Implementing seller agent in multiple online auctions

Abstract

Online auctions are becoming extremely popular because of the convenience that it offers to the consumers. Much work has been done in designing bidding strategy that can be utilized by bidders who want to participate in online auctions. However, very little work has been done on the seller's strategy for online auctions. In any online auction, the final selling price of the item is unknown until the auction closes. This price is dependent on several factors such as the number of bidders participating in the auction, how much each bidder is willing to pay for the product, how many online auctions are selling the same item as well as the duration of each auction. Each item to be auctioned off has a reserved price set by the seller. Setting the reserved price too high for the item will result in the item not being sold and setting the price too low may result in profit reduction or even loss. Deciding on the reserved price of an item to be auctioned off is not a straightforward decision. This chapter reports on a preliminary implementation of a seller agent that recommends a reserved price for a given item to be auctioned off by the seller. The seller agent's objective is to suggest a reservation price that guarantees the sale of the item within a given period (as required by the seller) with a profit.