

Project1 Report

LR Foundation, Dehradun

Submitted by:
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Declaration

I declare that this written document represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources.

I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission.

I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Naveen Singh Rawat, 146330011

Interaction Design Industrial Design Centre, Indian Institute of Technology Bombay

Acknowledgement

I would like to express my sincere gratitude to Pooja Mam and Mohita for the valuable learning experience. I am extremely grateful to Manju Mam for her positive spirit and making me feel like a part of the family at Latika Vihar.

I would also like to thank Sunita Madam for giving me this oppoytunity to spend time among such amazing atmosphere of care and encouragement.

Also thanks for Babita did for the daily dose of delicious tea.

I'm thankful to my faculty members at IDC, IITB for providing this learning opportunity to me.

And lastly my family for all their love, support, patience and encouragement.

Naveen Singh Rawat

School of Computing



26 May 2015

Naveen Singh Rawat Indian Institute of Technology (Bombay) Mumbai, India

TRAINING ATTACHMENT

We are pleased to invite you for project training attachment with the Department of Computer Science at the School of Computing, National University of Singapore. The terms of the training attachment are as follows:

May - July 2015 Period of attachment: Project to be attached to:

Design of Smart Media for Elderly (COSMIC

Infrastructure)

\$\$1,500
Return airfare (most direct and economical route between Mumbai, India and Singapore)
On campus accommodation Prof Ravi Poovaiah / A/Prof Roger Zimmermann Monthly allowance: Project supervisor:

Accommodation:

Airfare:

Please note that you are required to obtain a medical insurance with 24-hour worldwide coverage before starting your training attachment.

Yours sincerely

Lim Puay Ann

Manager

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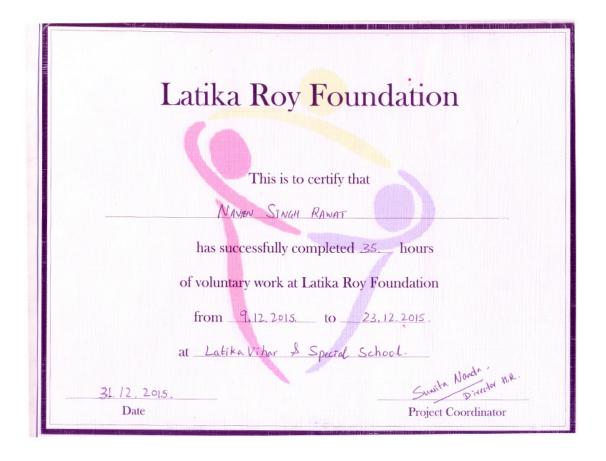
Associate Professor Roger Zimmermann Professor Ravi Poovaiah .; ;;

Ms Jayne Sun, Office of Financial Services, NUS

Funds will be met from R-253-300-001-490

NUS School of Computing, Computing 1, 13 Computing Drive, Singapore 117417 Tel: (65) 65162727 Fax: (65) 6779 4580, Website: <u>www.comp.nus.edu.sg</u> Company Registration No: 200604346E

Certificate



The driving force behind my stint at LRF was the desire to understand, ask questions and help out. I wanted to give my time and energy in understanding the learning environment of children with disabilities and the dyamics between the teacher and the student in such scenarios. Needless to say I have a long term goal in mind as I wanted to initiate a project in child education domain.

This opportunity was the stepping stone for that goal.

Content

1. OBJECTIVE	11
2. ABOUT LRFOUNDATION	12
3. BRIEF	14
4. DEVELOPMENTAL DISABILITY	16
5. EXPOSURE	17
6. RESPONSIBILITIES	18
7. LEARNING ENVIRONMENT	19
8. CHILDREN NEEDS	20
9. PLAY AND LEARN	2
10. OLD WEBSITE	24
11. NEW DESIGN CONCEPT	26
13. TAKEAWAY	29
14. REFERENCES	30

Objective

The objective of this project was to gain experience in a special education environmet about the dynmics between educators and children with development disorders. It was aimed at understanding the difficulties faced by children and how those are addressed by the special teachers and assistants.

This opportunity helped me form a mindset and generate empathy for the people involved in this ecosystem. From the first semester when we had the user studies module I was deeply interested in going among the users and know the difficulties at ground level. I learnt that taking face to face in people reveals so much about the issue in hand. This is why I chose this NGO for this objective so I can learn how assitance is provided to the young ones through intervention and effective tailored teaching methods. It helped me understanding how creativity and fun can provide children with opportunites of free expression, creative thought and problem solving skills.



About LRFoundation

The foundation is a voluntary organization which works with children and adults having special need such as developmental and other disabilities. They provide early intervention services, education, livelihoods development, training and awareness. There are projects ranging from early intervention centre that is for very young children with developmental delays. All the programs are activity based to involve the child as much as possible. There is Latika Vihar which has the central theme of play and this is where I contributed my time. Here children are envourage to discover their creativity

The staff is very qualified under the leadership of executive director Jo Chopra.

The foundation is located at multiple centres in Dehradun.

LATIKA VIHAR Mohita Kapoor 121/1, Vasant Vihar, Dehradun

Phone: 0135-276949540

Brief

My objective for this project was based on understanding special needs children and their learning environment. This objective will be achieved by observing daily morning sessions with childrena and educators and assisiting in play environmen with staff.

Based on this learning i was able to get a deep understanding of this learning environement which I utilised in my thesis project. Working with special teachers and project heads helped me in closely observe their work and how to interact and work with such chidlren with developmental delays.

Another objective was to document the lives of children through photographs to create a visual narrative of my time there. All the photos I took were under permission from project head. Most of the activities were done at Latika vihar centre which focuses on creative play and learn environment.



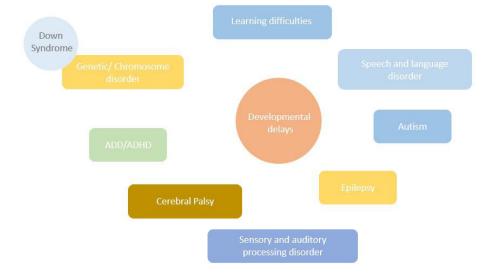


Developmental disability

Developmental disability causes people living with them many difficulties in certain areas of life such as in language, mobility, learning, self help and independent living.

They can be detected early on, and do persist throughout an individuals lifespan such as Down Syndrome that affects the development of body and brain, causing mental and physical challenges for the individual. Children are not able to reach developmental milestones at expected times. For example, child "C" is 14 Months old and she has not achieved her sitting balance, then said child is considered as a case of developmental delay or delayed milestone. If a child is slightly or only temporarily lagging behind his age appropriate milestones, that is not called developmental delay.

World Health Organisation says about 5% of children under 14 years of age have some type of developmental delay or childhood disability. In India the prevalence of developmental delay under the age of 2 years is approximately 2%. Some examples are, Cerebral Palsy, Down Syndrome, ADD / ADHD Bipolar disorder, Mental Retardation, Infantile spasm Angelman syndrome, Fragile-X syndrome, Central Auditory processing disorder, Expressive language disorder etc.





Exposure

I was introuduced and exposed to three main parts of the organization:

Latika Vihar - Creativity, self-expression, freedom and imagination are the over-riding values of Latika Vihar. It is an inclusive centre for all children. I spent most of my time here working with children and teacher assisting in daily session and activities.

Karuna Vihar – Innovative centre for activity based learning. The staff includes special educators, therapists, classroom assistants etc. EIC (Early Intervention Centre) - It is for very young children with development delay. Team consists of therapists and counsellors. Individual therapy programs for children are designed.

Responsibilities

Though I was at the centre for a short time that too during just before christmas time, the atmosphere was of fun and excitement which made my time spent here more fruitful. The attendence was great and children were enthusiastic. I learned how to conduct a learnig session with children and how to assist in thier development while they come daily at the centre. I assisted physiotherapists, teachers and the project head in making the coming festival event a success while involving children in creative activiities.

As my main goal was to conduct ethnographic studies I regularly observed children in their element and through participant observation understood the dynamics between teacher and students. I assisted special educators, helped in art and craft workshops, took intiative to redesign the society website and documented the live of children.





Learning environment at Latika Vihar

The learning envirnment in the morning look like any primary classroom. The children are divided among three classes with named chairs and desks so children can daily easily identify their seats and can move close to them as many children had motor disabilities and required support to even stand, walk or sit. The day starts with doing visual exercises where children were taught to identify and call/recall the image shown to observe and assess children memory retention abilities.

Design note: Children with development delays oftern struggle with language issues and reading difficulties. Memory retention techniques and activities will help them better organise their scattered memories.

Children with speech delay were encouraged to speak out about the image that was shown. This helps to curb shyness as the major issues with such childrenn is lack of self esteem, and confidence and tendency to be silent.

Learning while assisting teachers, therapists

Children having physical disability like trouble in standing are strapped to a stander and are encouraged to converse with the teacher and other children. Many children I worked with were unable to walk and even stand without support. I learned how to take care of such children while lifting and moving them around.

It was disheatning to see such energetic, young children limited by these difficulties but I learned from them to smile more and always aim high.

Lot of children were spastic (Spasticity is a muscle control disorder characterised by tight or stiff muscles and inability to control these muscles) and such children need to be carried in a specific way so they adjust to keep their legs apart which helps in long run in building muscle strength. It is caused by damage to the brain before birth, during delivery, or within the first few years of life. Children needing support to stand are tied using a forward lean stander or if they need less body support an upright stander is used.



Spastic children are to be hold specifically to help them better excercise thier muscle groups



Art and craft

Creativity is the USP of Latika Vihar. I took part in craft workshops and took initiative in completing many pieces with the invinvolvement of teachers and children alike. I learnt how everything becomes easy and interesting when fun is introduced in a learning envirnment

Design note : Fun is a key element in teaching children to collaborate to creative exercises.

Art and craft class is not always about pen, paper and crayons. From painting interesting murals on the walls to painting swings, the world is taken as a canvas here. The children are exposed to fun and creativity here. They can make anything they want with sketching to painting. It was Christmas time so all the preparations were being carried out for Christmas eve. I took charge for making artefacts for the stage and created cutouts of Santa Clause and did a lot of painting too. Pottery is one of the special activities offered at Latika Vihar. Besides being fun and creative it also offers as being a career for many. I took part in the pottery making process and learned a lot of lessons. In a nutshell Latika Vihar is all about you, exploring, accepting and celebrating you.





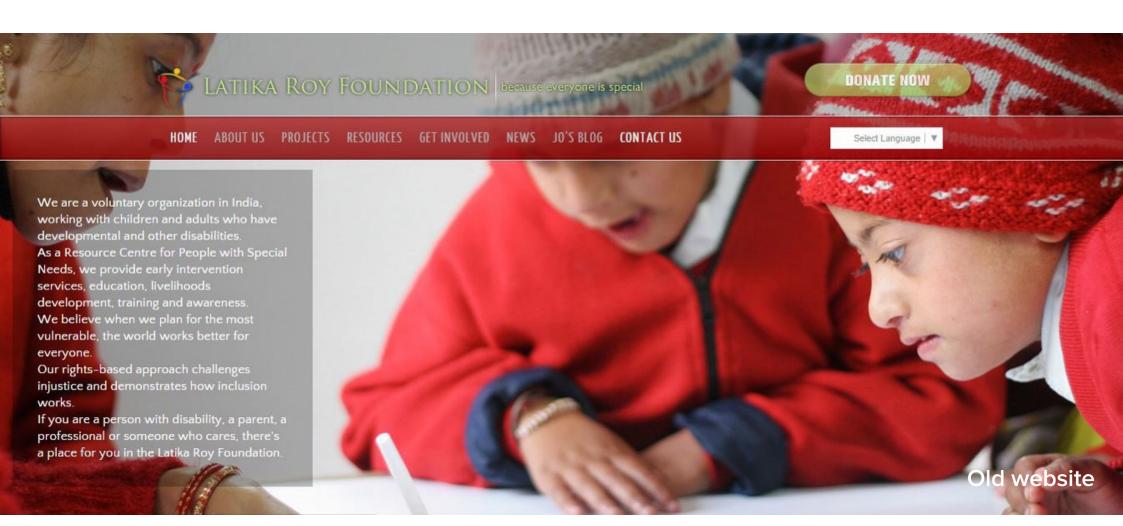
Website redesing concept

My goal was ethnographic study at LRF but as I had a fair understanding of what we were doing at the centre and how it was centered around children. I talked to the project head and together with an idea of a new look to the current centre's website. The design is not yet implemented but I conceptualised a concept with review from project head at Latika Vihar.

The old website had too much text and information was too cluttered with a deep information architecture. For this concept I looked into making the homepage a more welcoming and befitting to the centre's theme.

I did heuristic evaluation of the existing website and came up with certain pain points that could serve as an area of opportunity to intervene.

I analysed that I was spending too much time in looking for relevant information in the website. I started ideating and creating many concepts and choose the one what justified the identity of the centre.

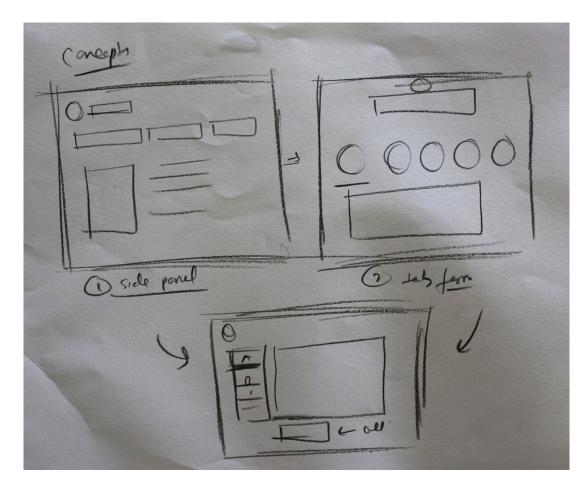


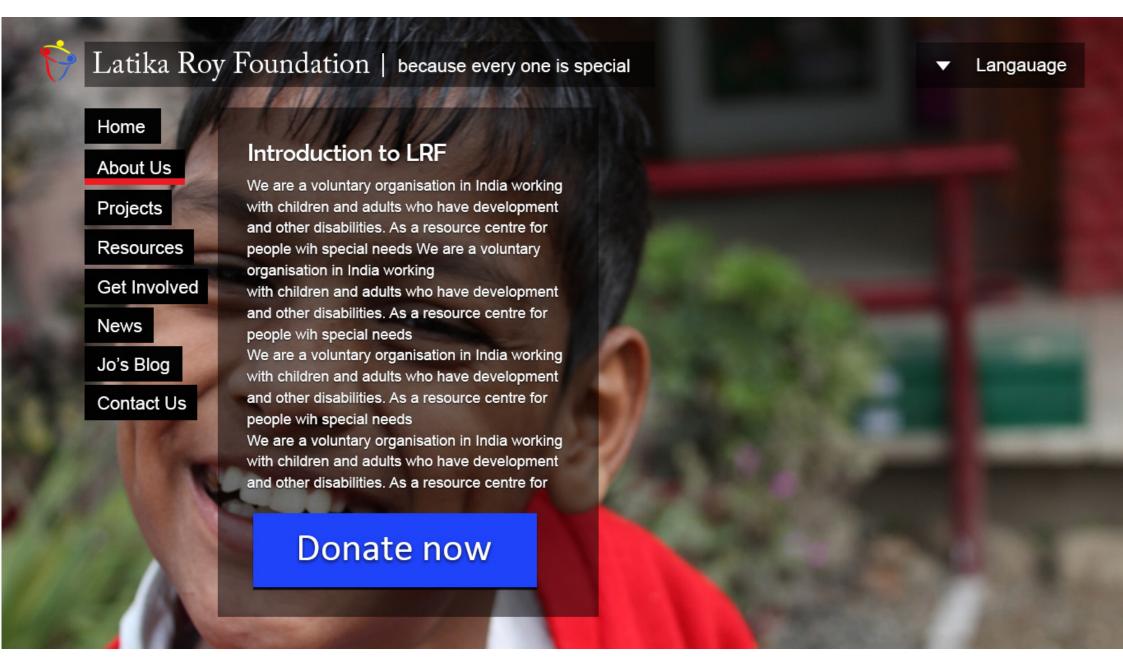
Concept details

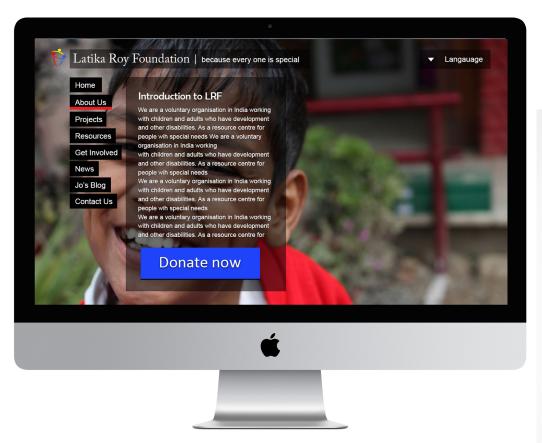
I observed that the call to action for donation was really not visible to a visitor and the visual hierarchy was also not intuitive. My first step was to oultline how best I can create a easily navigable interface that will be streamline across all platforms. Through brainstorming on the basis of better adopation on a mobile plaform and reponsive design I selected the concept with tabs as primary navigation and a lookout of the content with brief information on the main homepage and then user can wish to navigate to other pages if required.

Any important call to action related to a specific primary menu is highlighted and is given visual importance in the home page itself as in the final mockup you can see the donate now button as main call to action attracts user attention.

The design was made in adobe photoshop and the visual scheme was chose based on existing color palette of the logo.









Takeaway

Working with the kids of such a small age and with such disability come everyday with a smile on their face, made me realise how I had forgotten what God has blessed us with. We cry for things we want all our lives and these kids only needed to express themselves in their own unique way. I learned to empathize at the same time being gentle and kind.

As an interaction designer I have learned to interact more with the users and how to communicate in a given context. In our user studies and interactions, media and senses course we were taught how to study users and conceptualise solutions. I was able to apply the learning here and the project helped me a lot in understanding leaning environment in a developmental disability child, teacher environement and how to best approach it. With website concept I was able to contribute more than what I hoped for. I am thoroughly thankul to have experieced and being a part of such great organisation and I aspire to put my skills in child education domain aiming for an inclusive education. Till that goal is achieved these are important steps in that direction.

Refernces

http://www.icddelhi.org/ http://wikieducator.org/