CS223 Digital Design
Project Report Guideline

All students must upload their project code and project report to Unilica until 30.12.2019, 08:00 a.m.! Each student will demonstrate during the allocated time slot on the Google sheet (based on the signup sheet - link will be provided). Demo will be done by downloading the project code which was uploaded till 30.12.2019.

Also note that even though you were not able to deliver a fully functioning project, providing the target design, simulation results and discussions on what might be the problem based on simulation results can affect what percentage of partial grade you will get significantly. Your project reports must be composed of the following parts:

1. Cover Page
2. Brief Introduction
3. Block Diagram
4. Detailed Explanation of the Work
5. Final Comments
6. References &Appendix

1. Cover Page

Cover page of the report should contain: Course name, Project Title, Section, Student name, surname, ID, Date of Submission.

2. Introduction

Since the same project is given to everyone, you don't need to spend too much time here. Just provide a clear explanation of the project/problem (2-3 sentences at most) and give a brief summary of the approach that has been used to solve the problem given in project description.

If you were unable to deliver a fully functioning project, you should mention which parts of the project you were unable to implement, or what constraints you needed to relax in order to have a working project.

3. Block Diagram

Here, provide the block diagram of the project, showing the top-level design of the system. All parts used in the top-level of the system should be represented in the diagram, even if the parts were not implemented by you. All blocks, inputs and outputs must be named, and the number of bits should be clearly marked and identified, as specifically as possible.

4. Detailed Explanation of the Work

This part is where you explain your solution in detail. It is best if you divide this section to several appropriate subsections. First, you should describe the flow of your design briefly. Best way to do that is to provide your HLSM and explain it verbally in a few sentences. Then, for each block module in your design (even if it was given to you ready), you should explain what that block does briefly, and specify the input/outputs of that block. For relatively straightforward modules, it is okay if you give 1-2 sentence descriptions.
You should give more detailed explanations (what is the inner logic there, how does the module do what it does?) for the blocks which you think have more importance. For such modules, you can/should make use of the figures such as the associated state diagrams, or the inner circuit schematics.

If you were unable to make a module work in your design, or had to change some of the constraints to make it work, specify them in detail. For example, you can discuss how you tested your design. Did you write any testbench for debugging? Did simulation results imply what might be wrong?

5. Conclusion

The conclusion section should summarize the main points that have been mentioned in the report,i.e the summary of the design etc. Also mention about the problematic parts.

6. References&Appendix

Use proper citations if you had any. Put any source that you think you should refer to but will take too much space to put inside the report, or relatively not very important, such as code/simulation results/truth table/schematic etc. put here.