

CS490-004 Network Programming, Fall 2026

Project #2 Description

I. Project Objectives:

- (1) Conduct an in-depth research about a particular topic in network programming
- (2) Learn the process of conducting a survey research.
- (3) Learn and exercise an academic presentation

II. Project Requirements:

Milestone 1 (due 3:00pm, September 15): Form your project team (2 persons in a team). Email the names of your project members (two names) to hfujino@siue.edu by **3:00pm on September 16**.

Milestone 2 (due 11:59:59 pm, September 17): Preliminary survey to select your teams' project topic.

Each person looks for technical articles on two different topics in network programming techniques (should be reasonably recent topics).

Each person prepares a half-page summary for each topic (each of the two topics) (12-point, single-line, Times font, the standard US-letter size document), which should contain the following details (**5 points to each person for each topic**):

- (1) The topic summary of the general topic
- (2) **Significance**: Why you consider it a significant topic (including the timeliness of the topic). Describe why the network programming technique is/was introduced (clearly state what problem(s) the new technique should solve).
- (3) **Contribution**: How the topic contributes to network programming (explain how the new programming technique will/can solve the problem(s) you describe in (2) above
- (4) **References** (URL of the website, academic/white paper).

Note: the two topics should not overlap for the two members in a team.

After Fujinoki receives four topics from a team, Fujinoki will select one topic (or suggest changing the topic – especially when another team has selected a similar topic). If Fujinoki receives the same topic(s) from multiple teams, Fujinoki will assign a topic to each team based on the following rules:

- (a) The quality in the summaries

- (b) If there is a tie on the quality in the summary, the submission timestamp (the one attached by Outlook mail cloud)

Milestone 3 (schedule on **October 27** and **October 29**): initial presentation (15-minutes presentation in the classroom) – **30 points** (to each team)

Required Activities:

- (a) Prepare your PPT presentations that summarize the project topic selected topic.
- (b) Present your team's Milestone 2 in the classroom (for 15 minutes)
- (c) Everyone is expected to "peer-review" other teams' presentation.
- (d) After all presentations, evaluate their presentation (**significance** and **contribution**).
- (e) Organize and provide your feedback to the others (failing to submit a decent feedback to other teams (-4 points for each missing feedback – **to individuals**)
- (f) Grade for this activity will be assigned based on the peer-review
 - The best presentations: 30 points
 - The second best presentations: 25 points
 - The third best presentation: 20 points
 - Incomplete presentation(s) or low-quality presentation(s): less than 20 points

Milestone 4 (scheduled on **December 1, 3, and 8**): Final Presentations – **60 points** (to each team)

- (a) Each team prepares a 25~30 minute presentation (final PPT presentation)
- (b) Everyone is expected to "peer-review" others' presentation (-5 points for missing a feedback – **to individuals**)
- (c) After all five people present, evaluate their presentation (**significance** and **contribution**):
- (d) Grade for this activity will be assigned based on the peer-review:
 - The best presentations: 60 points
 - The second best presentations: 50 points
 - The third best presentation: 40 points
 - Incomplete presentation(s) or low-quality presentation(s): less than 40 points

III. Project Topics

Any topics other than the following topics:

- Programming methods for web applications:
 - Client-side programming methods (Java scripts, Java applet)
 - Server-side programming methods (Java servlet, Java Server Pages, CGI, and etc.)
- WSDL and UDDI

- Web securities
- Web assembly
- Browser incompatibility issues and SELENIUM
- Flash/Flex and Ajax
- Threats from computer viruses to network applications

Note: the topics in the list are examples. There can be other topics that are not appropriate for this project. Each team is suggested to frequently discuss with Fujinoki.