**Project Documentation – Computer Architecture Project  
Piplined 4 Core CPU Simulator**

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Project Summary:

The project includes   
  
  
  
  
**Project Structure:**   
  
Cache.c – handles reading and writing from and to a cache by sending opcodes to the MESI bus and handling them.   
Main.C – Main program. Initializes data structures, activates the pipeline for each core and calls the snoop\_bus operation each clock  
Pipeline.C – main pipeline logic which  
State\_machine.C  
  
  
**Main Methods**   
  
**Handling Data Hazards and Memory stalls**  
Simulations:   
  
The