

# System and Device Programming

## *Lab 05 Exercises – Building a Minimal Kernel*

### Exercise 1

Comment every line of the script **pack.sh** in the directory MK

### Exercise 2

Follows the steps for creating a bootable hard disk file image in directory **MK/gdt-idt** and installing the kernel in **src**.

Use the tutorial in

[http://www.jamesmolloy.co.uk/tutorial\\_html/](http://www.jamesmolloy.co.uk/tutorial_html/)

to understand the main and the functions that make this minimal kernel.

Produce a report which illustrates the most important data structures, functions, and instructions that are used to build this kernel. Use figures and tables to make your report easily readable.

Give also your suggested procedure to debug this kernel (i.e., where would you suggest to put breakpoints and why).