

Title: TEAM STATUS

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What are the most significant risks that could jeopardize the success of the project? How are these risks being managed? What contingency plans are ready?

- Password on root account of DE-10 that prevent login onto the hardware
 - Spoke to owner of board (Professor Nace) about password lock
 - Contingency:
 - Flash SD Card (requires acquiring SD/MicroSD card adapter)
- Learning how to use the SOC and dealing with a board different to the one we are used to
 - Continue doing online tutorials
 - Contingency:
 - Consult experts
- Memory consumption validation on DE-10 FPGA by instantiating multiple large matrices and viewing the block memory usage on the Quartus report failed. Megafunction Wizard on Quartus was used to instantiate the embedded block memory but it always froze.
 - Ran matrix multiply from 341 to see how much memory it would use on the DE-10 and checked the Quartus compilation report. Report said 0 embedded bits even though it gave accurate numbers when the 341 board was used
 - Contingency:
 - Cross check Quartus setup with Professor Nace's
 - Version: /afs/ece/support/altera/release/12.1/quartus/bin/quartus
 - Releases: ls /afs/ece/support/altera/release
 - 12.1/ 14.0/ 14.1/ 16.0/ 16.1.2/ pro-17.0.0/ pro-17.1.0/ pro-18.0.0.219
 - DE10 uses M10K blocks which are different from 341 board and so consult expert on verifying Quartus configuration
- Removing 5 seams at a time might result in overlaps and thus invalid seams
 - We will check for duplicate pixels in the returned list to the SoC and not remove seams that have such an overlap. This might result in removing less than 5 seams at time
 - Contingency:
 - We will simply remove one seam at a time

Were any changes made to the existing design of the system (requirements, block diagram, system spec, etc)? Why was this change necessary, what costs does the change incur, and how will these costs be mitigated going forward?

- We have updated design to check for testing of video quality and researched such methods
 - Researched PSNR, Spatio-temporal SSIR, User testing

- Necessary to ensure video quality testing
- Cost: Extra task to incorporate into schedule (design user test for video quality evaluation)
- As mentioned in the risks portion we added checks in the process to ensure no overlapping seams occurred

Provide an updated schedule if changes have occurred.

