CS223 Digital Design
Project Report Guideline

All students must upload their project code and project report to Unilica until **13.05.2019, 08:00 a.m.**! Each student will make the demo on his/her regular lab date and time by downloading the project code which was uploaded till 13.05.2019.

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 take significantly. Your project report must be composed of the following parts:

1. Cover Page
2. Introduction
3. Block Diagram
4. Detailed Explanation of the Work
5. Conclusion
6. References
7. Appendix

1 Cover Page

The 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 assigned to everyone, you don't need to spend much time here. Just provide a clear description of the project/problem in a short paragraph 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 weren't 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 it was given to you for ready-use), you should explain what that block does briefly, and specify the inputs/outputs of that block. You can describe relatively straightforward modules in a few sentences.

You should give more detailed explanations(what is the inner logic there, how does the module work?) for the blocks which you think have more importance. For such modules, you can make use of the figures such as the associated state diagrams, or the inner circuit schematics.

Give detailed information about the testbenches developed in order to verify your design. If you were unable to make a module work in your design, or had to change some constraints to make it work, specify that in detail. For example, you can write how you are sure that specific block malfunctions, did you write any testbench for debugging, what do the results of simulation imply and what might be wrong.

5 Conclusion

The conclusion section should summarize the main points that have been mentioned in the report,i.e a brief definition of the problem, your approach for the solution, the difficulties and achievements about the project etc. Mention again the parts that malfunction.

6 References

Give a list of your references and provide proper citations throughout the text, if you had any.

7 Appenndix

Put any source that you think you should refer to but will take too much space to put inside the report, such as code/simulation results.