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## ➤ **List of Platforms, Tools, and Software Used**

### **Frontend Technologies**

- **HTML5** – Structure and layout of web pages
- **CSS3** – Styling and responsive design
- **JavaScript** – Client-side interactivity and form validation

### **Backend Technologies**

- **Node.js** – JavaScript runtime environment for server-side logic
- **Express.js** – Web framework for routing and middleware handling

### **Database**

- **MongoDB** – NoSQL database for storing user data, quiz questions, and results
- **Mongoose** – ODM (Object Data Modeling) library for MongoDB schema and queries

### **Development Environment**

- **Visual Studio Code** – Code editor with extensions for Node.js and MongoDB
- **Git** – Version control system for tracking changes
- **GitHub** – Repository hosting and collaboration

### **Security and Configuration**

- **bcrypt.js** – Password hashing for secure storage
- **crypto** – Token generation and encryption
- **dotenv** – Environment variable management to protect sensitive credentials

## ➤ **Step-by-step guide on how to run the project:**

### **1. Prerequisites**

Before starting, ensure the following software is installed:

- Node.js (v18 or later)
- MongoDB (local or cloud via MongoDB Atlas)
- Git (for cloning the repository)
- Code Editor (e.g., Visual Studio Code)

### **2. Install Dependencies**

```
npm install
```

### **3. Configure Environment Variable**

Create a .env file in the root directory and add the following

```
PORT=5000
```

```
MONGO_URI=your_mongodb_connection_string
```

```
EMAIL_USER=your_gmail_address
```

```
EMAIL_PASS=your_gmail_app_password
```

### **4. Start MongoDB Server**

```
Mongod
```

### **5. Run the backend Server**

```
npm start
```

### **6. Access the Application**