IT5014 – Project (PW)

**Semester: 5**

**Functional Requirement**

Title of the Project:E-Auction Management System

* **User Management**

| **RN** | **Description** | **Comments** |
| --- | --- | --- |
| FR1 | The system shall be able to allow bidders to register with unique username, password, email id, mobile number send verification emails and OTPs for mobile number verification. | Bidder Registration |
| FR2 | bidders and the owner shall be able to log in using their username and password. | User Login |
| FR3 | Bidders shall be able to view and update their profile information. | Profile Management |
| FR4 | Users shall be able to change their password and reset it through email verification if forgotten. | Password Management |

* **Auction Management**

| **RN** | **Description** | **Comments** |
| --- | --- | --- |
| FR1 | The owner shall be able to add, edit, and delete auction items and categorized for better management. | Item Management |
| FR2 | The owner can set the start and end times for each auction and manage the auction timing. | Auction Scheduling |
| FR3 | The system will display a list of upcoming auctions accessible to all users and viewers. | Upcoming Auctions |
| FR4 | Only interested bidders and the owner can view and participate in live auctions. | Live Auctions |

* **Bidding**

| **RN** | **Description** | **Comments** |
| --- | --- | --- |
| FR1 | Interested bidders can place bids on auction items. | Bid Placement |
| FR3 | The system will send notifications to bidders about their bid status (outbid, winning bid) and auction updates. | Bid Notifications |

* **Earnest Money Deposit (EMD)**

| **RN** | **Description** | **Comments** |
| --- | --- | --- |
| FR1 | Bidders must register and pay the EMD before the EMD date to participate in an auction. | EMD Registration |
| FR2 | The owner can manage the EMD amount and its due date for each auction. | EMD Management |
| FR3 | The EMD amount will be refunded to all non-winning bidders after the auction concludes. | EMD Refund |

* **Payment Processing**

| **RN** | **Description** | **Comments** |
| --- | --- | --- |
| FR1 | Bidders can make EMD payments through a secure payment gateway. | EMD Payment |
| FR2 | Winning bidders can make the full payment for the auctioned items via the payment gateway. | Full Payment |

* **Auction Outcomes**

| **RN** | **Description** | **Comments** |
| --- | --- | --- |
| FR1 | The system will automatically determine the auction winner based on the highest bid amount. | Winner Determination |
| FR2 | The auction will start only if the first bid meets or exceeds the reserve price. | Reserve Price |
| FR3 | The final price of the item will be the highest bid amount at the end of the auction. | Final Price |

* **Search and Filtering**

| **RN** | **Description** | **Comments** |
| --- | --- | --- |
| FR1 | Users shall be able to search for auction items using keywords. | Item Search |
| FR2 | Users can filter auction items based on item name, category, and reserve price. | Filtering Options |