



# Linux For Embedded Systems

## *For Arabs*

## Course 102: Understanding Linux

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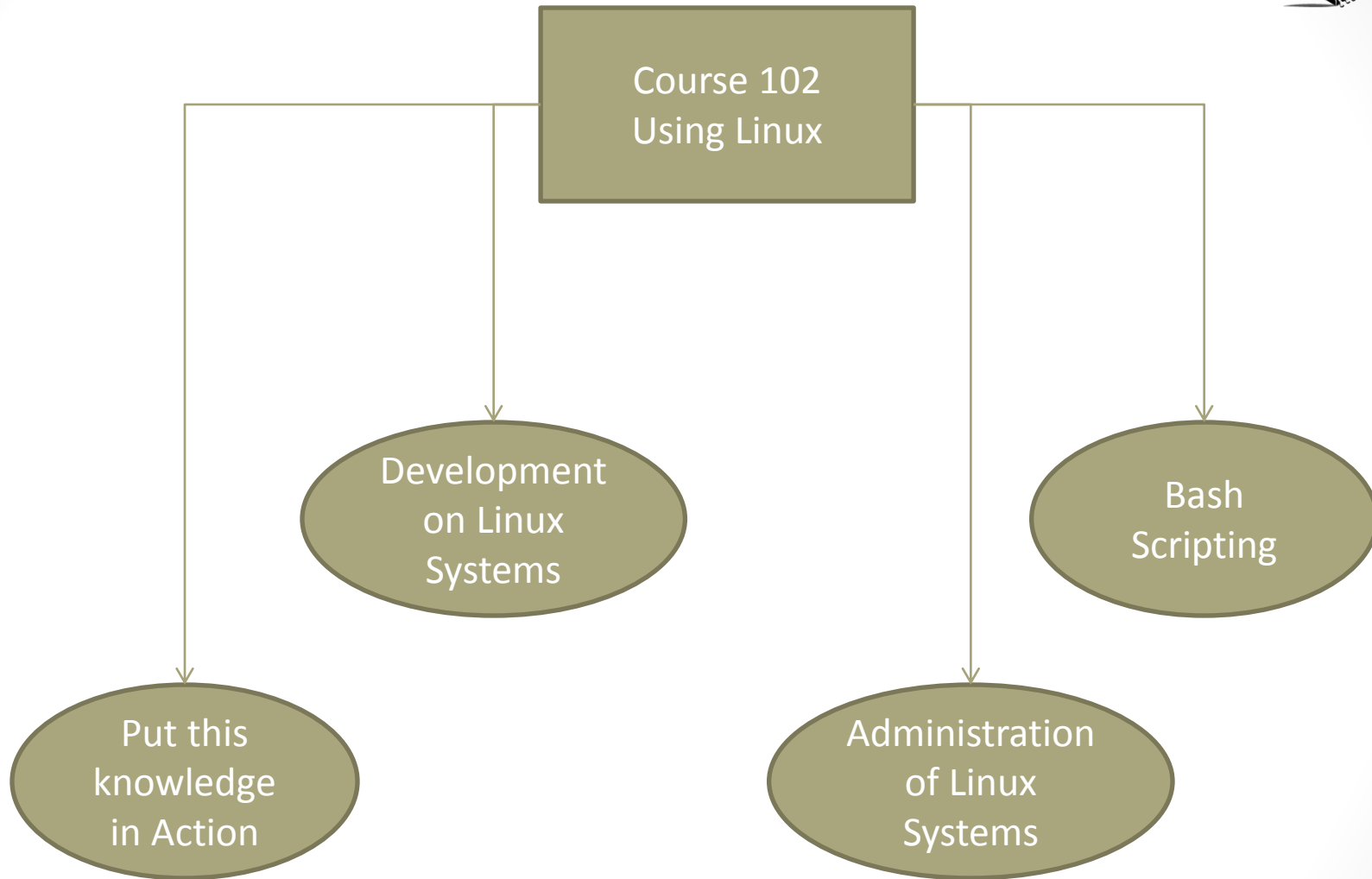


Lecture 29:

# What's Next ...

# Course Conclusion

- In this course we covered a lot of material about Linux and its Command Line Interface including
  - Files and FileSystems
  - Multi-user environment and Management of Permissions
  - Processes
  - Networking
  - Handling text files, and regular expressions
  - Input/Output
  - And other areas
- After finishing this course, we need to know what are the next steps to master this domain





# Put this knowledge in Action

- We have learned a lot of commands and utilities
- It will be very hard to remember all of this info
- However, as we work on Linux systems, a lot of what we have learnt will become very useful in our daily operation
- Other techniques will not be that common, but at times, it will be very useful to know it
- Linux has much more tools and utilities beyond what we have learnt in this course (or any other course)
- But we should be able to know how to find our way with these new utilities
- Linux CLI knowledge is like a language, if you don't practice it, you will lose it over time
- As we work in future courses on embedded systems, we will be using a lot of the material we learned in this course

# Administration of Linux Systems

- The scope of this course was directed towards a user of a Linux System
- However, since we will be dealing with embedded systems, we will need to be doing more than just using Linux
  - We will be playing with users and groups
  - We will be managing a lot of system configuration
  - We will be controlling a lot of aspects for the kernel bootup
- That is why, this course has covered some areas beyond simple Linux system user needs
- Still, there are some more areas outside the scope of this course that need to be investigated if you want to master Linux Administration

# Bash Scripting

- In this course, we applied the Linux Commands on the Command line prompt of the shell
- However, all of these commands can be used inside a bash script
- Bash Scripting is a very handy tool to learn for two purposes,
  - Building your own bash script files to perform the desired tasks in a repetitive and systematic way
  - Understanding the bash scripts that come with the Linux Distribution
- Bash Scripting will be covered in a separate course in this series of courses

# Development on Linux Systems

- This course did not require previous development experience
- However, in a lot of cases, it touched on some tricks and tools that would be suitable for a developer
- To proceed further in embedded systems, some development will need to be performed
- There will be several courses that will use the knowledge of this course along with development knowledge in the area of embedded systems
- Development can be,
  - On the user plane (building applications)
  - On the kernel side
    - Building Device Drivers
    - Hacking the Kernel
    - Working with low level utilities such as BSPs (Board Support Packages) and bootloaders





# Linux 4

## Embedded Systems

<http://Linux4EmbeddedSystems.com>