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cs-35l / assignment6 / **randcpuid.c**

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prithvikannan fixed bug with make and created submission tarball

f2881d5   on Nov 7

1 contributor

Raw   Blame   History

28 lines (25 sloc)   657 Bytes

```c
#include "randcpuid.h"
#include <cpuid.h>

/* Description of the current CPU.  */
struct cpuid
{
    unsigned eax, ebx, ecx, edx;
};

/* Return information about the CPU.  See <http://wiki.osdev.org/CPUID>.  */
static struct cpuid
cpuid(unsigned int leaf, unsigned int subleaf)
{
    struct cpuid result;
    asm("cpuid"
        : "=a"(result.eax), "=b"(result.ebx),
          "=c"(result.ecx), "=d"(result.edx)
        : "a"(leaf), "c"(subleaf));
    return result;
}

/* Return true if the CPU supports the RDRAND instruction.  */
extern _Bool
rdrand_supported(void)
{
    struct cpuid extended = cpuid(1, 0);
    return (extended.ecx & bit_RDRND) != 0;
}
```