

## **Abstract**

Virtualization is a technique for efficient utilization of hardware resources. A Virtual Machine Monitor(VMM) is a piece of software that implements virtualization. It enables concurrent execution of multiple operating systems on a single machine. The initial phase of the project involved a comprehensive study of the recent x86 virtualization extensions. We followed this up with the design and implementation of a simple kernel with basic functionalities. Finally, we worked on extending a purely Hardware-assisted VMM to boot this kernel within its Virtual Machine.