## Assignment Orientation

#### **Networked Software**

- Developing a networked software (server-client / P2P / SDN, etc.)
  - Networking protocols and mechanisms, and their improvements
  - Reproduction or miniature version of an existing "Good" paper or network software is also accepted
- What is the motivation to develop the software? Appreciate the past efforts by somebody else. And clarify where your idea came from.
  - Papers, blogs, your own finding as inspirations?
  - What is the benchmark software to improve or to miniaturize?
  - Project that does not give "References" will receive very low mark

# How the base mark changes? Nature and Deliverable

- Nature: Originarity, Impact, and Challengingness
  - Very High, High, Medium, Low, Very Low
  - Where do they stand? In the problem formulation? Solution? Implementation?

	Very High	High	Medium	Low	Very Low
System Deisgn	Completed	Completed	Completed	Completed	Completed
Module Implementation	Completed	Completed	Completed	Not completed	Not started
Integration to ensure end-to-end functioning	Completed	Completed	Not completed		
Performance Evaluation	Completed	Not staretd nor completed			
Presentation Quality	Good	Good	?	?	?

#### Tentative Schedule

- November 10: Registration (Google Form)
  - Declaration of Team Members and Topic
  - Explanation of why your team picks the topic
  - You should start coding as soon as possible
- November 17<sup>th</sup>: Check Point Presentation & Mentoring
  - Declaration of the project deliverable
  - Presenting the system design (System Block Diagram, Pseudocode, Flow Chart)
  - Report of the current progress (You should have the design and a peace of code)
  - Declaration of the roadmap for producing the final deliverable
- December 4<sup>th</sup>: Final Evaluation (Live Presentation and Demo)
  - Evaluation of Final Outcome
  - To what extent, did you achieve the deliverable?
  - Partialism check will be done

#### Other Points

- Group Project
  - 6 members per group (Non negotiable, zero mark to a group having more than 6 members)
  - Big or small of a group is not considered as evaluation criteria.
  - Individual contribution is not considered.
  - Same marks will be offered to all members in the group.
- You MUST NOT re-use a project deliverable which was or is going to be submitted as a part of any other course.

### **Existing Projects**

- Extention of Web Cache software?
- P2P file sharing system
- Miniature version of a Blockchain
- Load based multipath packet forwarding using SDN
- UDP based Reliable Data Transfer which is faster than TCP
- A new routing protocol
- AI/ML for Anomary Detection