

# Creative Design, Prototyping & Experiential Simulation Lab

## In

## Human Computer Interaction

### FEEDBACK REPORT

13 December 2012

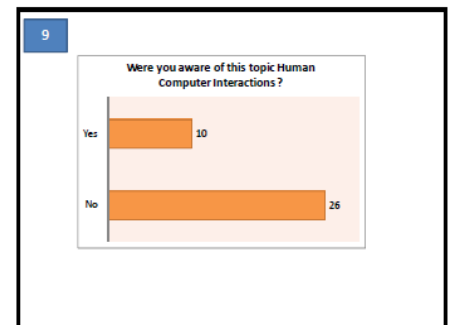
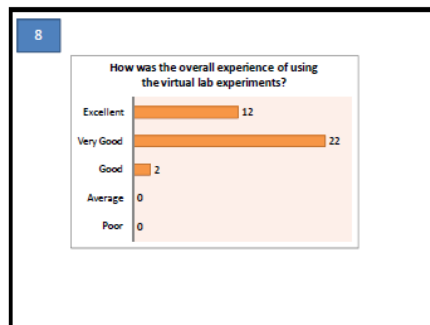
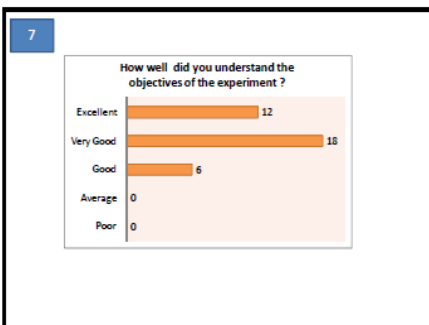
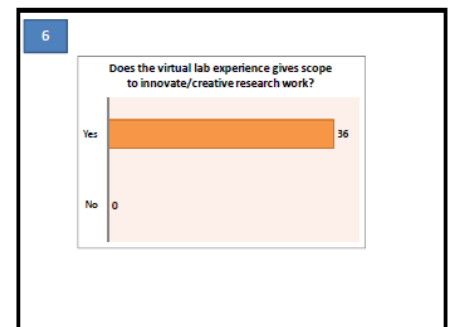
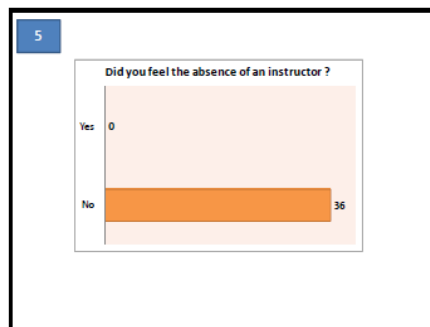
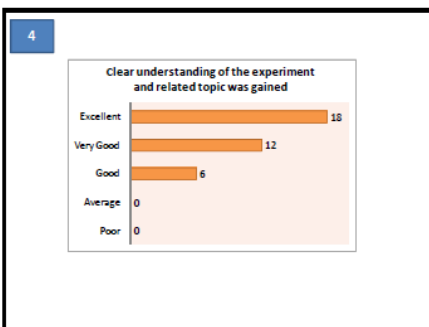
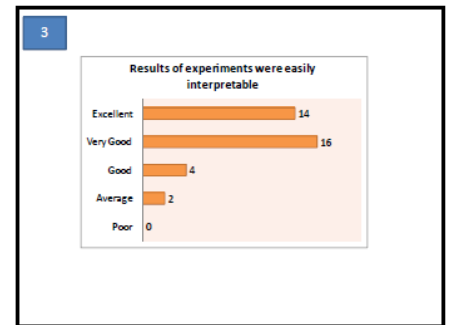
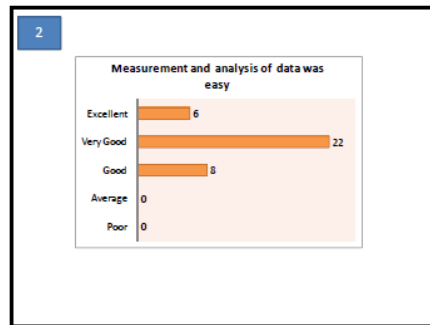
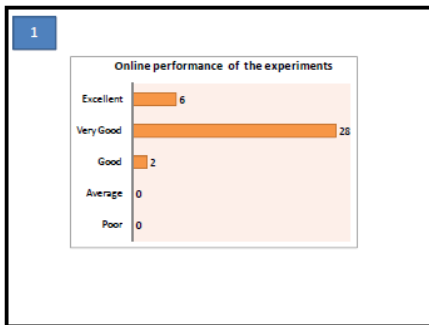
#### Objectives

1. To find problems in understanding and interaction of the simulated experiments..
2. To find degree of usefulness of online simulated experiments for the users.
3. To understand future scope of improvements in design from user perspective.

#### Participants

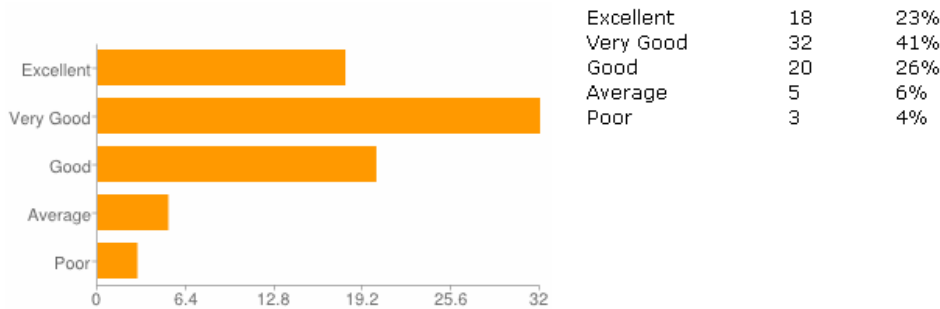
Field Trial Data	Name of College	Number of Students	Number of Teachers	Total Number of Feedback Forms Collected	Remarks
Offline	GIMT	18	-	18	
Offline	IITG	18	-	18	
Online	DBCET	45	-	45	
Online	Others	36	-	36	
Total		117		117	

# Offline Feedback Analysis

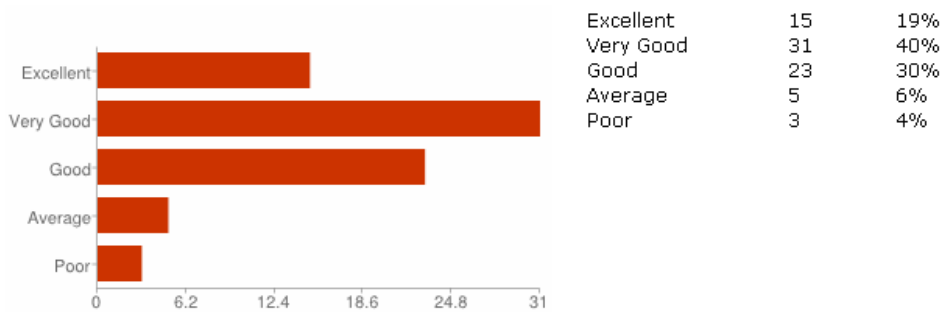


## Online Feedback Analysis

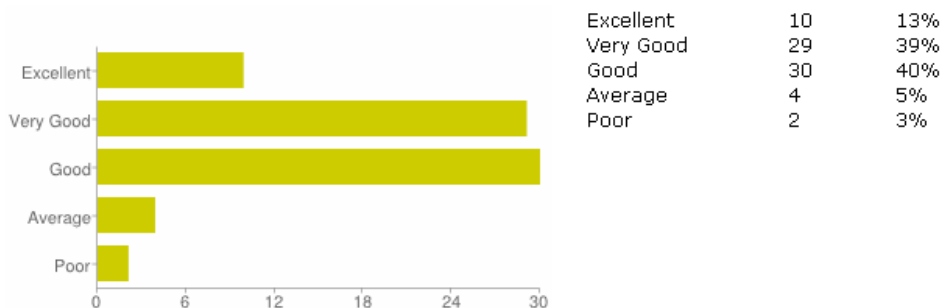
Please indicate your agreement with the following statements - How do you rate the online performance of the experiment?



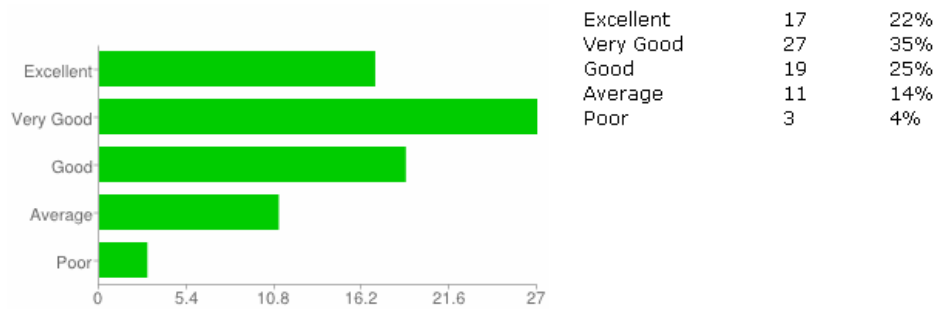
Please indicate your agreement with the following statements - To what extent did you have control over the interactions?



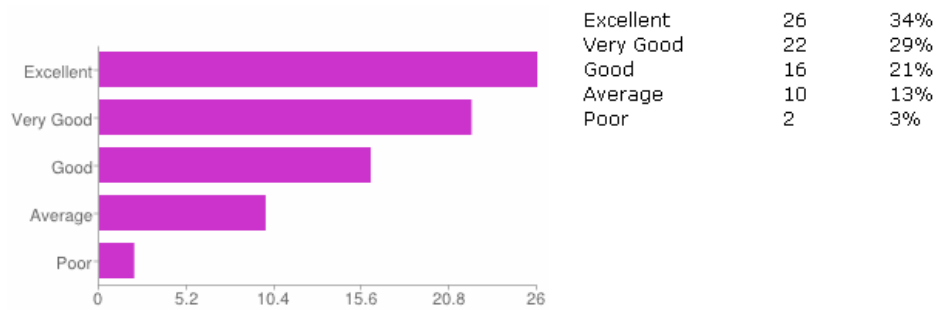
Please indicate your agreement with the following statements - To what degree was the actual lab environment simulated?



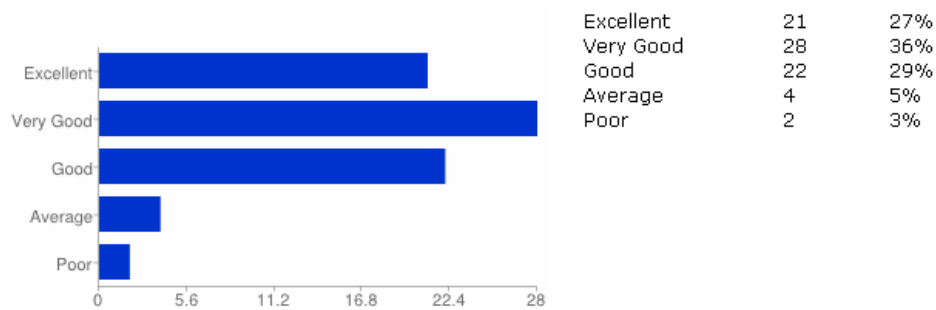
Please indicate your agreement with the following statements - Was the measurement and analysis of data easy for you?



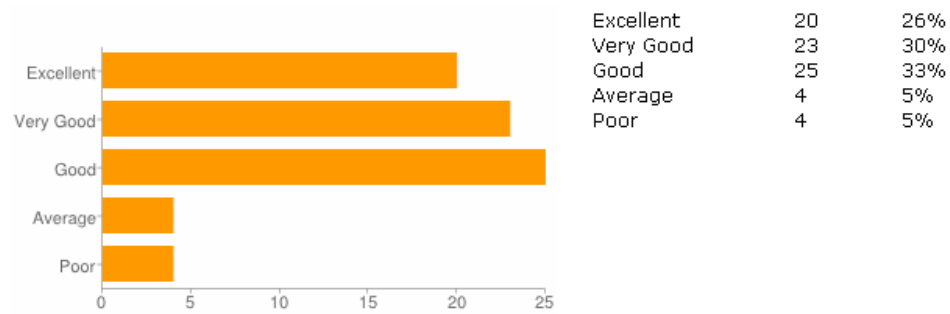
Please indicate your agreement with the following statements - The manuals were found to be helpful



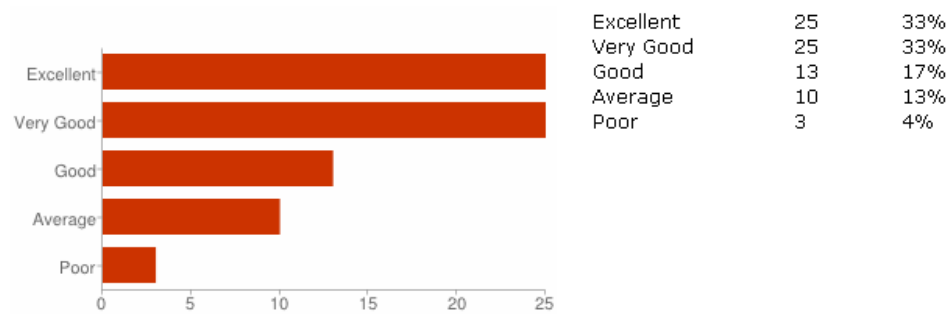
Please indicate your agreement with the following statements - Were the links provided consistent with the objectives of the experiment?



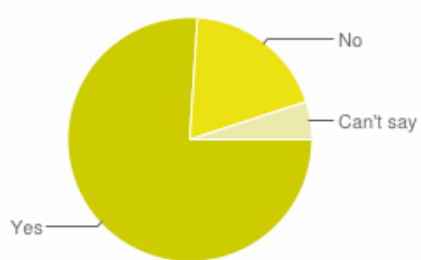
Please indicate your agreement with the following statements - Were the results of the experiment easily interpreted?



Please indicate your agreement with the following statements - A clear understanding of the experiment and related topics was gained

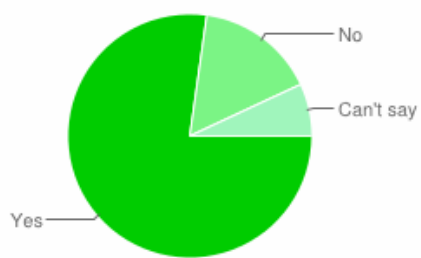


**Did you feel confident enough while performing the experiment?**



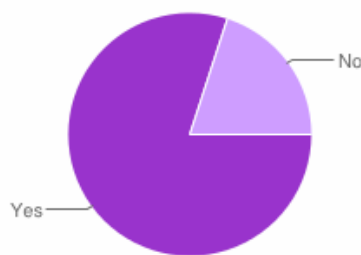
Yes	57	76%
No	14	19%
Can't say	4	5%

**Was the experiment/process motivating enough?**



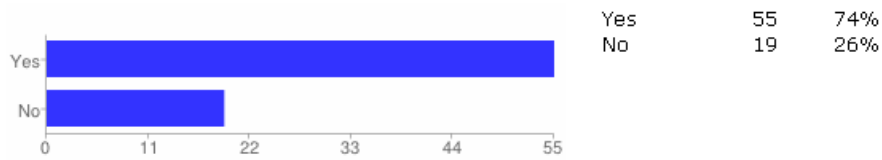
Yes	59	78%
No	12	16%
Can't say	5	7%

**Did you go through the manual/ step by step procedure before performing the experiments live?**

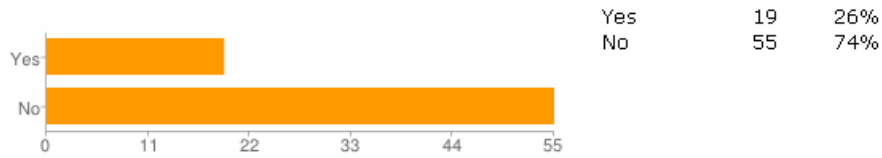


Yes	61	80%
No	15	20%

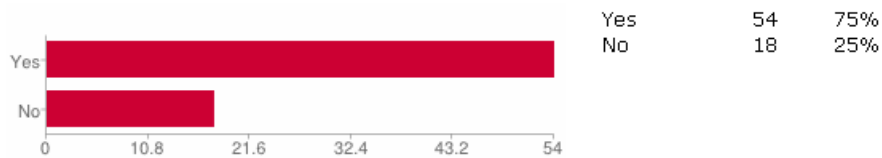
Please answer the following - Did you get the feel of a real lab while performing the experiments virtually?



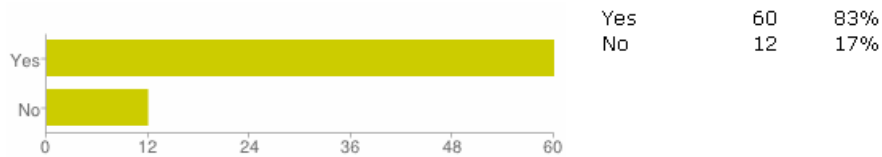
Please answer the following - Did you feel the absence of an instructor?



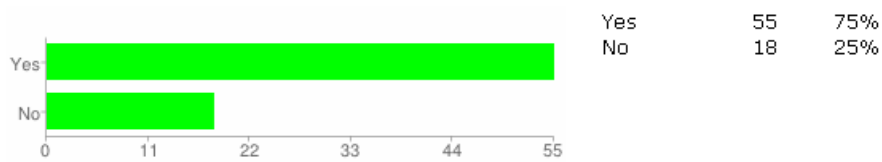
Please answer the following - Could you run the experiments smoothly, i.e., without interruptions?



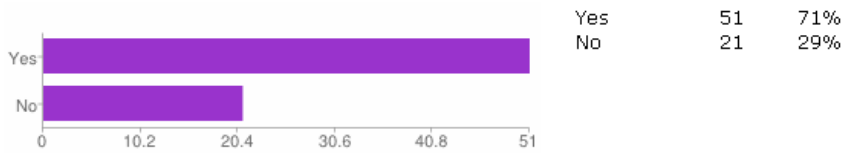
Please answer the following - Could you measure and analyse the data successfully?



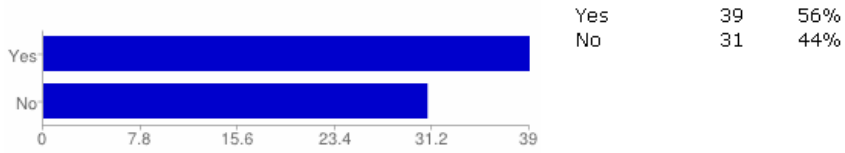
Please answer the following - Did you follow the step by step procedure before doing the live experiment?



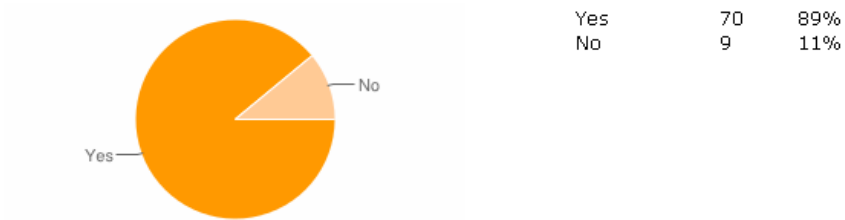
Please answer the following - Could you compare your results with the given typical results?



Please answer the following - Do you think performing experiments through virtual labs were more challenging than the real lab experiments?



Do you think doing experiments through virtual lab gives scope for more innovative and creative research work?





## Selective user feedback comments

### How helpful do you feel the system is?

- Explains human behavior in a more practical way.
- Realized the use of human factors used in interface design : intrigued.
- Good for novices to understand fundamental human centered design principles.
- Gives insights for designing better interfaces.
- Introduces and gives quick overview of HCI and creative design principles
- I love reading these articles because they're short but informative.
- Its system is quite helpful in case of the students who want to really get the concept of HCI and UI, in lectures, we did get the theory, but this simulation clarifies everything.
- Interaction is excellent in overall performance.
- Clear understanding of experiment.
- Sufficient data taken for the experiment.
- Application is joyful to play as it helps in increase of memory strength.
- Special feature is that, there is no any sequence requires remembering things and selecting it.
- This makes everything so completely painless.
- You know what; I'm very much inclined to agree.
- The system is good, but the understanding should be made more precise and compact, lively.
- The system is helpful because through this we can measure our interaction time.
- It is helpful to me as the procedure is easily described.
- It is helpful to determine the time or space complexity
- Through this experiment we can notice that when traffic signal is green and on signal is green and when stop signal is red and off signal is red then it is easy to interpreted but not same in the opposite case.
- It is helpful to me. From this experiment I knew about colors like what is primary color, secondary color, Tertiary color.
- It can show the capability of a human being to catch and it is also interesting.

### Did you experience any problem?

- Yeah, using a mobile and using a mouse or touchpad will give totally different results, when we are using certain layouts for so many years, it's really in fits on the figures and thus introducing new layouts will create chaos.
- The manuals for found is not helpful.
- Browsing problem, not perform well on internet explorer basic version.
- Instructions given does not help that much.
- Time given is somewhat short.
- In the interface1 it takes time to scroll down and its time consuming.
- Having problem in doing the Webber expt.
- Some time and effort was required to understand the results.
  
- Unnecessary scrolling could be avoided in some pages.
- Some experiments are too simple. Can make them more complex and engaging.
- Provide answers to quiz.

- Integrate calculator and/or database to record and analyse observed data.
- Should also support touch screen type input interface.
- Quizzes difficult to solve.

### **Is there anything you would like to tell us?**

- There should be on counter which counts the no. of click. I think it increase usability.
- Make GUI better.
- Also can give rating after the performance.
- Provide more options and possibilities to experiment or game.
- Your Applications are very good. I enjoyed playing it.
- I need some elaborations with examples under 'strive for consistency' regarding windows Microsoft Word.
- I am a grad student from Iran at University of Maryland; the quality of work I found in this portal of an IIT is very poor. The experiments and results showing numeric data would make no sense to an amateur.
- It could be more precise and interesting else it is nice.
- GUI can be more interactive
- Downloading was done but maze is not supported by the debugger. .NET FRAMEWORK was absent in the system so, it was problematic.
- Yes, the car speed should be more fast.
- Addition of some pictorial representation in each step would be better.
- The "on" and "off" button must come at random place instead of fixed in the same place..
- Manual system is not user Interactive,
- The "evaluate design" section of the simulator was confusing.

### **Specify three problems/difficulties you faced while performing the experiments?**

- Design of the page need to be more attractive
- Error message need to be generated when we click 8th pair in 1st experiment.
- Initial concept of virtual lab was somewhat confusing, but clarified later
- Each time we play the same colors and months appear. Use some variations.
- High loading time
- Some theories difficult to understand
- While clicking start and stop button to take the mouse it consumed time so time difference is more than the actual time taken to response.
- Interface 1 take more time while scroll all the combo box for selection  
But, Design is better than interface 2.  
Interface 2 is easy to select rate, but design is not Interactive
- Restart & Stop button is not efficient, while select the 1st one then start the timer until the last one complete
- Stop button is there but ending the experiment we click the button help of mouse then some more second is go to faster so we cannot find the proper result.
- In the weber experiment start and rest button sometimes doesn't work.
- Before submitting the feedback form, the code which we need to enter is not that easy to read and understand.

## **Describe three interesting things about the experiments.**

- Interactive and easy to use. Interacting was fun and motivating.
- Tests cognitive abilities.
- Good compilation of principles and simulations.
- Enhances knowledge about Human Computer Interaction and Design.
- Self assesment of abilities possible.
- Innovative with good analysis treatment.
- Enjoying
- Clear understanding of Serial Position Effect
- Entertaining.
- Can check our IQ.
- Really Interesting.
- It is very interactive and easy to use.
- The best thing is that, we do not want to remember sequence.
- It gave the experience of importance of consistency in the UI design.
- The example was good
- The step - wise explanation was very clear to perform the task effectively
- Did not find anything interesting. The Experiments are filed under creative design, prototyping & experiential simulation lab, but lack creativity!
- Good animation
- Ease in navigation
- It is creative.
- Colors and words concept was interesting.
- The procedure had described systematically.
- The color combinations
- By only clicking buttons we get our result
- It is very innovative.
- It is like a rapid fire kind of a thing where speed matters most and that is what I liked the most. Even the images are good.
- Time taken to make a decision depends on the presence of mind of the person.

## **Conclusions and future plan.**

- Overall the users liked the experiments and were benefited and satisfied to a large extent.
- Opportunities for improvements reflected in user feedback were approved and most of the changes where-ever possible were made.

**Prof. Pradeep Yammiyavar**  
Principal Investigator

**Yogesh Deshpande**  
Assistant Project Engineer

**Rhiddhiman Patowary**  
Assistant Project Engineer