CPUs of Spacecraft Computers
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Project Summary
When computers are designed for space travel, the criteria for design and resources become wildly different from the standard designs introduced in a computer architecture class. Usual CPU designs regard efficiency, throughput, area cost and so forth. However, space is a place with extreme conditions, and we must take into consideration how the computer interacts with its physical environment. The CPUs must be highly reliable, durable, and able to withstand the varying temperatures and radiation. Energy is also a big issue, as spacecrafts and satellites must operate on minimal energy.

We will research the history and design of the computers behind the past breakthroughs of space exploration. We want to gather and organize information for fellow students in our class. Our peers will learn that computer architecture changes when the computer itself is subject to extreme physical conditions.

References
[1] https://en.wikipedia.org/wiki/Apollo_Guidance_Computer (this is will not be one of our final references, but it contains many other references that we can use)
[2] http://www.cpushack.com/space-craft-cpu.html
[3] http://history.nasa.gov/computers/Part1.html
[4] http://klabs.org/history/build_agc/

Goals
We will research on one space-related CPU design, the Apollo Guidance Computer, and compile our findings into a poster format.

Our stretch goal is to look into additional CPUs in different spacecrafts.

Work Plan
11/29 - Project Proposal due

11/30 ~ 12/3
- At least 1 meeting
- Delegation of Research
- And individual portion write ups

12/4 - Midpoint Deliverables
- Outline of the poster
- Words to go on poster completed
- Images to go on poster found

12/5 - Midpoint check in

12/5 ~ 12/15

Put everything into the poster

Finalize documentation

12/15 - Final project due