

# Mini case

Science, Computer Science



I. Deals-R-Us Brokers (Part 1) Fred Jones, a distant relative of yours and president of Deals-R-Us Brokers (DRUB), has come to you for advice. DRUB is a small brokerage house that enables its clients to buy and sell stocks over the Internet, as well as place traditional orders by phone or fax. DRUB has just decided to offer a set of stock analysis tools that will help its clients more easily pick winning stocks, or so Fred tells you. Fred's information systems department has presented him with two alternatives for developing the new tools.

The first alternative will have a special tool developed in C++ that clients will download onto their computers to run. The tool will communicate with the DRUB server to select data to analyze. The second alternative will have the C++ program running on the server, the client will use his or her browser to interact with the server. a. Classify the two alternatives in terms of what type of application architecture they use. b. Outline the pros and cons of the two alternatives and make a recommendation to Fred about which is better.

#### Mini Case 1 Solution

The second alternative will use the host-based architecture. Using this alternative, the server will do all the work. Because of this, the server will become very slow in processing those requests as more users are sending them. It cost a lot of money to upgrade those mainframes. The first alternative will use the client-server application architecture. In this case, the server and the client computer will share the workload. The server will be able to respond to many users' requests without any slowness. This is the best option Fred needs to use for his business.