CS F422 Parallel Computing Project

Design and Implementation of a Template for Parallel Programming (to solve a class of problems) on a *hybrid system* (i.e. a commodity cluster supporting message passing at the top level and shared memory access within each node).

Team : 2 or 3 students per team; form your own team

Marks: 30

Exercise: Choose one of the exercises I, II, or III.

Process and Evaluation:

- Phase I: Design
 - o <u>Present</u> your design between <u>9th April (Saturday) and 12th April (Tuesday). [Schedule to be announced].</u>
 - Wrap up the design and <u>upload a design document by 15th</u> April
- · Phase II: Implementation
 - o Interact with the instructor between 19th April and 23rd April.
 - This is not for evaluation but for validating your implementation ideas.
 - This is optional so don't show up just for the sake of it unless you have done something and want this to be validated.
 - <u>Time for discussion after 23rd will be very limited</u> and you will not be able to finish your implementation during the last week *therefore* start implementing early as soon as you have a preliminary design.
 - <u>Demonstrate</u> your implementation along with performance evaluation <u>between 29th April and 1st May</u>.
 - Performance evaluation of your implementation will carry a significant weight!!