**EQUALTRADE: INCLUSIVE WEB PLATFORM ROADMAP**

**1. Research and Planning Phase**

**1.1 Market Research**

* **Target Audience:**
  + **Vendors:** Individuals with intellectual and visual impairments.
  + **Customers:** General public interested in unique artisan products.
* **User Needs Analysis:**
  + Simple, intuitive UI for users with intellectual impairments.
  + Voice commands and audio guidance for visually impaired users.
  + Step-by-step guided selling and transaction support.
* **Competitor Analysis:**
  + Analyze existing e-commerce platforms for accessibility features.
  + Identify gaps in inclusivity and usability.

**1.2 Project Scope and Goals**

* Develop a web platform accessible for users with intellectual and visual impairments.
* Integrate assistive technologies like voice commands, screen readers, and simplified navigation.
* Ensure seamless vendor onboarding and product showcasing.

**2. Design Phase**

**2.1 User Experience (UX) Design**

* **For Intellectual Impairments:**
  + Simple and intuitive UI.
  + Large, clear buttons with icons.
  + Clean layout with minimal text.
  + Step-by-step guided selling process.
* **For Visual Impairments:**
  + Voice commands and audio guidance.
  + Screen reader compatibility.
  + High-contrast mode and font adjustability.
  + Voice assistance for navigation and transactions.

**2.2 User Interface (UI) Design**

* Limited color palette for better focus and contrast.
* Auto-suggestions and drop-down lists for easier input.
* Picture-based navigation with recognizable icons and simple labels.
* High-contrast mode toggle for enhanced readability.

**2.3 Wireframing and Prototyping**

* Create wireframes for key pages:
  + Home Page
  + Vendor Dashboard
  + Product Upload Page
  + Customer Page
  + Payment and Checkout
* Develop interactive prototypes to validate the flow and user interactions.

**3. Development Phase**

**3.1 Front-End Development**

* **Technology Stack:** HTML5, CSS3, JavaScript, React.js
* **Key Features:**
  + Responsive design for accessibility across devices.
  + ARIA (Accessible Rich Internet Applications) attributes for screen readers.
  + Voice command integration for navigation and input.

**3.2 Back-End Development**

* **Technology Stack:** Node.js, Express.js, MongoDB
* **Key Features:**
  + User authentication and profile management.
  + Product management system (upload, edit, delete).
  + Order processing and transaction management.

**3.3 API Integration**

* **Voice Recognition and Guidance:**
  + Speech recognition API (e.g., Google Web Speech API).
  + Text-to-speech API for audio guidance and navigation.
* **Payment Gateway Integration:**
  + Support for multiple payment options, including QR code and NFC payment.

**4. Testing Phase**

**4.1 Accessibility Testing**

* **Tools:** Axe, WAVE, NVDA (NonVisual Desktop Access)
* **Focus Areas:**
  + Compatibility with screen readers.
  + Voice navigation accuracy.
  + High-contrast mode and font scalability.

**4.2 Usability Testing**

* **Participants:**
  + Users with intellectual and visual impairments.
* **Objectives:**
  + Test ease of navigation and product upload.
  + Assess overall user experience and satisfaction.

**4.3 Functional Testing**

* Validate functionalities such as:
  + Sign-up, login, and authentication.
  + Product upload, edit, and delete.
  + Order processing and payment transactions.

**5. Launch Phase**

**5.1 Deployment**

* **Hosting Platform:** Cloud-based hosting (e.g., AWS, Azure).
* **Domain and SSL Certificate:** Secure domain and HTTPS for data protection.

**5.2 Marketing and Outreach**

* **Digital Marketing:** Social media campaigns targeting disability communities and support organizations.
* **Partnerships:** Collaborate with NGOs and organizations supporting disabled artisans.

**5.3 Training and Support**

* Develop user guides and video tutorials.
* Provide ongoing customer support via chatbots and helpdesk.

**6. Maintenance and Updates Phase**

**6.1 Performance Monitoring**

* Continuous monitoring of platform performance and accessibility.
* Regular updates for bug fixes and new feature integration.

**6.2 User Feedback and Improvement**

* Collect feedback from users to improve usability and accessibility.
* Implement requested features to enhance user experience.