CDC University is a small college in Metropolitan, Iowa. Until recently the campus has relied on the old fashioned methods of information exchange as there was never a push to implement technology beyond what the students brought with them. However the board of directors has recently decided that a computer network on the campus is inevitable and would provide many benefits to the curriculum at CDCU. The University has formed an Information Technology department, purchased equipment, and hired a team of network administrators to implement this network for them. This team is now responsible for the initial set up of the network.

Given the small startup budget the university gave the Information Technology department, a less than generous amount of equipment has been purchased (4 machines). However, this is a small network for a small campus so the board sees no need for additional equipment.

No specific software requirements have been outlined by the board, however it is expected that whatever software is used does not add to the cost of the program or violate any copyright laws. This said, the board will be happy with any implementation as long as it meets the following requirements:

1 A Web Server for www.cdcu.edu
    1.1 The board has hired an outside web development team create the site, and will provide the network administration team with the content once the server is operational. The only requirements for this are that the web server be PHP compatible, as dynamic content on the pages will be developed in PHP. Resolution of www.cdcuX.edu will need to handled by the network administration team.

2 An Email Server for @cdcuX.edu
    2.1 This service will provide accounts for the students and staff with spam filtering and virus protection. A list of users will be provided (between 25 and 50 are expected for now). Additionally, configuration of cdcuX.edu is needed, so that mail is directed to the appropriate address (DNS resolution). Users should be able to check email from both inside and outside the campus network using both POP and IMAP. The Administration Team is also expected to set up some sort of Web based e-mail system allowing users to access their accounts via a web browser (webmail.cdcuX.edu).

3 A File Server
    3.1 A password-protected file server for storage of data, reports, and personal files. Users should be allowed at least 10GB of storage on this server. Users should also be able to access this from off-site (i.e., back at Iowa State) via FTP (ftp.cdcuX.edu).

4 Remotely Accessible Programming Environment
    4.1 The newly formed programming department requests remote access to a lab server so that students can work on C/C++ programming assignments. Users should be able to log in to this service via command line with the same credentials as above and compile simple C/C++ programs using GCC.

5 Legacy System
    3.1 Professor Jacobson has done you a favor by setting up an ftp and dns server. This server needs to stay running as various faculty members need it for research and classroom instruction. This is a working server which can be patched for security purposes but it cannot be updated to a newer or different operating system due to faculty protests. Professor Jacobson has been kind enough to install DNS on this machine and do a basic configuration for you. This means all you need to do is enter the IP addresses of each machine (see instructions in the setup documentation).