

Project requirements and grading

- Final PowerPoint presentation and Demonstration (30 mins)
- Report for each team (up to 10 pages plus appendices, references, etc.)
- Grading: 25% of final course grade
 - I expect **members of the group to contribute equally** to the project and thus receive the same grade for the assignment.

Contents for PowerPoint slides (and report)

Introduction to the application

- Description in science/engineering point of view
- Formulas, etc.

Algorithm

Design and Implementation

- Mapping from algorithm to architecture
- Block diagram of system architecture
- Data arrangement and buffering
- Datapath details

Testing and demonstration

- Test/demo setup
- Dataset used
- Baseline for comparison (e.g., c program running on Zynq ARM processor)

Test results

- Resource usage, clock frequency
- Speedup vs. baseline

Conclusion

Factors I will be considering while grading

- Complexity of the project
- Elegance and innovativeness of design
- Does it work? (If only simulation, make sure to have a testbench for the entire user_app module)
- Project amenable to RC and impact to science and engineering?
- Speedup (1) computation only (2) data transfer and computation
- Use other “extra” features (e.g., FIFO, DRAM, Zynq I/O)
- Amount of parameterization
- Data used to test/demonstrate the design (i.e., “toy” data or “real-world” data)