Rlabz Edutech

Training | Workshops | Seminar | Consultancy

Presents

LINUX

Interactive

Reliable OS

Useful

More Secure

Low Cost

Online Support

User Friendly

Lots of Freedom and choices

Itinerary of the workshop with details of the Topics to be covered

Module 1: Getting Started

→   Introduction to UNIX, Linux, and GNU
→   Programming in Linux – Programs, Editors, Compilers
→   Shell Programming
→   C practice and Debugging
→   Lab Assignment – Getting Started

Module 2: Processes

→   What is a Process?
→   Process Descriptor and Task Structure
→   Process Creation
→   System Call – Fork
→   Lab Assignment - Processes

Module 3: System Call

→   APIs, POSIX, and C library
→   System Calls
→   System Call Handler
→   System Call Implementation
→   System Call Context
→   Lab Assignment – System Call

Module 4: Scheduling

→   Policy
→   Linux Scheduler
→   Pre-emption and Context switching
→   Lab Assignment - Scheduling

Module 5: Signals

→ Concept of Signals
→ Sending Signals
→ Signal Sets
→ Lab Assignment - Signal

Module 6: Pipes

→ Concept of Pipes.
→ Named Pipes – FIFO and Unnamed Pipes
→ Application of Pipes
→ Lab Assignment - Pipes

Module 7: IPC – Semaphores

→ Concept of Semaphores
→ A Theoretical Example
→ Linux Semaphore Facility
→ Lab Assignment - Semaphores

Modules 8: IPC – Shared Memory

→ Concept of Shared Memory
→ Lab Assignment – Shared Memory

Module 9: IPC – Message Queues

→ Concept of Message Queues
→ Lab Assignment – Message Queues

Module 10: POSIX Threads

→ What is a Thread?
→ Pros and Cons of Threads
→ Simultaneous Execution
→ Synchronization
→ Thread Attributes
→ Writing a multi-threaded program
→ Lab Assignment – Threads

Module 11: Other topics

→ Interrupt routing
→ Paging and Segmentation
→ Caches, TCM and TLB
→ Mutex, Futex, Spinlock
→ Priority Inversion
→ Priority Inheritance
→ Competition- will be disclosed on the spot

Competition winner:
The winner of competition will be awarded a cash prize worth Rs- 2000/ , a complete Linux kit and a certificate of merit certified by Rlabz Edutech Pvt. Ltd.

We ensure that you will find our initiative extremely beneficial for your students. If you have any queries kindly get back to us. We are looking forward to a quick and positive response from you and a long term association with your esteemed organization.

For any further details please contact us:

Pankaj Tiwari
(Business Developer Manager)
Rlabz Edutech Pvt. Ltd
13/4, Kishanpur, Near Mussoorie Diversion, Dehradun
Cell: +91 9760657585
E-mail: pankaj.tiwari@rlabz.com