OS Project Ideas

Graduate projects should be creative and focused on learning new things for students. Hands on projects are encouraged in this course. The projects must be related to OS and should involve programming efforts to illustrate a given concept. Do a project that you don't know how to do it! These projects can be any of four types:

1. Simulation Types
   In this category, one can demonstrate OS functions such as memory management, file management, disk management, process management and so on. Usually JAVA or C++ is used to demonstrate a given function.

2. Kernel Types
   Linux kernel is the most preferred system to use on these projects. There can be a variety of projects based on the interest and skill set of students. Learning existing modules, creating new modules, understand Linux internals and so on. One can also learn and create new makefiles and script files.

3. Device driver types
   Linux operating system interacts with many device drivers such as Ethernet, wireless, USB and so on. One can learn these drivers, add new drivers, improve or modify the existing ones.

4. Tool types
   Linux kernel is a complex and intricate OS. One can develop tools or use existing tools to understand and learn the Linux kernel. Some examples of this include: tools to navigate kernel, adding kernel to kernel interfaces, study debugging tools, improving kernel compilation times and so on.