Tom Wang

## Summary of CPEN 331

Tom Wang

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## 1 Introduction

## 1.1 Review of VM and address translation

Review of VM and address translation

- Virtual memory (VM) is a technique that allows an operating system to give processes the illusion that they have exclusive access to the entire address space.
- The operating system can then use the hardware to map the virtual addresses to physical addresses.
- This mapping is done in pages, which are typically 4KB in size.
- The hardware maintains a page table that maps virtual pages to physical pages.
- The page table is stored in memory and is managed by the operating system.

## 2 Bootstrap