

COMP0178: Database Fundamentals

Auction website coursework report

Group 3

Junming Hu

Jaiming Zhang

Arjun Bahra

Arei Mohammed

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# Introduction

This goal of this project is to create an auction system website using fundamental database and website creation techniques. This auction system will allow users to perform basic tasks such as registering themselves as a buyer and seller, posting an item for auction and bidding on items. The functioning database system used WAMPServer or XAMPP for the database creation. A partial functional front end was provided, however there was minimal functionality. The website development consisted primarily of PHP, Bootstrap and MySQL for the database back-end development.

The main website features include registering to the auction website as a user, both as a buyer and a seller simultaneously. Users being able to post a new auction for an item they want to sell with a starting price and reserve price. A listing browse page where any user can search for listen items up for auction. A recommended page where similar items are recommended to the user based on their bidding and viewing history and a watchlist feature which allows users to save an auction they are interested in bidding on at another time.

# ER Diagram

# The database schema

|  |  |
| --- | --- |
| Users | |
| Key | Description |
| id | Primary key that is unique to each user |
| username | The username the user uses to sign up |
| email\_address | Users email address |
| address | Users home address |
| post\_code | Users post code |
| password | Users password used to sign in |
| is\_active | User account active status |

|  |  |
| --- | --- |
| tbl\_listings | |
| Key | Description |
| listing\_id | Unique id that represents each listing |
| title | Title of the auction |
| details | Details and description of the listing |
| category\_id | The category of the item being listed |
| starting\_price | The starting price of the listing |
| reserve\_price | The reserve price of the listing |
| end\_date | The date the auction ends |
| user\_id | Id of the user that lists the item |
| is\_active | The listing is active to view |
| created\_at | The time the listing was created |
| deleted\_at | The time the listing was deleted |

|  |  |
| --- | --- |
| biding | |
| Key | Description |
| bid\_id | Unique bid id |
| listing\_id | Which listing was bid on |
| user\_id | Which user bid on the item |
| biding\_price | The amount of the bid |
| biding\_time | The time the bid was places |

|  |  |
| --- | --- |
| watchlist | |
| Key | Description |
| user\_id | The user that watched the item |
| listing\_id | The listing that is being watched |

# Database relationship table