

King Fahd University of Petroleum & Minerals

College of Computer Sciences and Engineering

SWE 344: Internet Protocols and Client-Server Programming (2-3-3) Fall Semester 2008-2009 (081)

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Project Guidelines

Introduction: The aim of this project is to gain hands-on experience on client/server programming development using C# .NET, and to practice project management, communication and team work skills. For the project to be acceptable, it must either extend an existing work or be a completely new idea. In case your work builds on other people's work, their work must be included (in its original and complete form) with your work to allow the instructor to assess your contribution. The project weighs 20% of your grade; hence you should take it very seriously.

Teams: Form groups of three members (two members will be allowed in rare cases and after the instructor consent). It is your responsibility to select your group members. If you cannot find a group after trying all your best, contact the instructor and he will try to help your but you may be assigned to a group which you may not in favor.

Project proposal: After brainstorming, surfing the web, and looking at the lab tasks; identify a number of potential projects and discuss them with your group. Then together, select only one project of all the ideas that you gather. You should consider the quality and usefulness of the project as well as the time duration constraint while selecting your project. Write a proposal of two or three pages to briefly describe your project objectives, scope, intended users, features, and other related or similar work. You also need to include the names and IDs of your group members and a title for your project. It is your responsibility, as a team, to come up with a project topic in any area where client/server architecture is applicable. Some examples are (but not restricted list):

- Network games with chatting and file sharing capabilities.
- File sharing management system
- Web crawlers and search engines
- Advanced voice chatting system
- User monitoring system (like synchronEyes)
- E-learning management systems (like WebCT)
- Restaurant operation automation
- Advanced mail client
- Remote inventory control system
- Traffic monitoring system
- Remote ordering/request management system
- A student registration system
- Course evaluation
- Housing control system
- A remote car renting system

You can also visit top programmers sites, especially MSDN, Code Project, and other programmers' sites dedicated to C# and Networking for some more ideas.

Design and Implementation: Distribute the workload among the group members and design and implement the proposed project. You should start early to avoid possible risks and have enough time to deliver a good product. Note that you may fully or partially use standard protocols such as HTTP, FTP, SMTP, etc. or develop your own based on your project needs. You should have a consistent look and feel, and friendly GUI interface. The code should be clear and have proper comments to enhance its readability and should follow the recommended best practices in coding.

Final Report & CD: The final report must include at least a description of the project objectives, motivations, requirements, use cases, system architecture, implementation hints (explaining important fragments only), screenshots of the user interface, suggestions for further improvements, citation of the resources and general information about the team members and their role in the project. You may include any other information that you think is needed to your report. The report should not include a full list of the code. Include softcopies on a CD of the documents, programs, presentation, other resources, and a readme file explaining how to install and use the package. Organize the CD content as follows:



Presentations: Each group is required to prepare a PPT presentation and deliver it at the due date. During the presentation, the instructor will ask some questions and each member is expected to know all the details about the project even if he was not responsible for that part.

Grade Distribution: Proposal 1%, Requirements and Design 5%, Implementation 10%, Presentation 4%

Tasks, Deliverables Due Dates:

Task	Date
Proposal	November 24, 2008.
Softcopy of the final report (through	January 30, 2009 before 10pm.
WebCT or instructor email)	
Hard copy & CD	January 31, 2009 in class
(Hand-in a hard copy of the report and a CD	
containing the final report, PPT presentation,	
all software modules, a readme file on how to	
install an use, other resources.)	
Project Presentations and Discussions	January 31, 2009 in class
	(other groups will be scheduled to deliver
	their presentations either afternoon or on
	February 1 and 2)