

iLAB@MAKBrief - Brief History

Feb 2004: ·Visit to MUK by Prof. J. del Alamo to demonstrate the Weblabs Mar-Jun 2004: Introduction of the Microelectronics Weblab to students of Electrical Engineering Testing of the Heatex Weblab Testing of download times for the Microelectronics Weblab Clients

iLAB@MAKBrief - Brief History

Aug/Sept 2004: ·Installation of the new iLab Shared Architecture Service Broker named "EMUKLABS" Deployment of Service Broker(EMUKLABS) on the Makerere University Intranet (URL: <u>http://emuklabs.mak.ac.uq</u>) Open Courseware mirror setup (URL: http://makocw.mak.ac.ug)

iLAB@MAK - Brief History Continued

First Semester 2004/2005:
Introductory Microelectronics Weblab exercises for First year Electrical and Telecommunications engineering students.
Service Broker management- user

accounts and lab groups creation

Java Client upgrades

 200 new courses+ search function added to Open CourseWare mirror

iLAB@MAK - Brief History Continued

Second Semester 2004/2005: •Integration of a Microelectronics Weblab credit bearing exercise into the Electrical Materials II course (done by 2nd year Electrical Engineering students)

June 2005:

•Official start of active iLab-Africa

·iLab Meeting for iLab-Africa partners

iLab@MAK- Subdivisions

1. Electronics

- Analog Electronics
- Digital Electronics
- Power Electronics
- 2. Electromagnetics
 - Charged particle systems
 - Fields
- 3. Radio Frequency
 - Microwave
 - Antennas

ilab@mak - Planned Activities

PHASE I Activies (Duration: 1 year):
1. Integration of iLab based Components into Relevant Courses

- 2. Training
- 3. Identification of Specific Feasible Weblab(s)
- 4. Identification of Corresponding Equipment (Hardware) and Development tools (Software)
- 5. Designing of the Lab(s)

ilab@mak-1.iLab Integration

- 1. Period of Execution: 1st Quarter of Phase I
- 2. Planned Activities
 - Identification of Courses and Modules for integration
 - Curriculum Assessment
- Design and Testing of lab tutorials and exercises for existing Weblabs
 Place: MAK and MIT

ilab@mak- 2. Training

Period of Execution: 1st Quarter
 Training Areas

- iLab Architecture
- iLab Toolkits
- Web Services & Related protocols
- Distributed Application Development Technologies
- Interfacing toolkits such as LabView
- New Technology based teaching methods

3. Place: MIT & MUK

<u>iLAB@MAK</u> <u>3. Identification of suitable Weblabs for</u> <u>Development</u>

- Period of Execution: 2nd Quarter
 Lab Ideas
 - Amplifier Design and Testing Weblab
 - Digital Signal Processing and Filter Design Weblab
 - Digital Circuits Weblab
 - Microprocessors Weblab
 - Embedded Systems Weblab
 - Electromagnetics Weblab

<u>iLAB@MAK</u> <u>4. Design & Implementation of the Lab(s)</u>

- Duration: 3rd and 4th Quarters
 Activities
 - Identification of Corresponding Equipment (Hardware) and Development tools (Software)
 - Lab Server System Development
 - User Interface (Client) development

<u>iLAB@MAK</u> <u>Phase I Tentative Budget</u>

Major ItemPercentageAmount (\$)Equipment & Tools60%24,000.00Travel & Meetings10%4,000.00Internships@MIT30%12,000.00

ilab@mak - Phase II

Phase 2:
1. Review of Phase I achievements
2. Bringing on-board other Departments such as Physics, Mechanical and Chemistry.