



TECHNICAL WORKSHOPS SERIES – 2016

Activity Club

Tinkering Club

- Organized by Tinkering Lab, Venture Center -

Potential gains	<ul style="list-style-type: none"> ● Learn Product Design Skills ● Create Open Source projects and gain reputation ● Bring together a peer group of young people with similar interest
Workshop Director	Subhojit Basu, Advisor, Tinkering Lab, Venture Center
Organized by	<ul style="list-style-type: none"> ● Tinkering Lab, Venture Center
Supported by	<ul style="list-style-type: none"> ● Venture Center
For whom	<ul style="list-style-type: none"> ● Undergraduate and Post Graduate Engg./Science Students ● UI/UX Design Students / Professionals ● Hobbyists / Professionals ● Familiarity with English required
When	Start date: Saturday, 2nd April 2016 to 25th June 2016 Every Saturday: 10AM - 1 PM
Where	Tinkering Lab , Venture Center, 900 NCL Innovation Park, Dr. Homi Bhabha Road, Pune
Contact	Ms Lipika Biswas Phone: 91-20-25865877; Email: eventsdesk@venturecenter.co.in
Cost	<p>Cost: Rs 6000</p> <p>For registration please contact: siip@venturecenter.co.in</p> <p>Seats limited to 20</p> <p>Few scholarships available for deserving and meritorious students who cannot afford costs. Please write to Lipika Biswas at eventsdesk@venturecenter.co.in to request scholarship support.</p> <p>Note:-</p> <ul style="list-style-type: none"> ● Attendance only after confirmation of registration by organizers. ● Organizers reserve the right to accept or refuse or delay registrations so to optimize the composition of the group and hence maximize learning for all participants. ● Fees paid is not refundable and non transferable under any circumstances.



Introduction

Product Design requires careful User interaction and Development skills. Although formal education teaches us to design products we miss out on practical hands-on Product Design Aspects. In this Club we plan to take upon a few interesting, down-to-earth, fun , open source projects and execute them.

Workshop Outline

A typical session will have:

- Division of Participants into groups of Mixed skills
- Grouping the participants (5 groups of 4 each)
- Planning out Execution
- Taking help of tinkering lab facilities for executing
- Contributing to Open Source Projects

Participants can choose to commercialize the projects on their own.

Workshop includes

- Quarterly membership for Tinkering Lab at Venture Center
- Membership in mailing list of all participants
- Consumables / Equipment used shall be provided by Venture Center and retained by Venture Center after the session.
- Tour of the Venture Center's labs
- Participation Certificate (for more than 79% attendance)

Workshop does not provide

- No ranking or scoring shall be provided. Idea is to enjoy Collaborative Product development. Lunch is not planned under this workshop

Call for volunteers

- The workshop needs volunteers (minimum 2 numbers) to help in operating the club
- Volunteers need to:
 - Themselves enjoy Product Design activity
 - Enjoy mentoring people
 - Maintain decorum
 - Guide people for execution
 - Do Task Assignment
 - Good at reasoning/analytical skills
- Volunteers will receive:
 - Free ticket to the club and its sessions
 - The Club T-Shirt
 - Honorarium
- Commitment required:






- Attendance in planning sessions preceding the club sessions
- Attendance in at least 80% of the club sessions
- Volunteers will be selected by the organizers on the basis of the above mentioned criteria. Interested persons can contact Ms Lipika Biswas, Phone: 91-20-25865877, Email: eventsdesk@venturecenter.co.in


Open Source Projects Available

Series No.	Title	Lead
1	A Simple Handheld Game Console, Programmable with C/ Lua	SB
2	Design of a Child Programmable Line Following Toy	AS
3	Design of Games for the Hand-held Game Console : One	SB
4	Design of Games for the Hand-held Game Console : Two	AS
5	Design of a Swarm Robotic Action Toy	SB
6	Design of an IoT Sensor / Actuator	SK
7	Design of a Swarm Robotic Simulator in Lua / C [LOVE/OpenGL]	SB
8	Design of a Wireless Jukebox System	SK


Faculty and volunteers (in alphabetical order of last names)

 Subhojit Basu	Subhojit is currently working on a Myoelectric Prosthetic Limb at Venture Center, Pune. He is B. Tech (Electrical Engg.), M. Tech (Instrumentation) from IIT, Kharagpur. He has experience in VLSI Design, EDA and Multicore Processor Design and Multicore Computing, Analog and Digital Domains and Embedded systems. He is passionate about doing low power designs to solve the impending energy crisis and reducing e-waste.
 Sarang Kulkarni	Sarang is an electrical engineer by training from MIT, Boston, USA. He wants to put his education to use for developing low-cost sensors, biomedical monitors and other technologies that can be used widely in India. He is particularly interested in low-power electronics and his current long term interest is in developing sensors that give an insight into the workings of the human body in response to various stimuli. When he is not working, Sarang enjoys swimming and playing badminton. He also likes to travel to new places and take photographs.
 Amrita Sukrity	Amrita is a Materials Engineering post-graduate from IIT-Kharagpur and wants to establish a manufacturing ecosystem for commercialization of low cost medical devices. Prior to being BIRAC Social Innovator, she has worked with Bosch in purchase team where her role required development and procurement of ferrous and non-ferrous materials. Her main interest lies in bio-mimic technologies and current interests include developing diagnostic devices for low resource settings. When not in office, her inclination is towards performing arts and literature.

About the Organizers

 TINKERING LAB @ Venture Center	The Tinkering Lab is a facility developed and managed by Venture Center, NCL Innovation Park, Pune, India. The main aim of the Tinkering Lab is to help inventors and entrepreneurs to build prototypes of their ideas and generally “tinker” around exploring new ideas. The focus is on electronics, instrumentation and optics besides related prototyping and design. For more information, visit http://www.venturecenter.co.in/tinkeringlab/index.php
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Supported by

	Entrepreneurship Development Center (Venture Center) – a CSIR initiative – is a Section 25 company hosted by the National Chemical Laboratory, Pune. Venture Center strives to nucleate and nurture technology and knowledge-based enterprises by leveraging the scientific and engineering competencies of the institutions in the Pune region in India. The Venture Center is a technology business incubator supported by the Department of Science & Technology’s National Science & Technology Entrepreneurship Development Board (DST-NSTEDB). Venture Center’s focuses on technology enterprises offering products and services exploiting scientific expertise in the areas of materials, chemicals and biological sciences & engineering. For more information, visit http://www.venturecenter.co.in/
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