Developing a Dynamic Virtual Restaurant Using RMI

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ABSTRACT

In a highly competitive restaurant business, giving customers what they want at the click of their fingers is of great advantage. In this project, we implemented a dynamic virtual restaurant system using Java RMI (Remote Method Invocation), which is a powerful technology for distributed object computing. The virtual restaurant acts as an RMI server and provides a dynamic interface to the clients using Java Servlet and JSP technology. It enables the clients to view menus of different restaurants, query food items, place order for food, and view the orders placed through a single web address. The system also provides an interface for new restaurants to register their services. Every restaurant is on a remote system and can be registered in the RMI Registry of the virtual restaurant at runtime. For obtaining references to the remote objects, i.e., the restaurant objects, the virtual restaurant system provides a remote object registry interface, which includes methods for storing and retrieving remote object references. The virtual restaurant receives requests from users and invokes the corresponding services provided by the individual restaurants using RMI and displays the information to the clients. Furthermore, the virtual restaurant also provides additional features, for example, the customers can compare the prices of the same food item provided by different restaurants, and place an order of their choice from different restaurants at the same time.