## **Workshop Organizers**

Ms Nirmita Narsimhan (Programme Manager)

The Centre for Internet and Society

No. D2, 3rd Floor, Sheriff Chambers

14, Cunningham Road, Bangalore,

Karnataka 560052,

India

Phone: (+91)-080-4092-6283

Fax: (+91)-080-4114-8130

Email: [nirmita@cis-india.org](mailto:nirmita@cis-india.org)

Mr. Thomas Abraham (Training Coordinator)

Society for Promotion of Alternative Computing and Employment

C-11, Elankom Gardens,

Vellayambalam, Thiruvananthapuram

Kerala, India

Mobile: +91 94964 13317 Office Phone: +91 47123 18997

Email: [tomuhs@gmail.com](mailto:tomuhs@gmail.com), [contact@space-kerala.org](mailto:contact@space-kerala.org)

## **Consolidated Expenses of Web Accessibility Workshop, Trivandrum**

<b>Budget Head</b>	<b>Amount (Rs.)</b>
Rent of lab and set up	15200
Accomodation	4963
Stationery	10285
Communication	507
Food	7535
Travel	6235
Coordination	10000
<b>Total</b>	<b>54725</b>