

CSE 325: Operating Systems

Programming Project #1

Due Date: Sunday 25/2/2018

Objectives

The objectives of this programming assignment are:

- 1- To make the students familiar with the Linux operating system
- 2- To involve the students in basic operating system development by creating a kernel module and load it into memory

Project Description

The project is divided into two parts. The first part gives you the basic steps you need to follow to create a simple kernel module and load it into the Linux kernel. In the second part, you will modify the kernel module so that it uses the kernel linked-list data structure.

The actual description of the project and the steps you need to follow are located on page 96 in the book (Operating System Concepts, 9th Edition)

To Do

You should follow the instructions in the project description carefully. Report everything you are doing. You could ask your instructor or your teaching assistant for help.

Tips

You need to have an active installation of Linux on your system to be able to complete the project. You could use any distribution of Linux. The most popular distributions are Debian, Ubuntu and Fedora. In addition, you can install Linux inside a virtual machine instead of your actual computer. For creating and running the virtual machine, you could use VirtualBox or VMWare Player.

Project Report

A project report is due on 25/2/2018. Make sure to include in your report your steps, screen shots of the required outputs, and key points you learned from the project.

Submission

On 25/2/2017, the final code that you wrote and the report mentioned earlier should be submitted. Follow the following instructions carefully, otherwise your submission will not be accepted:

- Put everything including the report in a zip file and name it "CSE325_SP18_Proj1_YOURNAME.zip", where YOURNAME is your name.
- Attach the zip file into an email message which have the subject "CSE325 SP18 Project1" exactly.
- In the body of the message include your full name and bench number. You could also add any notes or special instructions.
- Send the message to the email address of your teaching assistant s.khalil9191@gmail.com

Important Notes:

This project must be done individually; any act of plagiarism will be penalized and reported.