1. Introduction

1.1 Purpose

The purpose of this document is to outline the functional and non-functional requirements for the TechWorks App. This app aims to facilitate the hiring and sales of technical equipment, offer technical job opportunities, and connect professionals with clients needing specific technical services.

1.2 Scope

The TechWorks App will include the following key features:

- Technical Equipment Hire
- Technical Equipment Sales
- Technical Jobs Offers
- Technical Jobs Hiring and Contracts
- Technical Professionals Database Registration
- Advertisements
- Contact Us

2. Functional Requirements

2.1 Technical Equipment Hire

- **User Registration**: Users can register with personal details, contact information, and type of technical equipment available for hire.
- **Equipment Listing**: Registered users can list their equipment with detailed descriptions, images, pricing, and availability.
- **Search and Filter**: Clients can search, and filter equipment based on type, location, price, and availability.
- **Booking Management**: Users can manage bookings, approve or reject requests, and update availability.

2.2 Technical Equipment Sales

- **User Registration**: Sellers can register with personal details and contact information.
- **Equipment Listing for Sale**: Sellers can list their equipment for sale with detailed descriptions, images, and pricing.
- **Search and Filter**: Buyers can search, and filter equipment based on type, location, and price.
- **Purchase and Payment**: Buyers can purchase equipment and make payments through the app.
- **Sales Management**: Sellers can manage their listings, update pricing, and mark items as sold.

2.3 Technical Jobs Offers

- **Job Posting**: Employers can post technical job offers with detailed job descriptions, requirements, and salary information.
- **Search and Apply**: Job seekers can search and apply for jobs based on their skills, location, and job type.
- **Application Management**: Employers can manage job applications, shortlist candidates, and schedule interviews.

2.4 Technical Jobs Hiring and Contracts

- **User Registration**: Professionals can register with personal details, contact information, and professional skills.
- **Profile Creation**: Professionals can create profiles showcasing their skills, experience, and certifications.
- **Search and Hire**: Clients can search and hire professionals based on their skills, location, and availability.
- **Contract Management**: The app will facilitate contract creation, management, and payment processing between clients and professionals.

2.5 Technical Professionals Database Registration

- **Database Registration**: Professionals can register and create profiles in the database.
- **Profile Management**: Professionals can update their profiles, add new skills, and upload certifications.
- **Client Access**: Clients can access the database to find and hire professionals.

2.6 Advertisements

- **Advertisement Posting**: Businesses can post advertisements for their services or products.
- **Ad Management**: Users can manage their advertisements, update content, and track ad performance.

2.7 Contact Us

- **Contact Form**: Users can complete a contact form to reach the support team.

3. Non-Functional Requirements

3.1 Performance

- The app should load within 3 seconds under standard network conditions.
- The app should support at least 10,000 concurrent users without performance degradation.

3.2 Security

- User data should be encrypted in transit and at rest.
- The app should implement secure authentication and authorization mechanisms.

3.3 Usability

- The app should have an intuitive and user-friendly interface.
- The app should be accessible to users with disabilities.

3.4 Compatibility

- The dashboard app should be compatible with the latest versions of major browsers (Chrome, Firefox, Safari, Edge).
- The app should be compatible with both iOS and Android platforms.

4. Technical Requirements

4.1 Platform

- **Web Application**: Built using modern web technologies (HTML, CSS, JavaScript, and a backend framework like Laravel).
- **Mobile Application**: Developed using a cross-platform framework like Flutter.

4.2 Database

- **Database Management System**: Use a scalable RDBMS like MySQL or PostgreSQL.
- **Data Storage**: Implement cloud storage solutions for storing images and documents.

4.3 APIs

- Develop RESTful APIs for communication between the frontend and backend.

5. User Roles and Permissions

5.1 Admin

- Manage users, equipment listings, job postings, and advertisements.
- View and manage bookings, sales, and contracts.
- Access analytics and reports.

5.2 Registered User

- List equipment for hire or sale.
- Post job offers and hire professionals.
- Manage personal profiles and listings.

5.3 Client

- Search and book equipment.
- Apply for jobs and hire professionals.
- Access professional databases and advertisements.

6. Conclusion

This requirement document outlines the key functionalities and technical specifications for the TechWorks App. The app aims to streamline the process of hiring and selling technical equipment, offering technical jobs, and connecting clients with professionals.