POS Web App Functional & Design Requirements

1. Excel Data Upload

- Upload .xlsx or .xls file with the following columns: Description (or Item), Price, ScanCode (or Code), VAT

- On successful upload:

- - Hide the upload section.

- - Show the main POS interface.

- - Autofocus the scan/search input.

2. Search / Scanning with Autocomplete

- Real-time suggestions as user types or scans.

- Suggestions include: Product Name, Product Code, Price

- Use fuzzy matching for partial matches.

- On selecting an item:

- - Add to cart table

- - If already in cart, increment quantity

- - Clear search box and refocus

3. Cart & Billing Table

- Display columns: Product Name, Quantity, Unit Price, Line Total

- Auto-calculated totals: Grand Total, Bill Amount

4. Cash Payment Modal

- Popup modal with:

- - Total Bill Amount

- - Cash Received input

- - Auto-calculated Change

- - Validation for insufficient cash

5. Multi-Payment Support

- Allow split payments between: Cash, M-Pesa, Credit Card

- Validate total allocation matches Grand Total

6. Receipt Generation

- Professional receipt layout with:

- - Business Name, Date & Time (hh:mm:ss)

- - Items, Quantities, Totals, Payment Breakdown

- - Footer with return policy

- Auto-save receipt and preview popup

7. End-of-Day Report

- 'End of Day' button triggers summary of:

- - Total transactions

- - Item sales statistics

- - Payment method breakdown

- - Printable report

8. UI/UX Design

- Modern responsive design for mobile & desktop

- Gradient headers, stylish buttons, smooth transitions

- Icons, validation, and collapsible layout

9. Additional Functionalities

- VAT calculations for both 16% and 0%

- Flexible Excel header handling (e.g. Description or Item)

- Persistent transaction history (optional future)

10. Technologies to Use

- HTML, CSS, JavaScript

- xlsx.full.min.js for Excel reading

- No backend required (optional future: Google Sheets, Telegram)