

# ELE 432 PROJECT

## Spring Semester 2020 Design of a 16-bit RISC Processor Using VHDL

Dear Students,

This semester's project is based on "Design of a 16-bit RISC Processor Using VHDL" by Karansingh Pramodsingh Thakor et al. uploaded at HUZEM web site.

Procedure:

- 1- Gather 3-4 people as a group.
- 2- Publish this in  
[https://docs.google.com/document/d/1WlcxnFXOLH-F4px9CGPq\\_07NIOIzZ-1xfmcxlrIkaHXg/edit?usp=sharing](https://docs.google.com/document/d/1WlcxnFXOLH-F4px9CGPq_07NIOIzZ-1xfmcxlrIkaHXg/edit?usp=sharing)
- 3- If you have no group add (your name+email) to in an empty slot or add it to groups with 1,2 or 3 people. Ask them first if they would accept you as a member
- 4- Your task is to implement version 3 of this RISC CPU
- 5- You will be graded as follows:
- 6- A) Implementing the exact schematic on Fig 12 on VHDL and showing this Will give you points +1-50; dependent on your report  
B) Implementing all the instructions of this CPU will give you +20-30 pts depending on how well you present this.  
C) Implementing a small program such as the one in TABLE V, will give you +10-20 pts depending on how well you present this.
- 7- Indicate the contributions of each member in the pdf
- 8- For 6A,B and C put all information in a pdf file and return it by Jan 14<sup>th</sup>.
- 9- This will form a part of your Midterm Grade.
- 10- Please read the paper and for the items not describe clearly try to improvise and be creative.

GOOD LUCK !

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