```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Kisan AI - Smart Farming Assistant</title>
<script src="https://unpkg.com/react@18/umd/react.development.js"></script>
<script src="https://unpkg.com/react-dom@18/umd/react-dom.development.js"></script>
<script src="https://unpkg.com/@babel/standalone/babel.min.js"></script>
k href="https://cdn.jsdelivr.net/npm/tailwindcss@2.2.19/dist/tailwind.min.css"
rel="stylesheet">
k rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.0/css/all.min.css">
k
href="https://fonts.googleapis.com/css2?family=Inter:wght@300;400;500;600;700&family=O
pen+Sans:wght@400;600;700&display=swap" rel="stylesheet">
<style>
:root {
  --primary-color: #2F855A;
  --secondary-color: #38A169;
  --accent-color: #4299E1;
  --light-bg: #F7FAFC;
  --dark-text: #1A202C;
  --light-text: #718096;
}
body {
  font-family: 'Open Sans', sans-serif;
  background-color: #F8F9FA;
  color: var(--dark-text);
  line-height: 1.6;
}
.professional-typography {
  font-family: 'Inter', sans-serif;
}
.btn-primary {
  background-color: var(--primary-color);
  color: white;
  transition: all 0.3s ease;
}
.btn-primary:hover {
  background-color: #276749;
  transform: translateY(-2px);
  box-shadow: 0 4px 12px rgba(47, 133, 90, 0.2);
}
```

```
.btn-secondary {
  background-color: var(--accent-color);
  color: white;
  transition: all 0.3s ease;
}
.btn-secondary:hover {
  background-color: #3182CE;
  transform: translateY(-2px);
  box-shadow: 0 4px 12px rgba(66, 153, 225, 0.2);
}
.card {
  background: white;
  border-radius: 12px;
  box-shadow: 0 4px 6px rgba(0, 0, 0, 0.05);
  transition: all 0.3s ease;
}
.card:hover {
  transform: translateY(-5px);
  box-shadow: 0 10px 25px rgba(0, 0, 0, 0.1);
}
.feature-card {
  border-left: 4px solid var(--primary-color);
}
.nav-item {
  position: relative;
  transition: all 0.3s ease;
}
.nav-item:hover {
  color: var(--primary-color);
}
.nav-item.active {
  color: var(--primary-color);
  font-weight: 600;
}
.nav-item.active::after {
  content: "";
  position: absolute;
  bottom: -8px;
  left: 0;
```

```
width: 100%;
  height: 3px;
  background-color: var(--primary-color);
  border-radius: 3px;
}
.hero-gradient {
  background: linear-gradient(135deg, rgba(47, 133, 90, 0.1) 0%, rgba(56, 161, 105, 0.1)
100%);
}
.voice-wave {
  animation: voice-wave 0.8s ease-in-out infinite alternate;
}
@keyframes voice-wave {
  0% { height: 8px; opacity: 0.4; }
  100% { height: 24px; opacity: 1; }
}
.loading-spinner {
  animation: spin 1s linear infinite;
}
@keyframes spin {
  0% { transform: rotate(0deg); }
  100% { transform: rotate(360deg); }
}
.slide-in {
  animation: slide-in 0.6s ease-out forwards;
}
@keyframes slide-in {
  from {
     opacity: 0;
     transform: translateY(20px);
  }
  to {
     opacity: 1;
     transform: translateY(0);
  }
}
.pulse {
  animation: pulse 2s infinite;
}
```

```
@keyframes pulse {
  0%, 100% { opacity: 1;}
  50% { opacity: 0.5;}
}
.input-field {
  transition: all 0.3s ease;
  border: 1px solid #E2E8F0;
}
.input-field:focus {
  border-color: var(--primary-color);
  box-shadow: 0 0 0 3px rgba(47, 133, 90, 0.2);
}
.badge {
  font-size: 0.75rem;
  padding: 0.25rem 0.5rem;
  border-radius: 9999px;
}
.badge-new {
  background-color: #F6E05E;
  color: #744210;
}
.badge-live {
  background-color: #F56565;
  color: white;
}
.badge-beta {
  background-color: #4299E1;
  color: white;
}
.tab-button {
  transition: all 0.3s ease;
  padding: 7px 15px;
  border-radius: 7px
}
.tab-button.active {
  background-color: var(--primary-color);
  color: white;
  border-radius: 7px;
  padding: 7px 15px;
}
```

```
.tab-button:not(.active):hover {
  background-color: #EDF2F7;
}
.progress-bar {
  transition: width 0.6s ease;
}
/* New styles for full-page views */
.full-page-view {
  position: fixed;
  top: 0;
  left: 0;
  right: 0;
  bottom: 0;
  background-color: white;
  z-index: 100;
  overflow-y: auto;
  padding: 20px;
}
.back-button {
  display: flex;
  align-items: center;
  color: var(--primary-color);
  margin-bottom: 20px;
  cursor: pointer;
}
.back-button i {
  margin-right: 8px;
}
/* Login page styles */
.login-bg {
  background: linear-gradient(rgba(0, 0, 0, 0.5), rgba(0, 0, 0, 0.5)),
url('https://images.unsplash.com/photo-1500382017468-9049fed747ef?ixlib=rb-4.0.3&ixid=M
3wxMjA3fDB8MHxwaG90by1wYWdlfHx8fGVufDB8fHx8fA%3D%3D&auto=format&fit=crop&
w=2070&q=80');
  background-size: cover;
  background-position: center;
  min-height: 100vh;
}
.login-card {
  backdrop-filter: blur(10px);
```

```
background: rgba(255, 255, 255, 0.85);
}
.feature-icon {
  width: 60px;
  height: 60px;
  border-radius: 16px;
  display: flex;
  align-items: center;
  justify-content: center;
  font-size: 24px;
  margin-bottom: 16px;
}
/* Enhanced container styles */
.app-container {
  max-width: 1200px;
  margin: 0 auto;
  padding: 20px;
  background-color: rgba(255, 255, 255, 0);
  border-radius: 16px;
  box-shadow: 0 10px 30px rgba(0, 0, 0, 0.1);
  transition: all 0.3s ease;
}
.app-container:hover {
  box-shadow: 0 15px 35px rgba(0, 0, 0, 0.15);
}
/* Google button fix */
.google-btn img {
  width: 35px;
  height: 35px;
  margin-right: 8px;
}
.text-gray-500 {
  --tw-text-opacity: 1;
  color: rgb(47 133 90);
  padding-bottom: 7px;
  padding-top: 7px;
  padding-left: 15px;
  padding-right: 15px;
  border-radius: 7px;
}
/* Alert section scrolling */
.alert-section {
  max-height: 400px;
```

```
overflow-y: auto;
  scroll-behavior: smooth;
}
/* Smooth scrolling for alerts */
.alert-section::-webkit-scrollbar {
  width: 8px;
}
.alert-section::-webkit-scrollbar-track {
  background: #f1f1f1;
  border-radius: 10px;
}
.alert-section::-webkit-scrollbar-thumb {
  background: var(--primary-color);
  border-radius: 10px;
}
.alert-section::-webkit-scrollbar-thumb:hover {
  background: #276749;
}
</style>
</head>
<body class="bg-gray-50">
<div id="root"></div>
<script type="text/babel">
  const { useState, useEffect, useRef } = React;
  // Enhanced mock data with more professional structure
  const mockCrops = [
     {
       name: 'Basmati Rice',
       price: '$3,250',
       unit: 'per quintal',
       change: '+8.5%',
       trend: 'up',
       volume: '2,340 tons',
       forecast: 'bullish',
       quality: 'Grade A',
       image: 'rice.png'
     },
       name: 'Wheat (PBW 343)',
       price: '$2,850',
       unit: 'per quintal',
       change: '-2.3%',
```

```
trend: 'down',
       volume: '1,890 tons',
       forecast: 'stable',
       quality: 'Premium',
       image: 'wheat.png'
    },
       name: 'Hybrid Corn',
       price: '$2,100',
       unit: 'per quintal',
       change: '+12.8%',
       trend: 'up',
       volume: '3,120 tons',
       forecast: 'bullish',
       quality: 'Grade A',
       image: 'corn.png'
    },
       name: 'Tomato (Fresh)',
       price: '$65',
       unit: 'per kg',
       change: '+25.4%',
       trend: 'up',
       volume: '890 tons',
       forecast: 'volatile',
       quality: 'Grade A',
       image: 'tomato.png'
    }
  ];
  const mockSchemes = [
       name: 'PM-KISAN Samman Nidhi',
       amount: '$6,000',
       period: 'per year',
       type: 'Central',
       beneficiaries: '11.7 Cr',
       status: 'Active',
       icon: 'hand-holding-usd',
       description: 'Provides income support to all landholding farmers to enable them to
take care of expenses related to agriculture and allied activities as well as domestic needs.',
       eligibility: 'All landholding farmers families, Small and marginal farmers families,
Cultivators',
       documents: 'Aadhaar Card, Land ownership documents, Bank account details'
    },
       name: 'Pradhan Mantri Fasal Bima Yojana',
       amount: '$2,00,000',
```

```
period: 'coverage',
       type: 'Central',
       beneficiaries: '5.5 Cr',
       status: 'Active',
       icon: 'shield-alt',
       description: 'Provides comprehensive insurance cover against failure of the crop thus
helping in stabilising the income of the farmers.',
       eligibility: 'All farmers including sharecroppers and tenant farmers growing notified
crops in notified areas',
       documents: 'Land records, Aadhaar Card, Bank account details'
     },
     {
       name: 'Kisan Credit Card',
       amount: '$3,00,000',
       period: 'limit',
       type: 'Central',
       beneficiaries: '7.3 Cr',
       status: 'Active',
       icon: 'credit-card',
       description: 'Provides adequate and timely credit support from the banking system to
farmers for their cultivation needs.',
       eligibility: 'Individual farmers, Joint borrowers, Tenant farmers, Oral lessees,
Sharecroppers',
       documents: 'Land ownership documents, Identity proof, Address proof, Passport size
photos'
     },
       name: 'Soil Health Card Scheme',
       amount: 'Free Testing',
       period: 'service',
       type: 'Central',
       beneficiaries: '22 Cr',
       status: 'Active'.
       icon: 'flask',
       description: 'Provides information to farmers on nutrient status of their soil along with
recommendations on appropriate dosage of nutrients to be applied for improving soil health
and its fertility.',
       eligibility: 'All farmers across the country.',
       documents: 'Aadhaar Card, Land ownership documents'
     }
  ];
  // Enhanced voice recognition hook
  const useVoiceRecognition = () => {
     const [isListening, setIsListening] = useState(false);
     const [transcript, setTranscript] = useState("");
     const [confidence, setConfidence] = useState(0);
     const recognition = useRef(null);
```

```
useEffect(() => {
     if ('webkitSpeechRecognition' in window) {
        recognition.current = new window.webkitSpeechRecognition();
        recognition.current.continuous = true;
        recognition.current.interimResults = true;
        recognition.current.lang = 'hi-IN';
        recognition.current.onresult = (event) => {
          const transcript = Array.from(event.results)
             .map(result => result[0])
             .map(result => result.transcript)
             .join(");
          setTranscript(transcript);
          if (event.results[event.results.length - 1].isFinal) {
             setConfidence(event.results[event.results.length - 1][0].confidence);
          }
       };
        recognition.current.onend = () => {
          setIsListening(false);
       };
  }, []);
  const startListening = () => {
     if (recognition.current) {
        setIsListening(true);
        recognition.current.start();
     }
  };
  const stopListening = () => {
     if (recognition.current) {
        recognition.current.stop();
        setIsListening(false);
     }
  };
  return { isListening, transcript, confidence, startListening, stopListening };
};
// Login Page Component
const LoginPage = ({ onLoginSuccess }) => {
  const [isLogin, setIsLogin] = useState(true);
  const [email, setEmail] = useState("");
  const [password, setPassword] = useState("");
  const [name, setName] = useState("");
  const [phone, setPhone] = useState("");
```

```
const [errors, setErrors] = useState({});
    // Dummy credentials for demo
    const DEMO_EMAIL = "farmer@demo.com";
    const DEMO PASSWORD = "kisan123";
    const validateLogin = () => {
       const newErrors = {};
       if (!email) newErrors.email = 'Email is required';
       if (!password) newErrors.password = 'Password is required';
       setErrors(newErrors);
       return Object.keys(newErrors).length === 0;
    };
    const validateRegister = () => {
       const newErrors = {};
       if (!name) newErrors.name = 'Name is required';
       if (!email) newErrors.email = 'Email is required';
       if (!phone) newErrors.phone = 'Phone is required';
       if (!password) newErrors.password = 'Password is required';
       setErrors(newErrors);
       return Object.keys(newErrors).length === 0;
    };
    const handleLogin = (e) => {
       e.preventDefault();
       if (validateLogin()) {
         // For demo purposes, accept any credentials but show success only for demo
credentials
         if (email === DEMO EMAIL && password === DEMO PASSWORD) {
            onLoginSuccess({
              name: "Demo Farmer",
              email: DEMO EMAIL,
              phone: "9876543210"
            });
         } else {
            alert("Invalid credentials. For demo, use:\nEmail:
farmer@demo.com\nPassword: kisan123");
         }
       }
    };
    const handleRegister = (e) => {
       e.preventDefault();
       if (validateRegister()) {
         // Simulate registration
         onLoginSuccess({
            name,
```

```
email,
           phone
         });
      }
    };
    const handleGoogleLogin = () => {
      // Simulate Google login
      onLoginSuccess({
         name: "Google User",
         email: "googleuser@gmail.com",
         phone: "9876543210"
      });
    };
    return (
       <div className="login-bg flex items-center justify-center p-4">
         <div className="app-container max-w-5xl w-full grid grid-cols-1 lg:grid-cols-2</p>
gap-8">
           {/* Left side - App Info */}
           <div className="text-white">
              <div className="flex items-center space-x-3 mb-6">
                <div className="w-12 h-12 bg-white bg-opacity-20 rounded-lg flex</pre>
items-center justify-center">
                  <i className="fas fa-seedling text-white text-xl"></i>
                </div>
                <h1 className="text-3xl font-bold">Kisan Al</h1>
              </div>
              <h2 className="text-4xl font-bold mb-6">Your Smart Farming
Companion</h2>
              Al-powered agricultural assistant to maximize
your crop yield and profits
              <div className="grid grid-cols-2 gap-6">
                <div className="bg-white bg-opacity-10 p-6 rounded-xl">
                  <div className="feature-icon bg-green-100 text-green-600">
                     <i className="fas fa-leaf"></i>
                  </div>
                  <h3 className="text-xl font-semibold mb-2">Crop Doctor</h3>
                  Diagnose plant diseases
with AI
                </div>
                <div className="bg-white bg-opacity-10 p-6 rounded-xl">
                  <div className="feature-icon bg-blue-100 text-blue-600">
                     <i className="fas fa-chart-line"></i>
                  </div>
```

```
<h3 className="text-xl font-semibold mb-2">Market Prices</h3>
                 Real time mandi prices
               </div>
               <div className="bg-white bg-opacity-10 p-6 rounded-xl">
                 <div className="feature-icon bg-purple-100 text-purple-600">
                   <i className="fas fa-microphone"></i>
                 </div>
                 <h3 className="text-xl font-semibold mb-2">Voice Assistant</h3>
                 Ask in your local
language
               </div>
               <div className="bg-white bg-opacity-10 p-6 rounded-xl">
                 <div className="feature-icon bg-yellow-100 text-yellow-600">
                   <i className="fas fa-seedling"></i>
                 </div>
                 <h3 className="text-xl font-semibold mb-2">Crop Advisor</h3>
                 Personalized
recommendations
               </div>
             </div>
          </div>
          {/* Right side - Login/Register Form */}
          <div className="login-card rounded-2xl shadow-xl p-8">
             <div className="text-center mb-8">
               <h2 className="text-2xl font-bold text-gray-800">
                 {isLogin? 'Welcome Back': 'Create Account'}
               </h2>
               {isLogin? 'Sign in to continue to Kisan Al': 'Join Kisan Al to access
smart farming tools'}
               </div>
             <but
               onClick={handleGoogleLogin}
               className="google-btn w-full flex items-center justify-center space-x-3"
bg-white border border-gray-300 rounded-lg py-3 px-4 hover:bg-gray-50 transition mb-4"
               <img
src="https://static.vecteezy.com/system/resources/previews/013/948/549/non 2x/google-log
o-on-transparent-white-background-free-vector.jpg" alt="Google" />
               <span>{isLogin ? 'Sign in with Google' : 'Sign up with Google'}</span>
             </button>
             <div className="relative my-6">
```

```
<div className="absolute inset-0 flex items-center">
                    <div className="w-full border-t border-gray-300"></div>
                 </div>
                 <div className="relative flex justify-center text-sm">
                    <span className="px-2 bg-white text-gray-500">Or continue with
email</span>
                 </div>
               </div>
               {isLogin?(
                 <form onSubmit={handleLogin} className="space-y-4">
                    <div>
                      <a href="label"><label</a> htmlFor="email" className="block text-sm font-medium"></a>
text-gray-700 mb-1">Email</label>
                      <input
                        type="email"
                        id="email"
                        value={email}
                        onChange={(e) => setEmail(e.target.value)}
                        className={`w-full input-field py-2 px-3 rounded-lg ${errors.email?
'border-red-500': "}`}
                        placeholder="farmer@example.com"
                      />
                      {errors.email && <p className="text-red-500 text-xs"
mt-1">{errors.email}}
                    </div>
                    <div>
                      <a href="label"><label</a> htmlFor="password" className="block text-sm font-medium"
text-gray-700 mb-1">Password</label>
                      <input
                        type="password"
                        id="password"
                        value={password}
                        onChange={(e) => setPassword(e.target.value)}
                        className={`w-full input-field py-2 px-3 rounded-lg
${errors.password?'border-red-500':"}`}
                        placeholder="•••••"
                      />
                      {errors.password && <p className="text-red-500 text-xs"
mt-1">{errors.password}}
                    </div>
                   <div className="flex items-center justify-between">
                      <div className="flex items-center">
                        <input
                           id="remember-me"
                           name="remember-me"
```

```
type="checkbox"
                           className="h-4 w-4 text-green-600 focus:ring-green-600
border-gray-300 rounded"
                         <a href="remember-me" className="ml-2 block text-sm">remember-me</a> className="ml-2 block text-sm</a>
text-gray-700">
                           Remember me
                         </label>
                      </div>
                      <a href="#" className="text-sm text-green-600"
hover:text-green-500">
                         Forgot password?
                      </a>
                    </div>
                    <button type="submit" className="btn-primary w-full py-3 px-4
rounded-lg">
                      Sign In
                    </button>
                    <div className="text-center text-sm text-gray-600">
                      Don't have an account?{' '}
                      <but
                         type="button"
                         onClick={() => setIsLogin(false)}
                         className="text-green-600 font-medium ml-1"
                         Sign Up
                      </button>
                    </div>
                 </form>
               ):(
                 <form onSubmit={handleRegister} className="space-y-4">
                    <div>
                      <label htmlFor="name" className="block text-sm font-medium"
text-gray-700 mb-1">Full Name</label>
                      <input
                         type="text"
                         id="name"
                         value={name}
                         onChange={(e) => setName(e.target.value)}
                         className={`w-full input-field py-2 px-3 rounded-lg ${errors.name
? 'border-red-500' : "}`}
                         placeholder="Farmer Name"
                      />
```

```
{errors.name && <p className="text-red-500 text-xs"
mt-1">{errors.name}}
                   </div>
                   <div>
                      <a href="label"><label</a> htmlFor="email" className="block text-sm font-medium
text-gray-700 mb-1">Email</label>
                      <input
                        type="email"
                        id="email"
                        value={email}
                        onChange={(e) => setEmail(e.target.value)}
                        className={`w-full input-field py-2 px-3 rounded-lg ${errors.email?
'border-red-500': "}`}
                        placeholder="farmer@example.com"
                      />
                      {errors.email && <p className="text-red-500 text-xs"
mt-1">{errors.email}}
                   </div>
                   <div>
                      <label htmlFor="phone" className="block text-sm font-medium</pre>
text-gray-700 mb-1">Phone Number</label>
                      <input
                        type="tel"
                        id="phone"
                        value={phone}
                        onChange={(e) => setPhone(e.target.value)}
                        className={`w-full input-field py-2 px-3 rounded-lg ${errors.phone
? 'border-red-500' : "}`}
                        placeholder="+91 9876543210"
                      />
                      {errors.phone && <p className="text-red-500 text-xs"
mt-1">{errors.phone}}
                   </div>
                   <div>
                      <label htmlFor="password" className="block text-sm font-medium"</pre>
text-gray-700 mb-1">Password</label>
                      <input
                        type="password"
                        id="password"
                        value={password}
                        onChange={(e) => setPassword(e.target.value)}
                        className={`w-full input-field py-2 px-3 rounded-lg
${errors.password?'border-red-500':"}`}
                        placeholder=" ********
                      />
```

```
{errors.password && <p className="text-red-500 text-xs"
mt-1">{errors.password}}
                    </div>
                     <button type="submit" className="btn-primary w-full py-3 px-4</p>
rounded-lg">
                       Create Account
                     </button>
                    <div className="text-center text-sm text-gray-600">
                       Already have an account?{' '}
                       <but
                         type="button"
                         onClick={() => setIsLogin(true)}
                          className="text-green-600 font-medium ml-1"
                       >
                          Sign In
                       </button>
                    </div>
                  </form>
               )}
             </div>
          </div>
       </div>
    );
  };
  // Professional Navigation Component
  const Navigation = ({ activeTab, setActiveTab, onLogout }) => {
     const [isScrolled, setIsScrolled] = useState(false);
     useEffect(() => {
       const handleScroll = () => {
          setIsScrolled(window.scrollY > 20);
       };
       window.addEventListener('scroll', handleScroll);
       return () => window.removeEventListener('scroll', handleScroll);
     }, []);
     const tabs = [
       { id: 'dashboard', label: 'Dashboard', icon: 'chart-pie', badge: null },
       { id: 'crop-disease', label: 'Crop Doctor', icon: 'leaf', badge: 'Al' },
       { id: 'market', label: 'Market Prices', icon: 'chart-line', badge: 'Live' },
       { id: 'voice', label: 'Voice Assistant', icon: 'microphone', badge: 'Beta' },
       { id: 'recommendations', label: 'Crop Advisor', icon: 'seedling', badge: null },
       { id: 'schemes', label: 'Govt Schemes', icon: 'file-invoice-dollar', badge: null }
    ];
```

```
return (
       <header className={`sticky top-0 z-50 bg-white shadow-sm transition-all</pre>
duration-300 ${isScrolled ? 'py-2' : 'py-4'}`}>
          <div className="container mx-auto px-4">
            <div className="flex items-center justify-between">
              <div className="flex items-center space-x-2">
                 <div className="w-10 h-10 bg-green-600 rounded-lg flex items-center</p>
justify-center">
                    <i className="fas fa-seedling text-white"></i>
                 </div>
                 <h1 className="text-xl font-bold text-gray-800">Kisan Al</h1>
              </div>
              <nav className="hidden md:flex items-center space-x-8">
                 \{tabs.map((tab) => (
                    <but
                      key={tab.id}
                      onClick={() => setActiveTab(tab.id)}
                      className={`nav-item ${activeTab === tab.id ? 'active' :
'text-gray-600'}`}
                      <i className={`fas fa-${tab.icon} mr-2`}></i>
                      {tab.label}
                      {tab.badge && (
                         <span className={`badge badge-${tab.badge.toLowerCase()}</pre>
ml-2`}>
                           {tab.badge}
                        </span>
                      )}
                    </button>
                 ))}
              </nav>
              <div className="flex items-center space-x-4">
                 <but
                   onClick={onLogout}
                   className="hidden md:block bg-gray-100 text-gray-800 px-4 py-2
rounded-lg hover:bg-gray-200 transition"
                   <i className="fas fa-sign-out-alt mr-2"></i>
                   Logout
                 </button>
                 <button className="md:hidden text-gray-600">
                    <i className="fas fa-bars text-xl"></i>
                 </button>
              </div>
            </div>
          </div>
```

```
</header>
    );
  };
  // Enhanced Dashboard Component
  const Dashboard = ({ setActiveTab }) => {
    const [currentTime, setCurrentTime] = useState(new Date());
    const [weatherData, setWeatherData] = useState({
       temp: 28,
       condition: 'sunny',
       humidity: 65,
       windSpeed: 12
    });
    const [reminders, setReminders] = useState([]);
    useEffect(() => {
       const timer = setInterval(() => setCurrentTime(new Date()), 1000);
       return () => clearInterval(timer);
    }, []);
    const handleAddReminder = (reminderText) => {
       if (reminderText.trim()) {
         setReminders([...reminders, {
           id: Date.now(),
           text: reminderText,
            date: new Date().toLocaleDateString()
         }]);
      }
    };
    return (
       <div className="container mx-auto px-4 py-8 space-y-8 slide-in">
         {/* Hero Section */}
         <div className="hero-gradient rounded-2xl p-8 text-center">
            <h1 className="text-3xl md:text-4xl font-bold text-gray-800 mb-4">
              Welcome to Your Smart Farming Assistant
            </h1>
            Get Al-powered insights to maximize your crop yield and profits
            <div className="flex flex-wrap items-center justify-center gap-4 mt-6">
              <div className="flex items-center bg-white px-4 py-2 rounded-lg"</pre>
shadow-sm">
                <i className="fas fa-map-marker-alt text-green-600 mr-2"></i>
                <span>Tirupati, Andhra Pradesh</span>
              </div>
```

```
<div className="flex items-center bg-white px-4 py-2 rounded-lg</pre>
shadow-sm">
                  <i className="fas fa-clock text-green-600 mr-2"></i>
                  <span>{currentTime.toLocaleTimeString()}</span>
               </div>
               <div className="flex items-center bg-white px-4 py-2 rounded-lg
shadow-sm">
                  <i className="fas fa-calendar-day text-green-600 mr-2"></i>
                  <span>{currentTime.toLocaleDateString()}</span>
               </div>
             </div>
          </div>
          {/* Feature Cards */}
          <div className="grid grid-cols-1 md:grid-cols-2 lg:grid-cols-4 gap-6">
            ]}
               {
                  title: 'Crop Doctor',
                  desc: 'Diagnose plant diseases with AI',
                  icon: 'leaf',
                  color: 'text-green-500',
                  stats: '95% Accuracy',
                  onClick: () => setActiveTab('crop-disease')
               },
               {
                  title: 'Market Prices',
                  desc: 'Real-time prices from 500+ markets',
                  icon: 'chart-line',
                  color: 'text-blue-500',
                  stats: 'Live Updates',
                  onClick: () => setActiveTab('market')
               },
                  title: 'Voice Assistant',
                  desc: 'Ask questions in your language',
                  icon: 'microphone',
                  color: 'text-purple-500',
                  stats: '12 Languages',
                  onClick: () => setActiveTab('voice')
               },
                  title: 'Crop Advisor',
                  desc: 'Personalized planting advice',
                  icon: 'seedling',
                  color: 'text-yellow-500',
                  stats: 'ML Powered',
                  onClick: () => setActiveTab('recommendations')
               }
```

```
].map((card, index) => (
           <but
             key={index}
             onClick={card.onClick}
             className="text-left"
             <div className="card feature-card p-6">
               <div className={`text-3xl mb-4 ${card.color}`}>
                 <i className={`fas fa-${card.icon}`}></i>
               </div>
               <h3 className="text-lg font-semibold text-gray-800"
mb-2">{card.title}</h3>
               {card.desc}
               <span className="text-xs font-medium bg-gray-100 text-gray-700 px-2"</pre>
py-1 rounded-full">
                {card.stats}
              </span>
             </div>
           </button>
         ))}
       </div>
       {/* Market Overview */}
       <div className="bg-white rounded-2xl shadow-sm p-6">
         <div className="flex flex-wrap items-center justify-between mb-6">
           <h3 className="text-xl font-semibold text-gray-800 flex items-center">
             <i className="fas fa-chart-bar text-blue-500 mr-3"></i>
             Today's Market Prices
           </h3>
           <but
             onClick={() => setActiveTab('market')}
             className="text-green-600 text-sm hover:underline"
           >
             View All Market Data
           </button>
         </div>
         <div className="overflow-x-auto">
           <thead className="bg-gray-50">
               uppercase tracking-wider">Crop
                uppercase tracking-wider">Quality
                uppercase tracking-wider">Price
```

```
uppercase tracking-wider">Change
              uppercase tracking-wider">Volume
              uppercase tracking-wider">Forecast
             </thead>
           {mockCrops.map((crop, index) => (
              <div className="flex items-center">
                   <div className="flex-shrink-0 h-10 w-10 bg-green-100</pre>
rounded-lg flex items-center justify-center">
                     <i className="fas fa-seedling text-green-600"></i>
                   </div>
                   <div className="ml-4">
                     <div className="text-sm font-medium"
text-gray-900">{crop.name}</div>
                   </div>
                  </div>
                <span className="px-2 py-1 text-xs rounded-full bg-blue-100"</pre>
text-blue-800">{crop.quality}</span>
                <div className="text-sm font-semibold</pre>
text-gray-900">{crop.price}</div>
                  <div className="text-xs text-gray-500">{crop.unit}</div>
                <span className={`flex items-center ${crop.trend === 'up' ?}</pre>
'text-green-600' : 'text-red-600'}`}>
                   <i className={`fas ${crop.trend === 'up' ? 'fa-arrow-up' :</pre>
'fa-arrow-down'} mr-1`}></i>
                   {crop.change}
                  </span>
                <td className="px-6 py-4 whitespace-nowrap text-sm"
text-gray-500">
                  {crop.volume}
                <span className={`px-2 py-1 text-xs rounded-full font-medium</pre>
${
                   crop.forecast === 'bullish' ? 'bg-green-100 text-green-800' :
```

```
crop.forecast === 'stable' ? 'bg-blue-100 text-blue-800' :
'bg-yellow-100 text-yellow-800'
                            {crop.forecast}
                         </span>
                       ))}
                </div>
         </div>
         {/* Weather & Insights */}
         <div className="grid grid-cols-1 lg:grid-cols-2 gap-6">
           {/* Weather Card */}
           <div className="bg-white rounded-2xl shadow-sm p-6">
              <h3 className="text-xl font-semibold text-gray-800 flex items-center mb-4">
                <i className="fas fa-cloud-sun text-yellow-500 mr-3"></i>
                Weather Forecast
              </h3>
              <div className="grid grid-cols-3 gap-4">
                <div className="bg-green-50 rounded-lg p-4 text-center">
                  <div className="text-3xl font-bold text-gray-800</pre>
mb-1">{weatherData.temp}°C</div>
                  <div className="text-sm text-gray-600">Temperature</div>
                </div>
                <div className="bg-blue-50 rounded-lg p-4 text-center">
                  <div className="text-3xl font-bold text-gray-800</pre>
mb-1">{weatherData.humidity}%</div>
                  <div className="text-sm text-gray-600">Humidity</div>
                </div>
                <div className="bg-purple-50 rounded-lg p-4 text-center">
                  <div className="text-3xl font-bold text-gray-800</pre>
mb-1">{weatherData.windSpeed} km/h</div>
                  <div className="text-sm text-gray-600">Wind Speed</div>
                </div>
              </div>
              <div className="mt-4 pt-4 border-t border-gray-100">
                <i className="fas fa-check-circle mr-2"></i>
                  Good weather for field operations today
                </div>
```

```
</div>
           {/* Al Insights */}
           <div className="bg-white rounded-2xl shadow-sm p-6">
             <h3 className="text-xl font-semibold text-gray-800 flex items-center mb-4">
               <i className="fas fa-lightbulb text-green-500 mr-3"></i>
               Al Farming Insights
             </h3>
             <div className="space-y-4">
               <div className="flex items-start">
                  <div className="flex-shrink-0 mt-1">
                    <div className="w-2 h-2 bg-green-500 rounded-full pulse"></div>
                  </div>
                  <div className="ml-3">
                    Optimal planting time for wheat in
next 7 days
                  </div>
               </div>
               <div className="flex items-start">
                  <div className="flex-shrink-0 mt-1">
                    <div className="w-2 h-2 bg-blue-500 rounded-full pulse"></div>
                  </div>
                  <div className="ml-3">
                    Rice prices expected to rise by 12%
this month
                  </div>
               </div>
               <div className="flex items-start">
                  <div className="flex-shrink-0 mt-1">
                    <div className="w-2 h-2 bg-yellow-500 rounded-full pulse"></div>
                  </div>
                  <div className="ml-3">
                    Apply for PM-KISAN scheme -
deadline in 15 days
                  </div>
               </div>
             </div>
             <div className="mt-4 pt-4 border-t border-gray-100">
               <but
                 onClick={() => setActiveTab('schemes')}
                 className="btn-primary px-4 py-2 rounded-lg"
                  <i className="fas fa-file-invoice-dollar mr-2"></i>
                 View Govt Schemes
```

```
</button>
              </div>
           </div>
         </div>
         {/* Reminders List */}
         {reminders.length > 0 && (
           <div className="bg-white rounded-2xl shadow-sm p-6">
              <h3 className="text-xl font-semibold text-gray-800 flex items-center mb-4">
                <i className="fas fa-bell text-yellow-500 mr-3"></i>
                Your Reminders
              </h3>
              <div className="space-y-3">
                {reminders.map((reminder) => (
                  <div key={reminder.id} className="border border-gray-200 rounded-lg</pre>
p-4 flex justify-between items-center">
                     <div>
                       {reminder.text}
                       {reminder.date}
                     </div>
                     <but
                       onClick={() => setReminders(reminders.filter(r => r.id !==
reminder.id))}
                       className="text-red-500 hover:text-red-700"
                       <i className="fas fa-trash"></i>
                     </button>
                  </div>
                ))}
              </div>
           </div>
         )}
       </div>
    );
  };
  // Enhanced Crop Disease Detection Component
  const CropDiseaseDetection = ({ setActiveTab }) => {
    const [selectedImage, setSelectedImage] = useState(null);
    const [isAnalyzing, setIsAnalyzing] = useState(false);
    const [results, setResults] = useState(null);
    const [confidence, setConfidence] = useState(0);
    const fileInputRef = useRef(null);
    const handleImageUpload = (event) => {
       const file = event.target.files[0];
       if (file) {
```

```
const reader = new FileReader();
     reader.onload = (e) => {
       setSelectedImage(e.target.result);
    };
     reader.readAsDataURL(file);
  }
};
const analyzelmage = () => {
  setIsAnalyzing(true);
  setResults(null);
  // Simulate AI analysis
  setTimeout(() => {
     const mockResults = [
       {
         disease: "Leaf Blight",
         probability: 87,
         severity: "Moderate",
         treatment: "Apply copper-based fungicide within 24 hours",
         prevention: "Ensure proper drainage and avoid overhead watering"
       },
         disease: "Healthy Plant",
         probability: 13,
         severity: "None",
         treatment: "Continue regular care routine",
         prevention: "Maintain current practices"
       }
    ];
     setResults(mockResults);
     setConfidence(87);
     setIsAnalyzing(false);
  }, 3000);
};
return (
  <div className="container mx-auto px-4 py-8 space-y-8 slide-in">
     <div className="back-button" onClick={() => setActiveTab('dashboard')}>
       <i className="fas fa-arrow-left"></i>
       <span>Back to Dashboard</span>
     </div>
     <div className="text-center">
       <h2 className="text-2xl md:text-3xl font-bold text-gray-800 mb-2">
         Al Crop Disease Detection
       </h2>
```

```
Upload a photo of your crop and get instant diagnosis with treatment
recommendations
          </div>
        <div className="grid grid-cols-1 lg:grid-cols-2 gap-8">
          {/* Image Upload Section */}
          <div className="bg-white rounded-2xl shadow-sm p-6">
             <h3 className="text-lg font-semibold text-gray-800 mb-4 flex items-center">
               <i className="fas fa-camera text-green-500 mr-3"></i>
               Upload Crop Image
             </h3>
             <div
               className="border-2 border-dashed border-gray-300 rounded-xl p-8
text-center cursor-pointer transition hover:border-green-500 hover:bg-green-50"
               onClick={() => fileInputRef.current?.click()}
               {selectedImage?(
                 <div className="space-y-4">
                   <ima
                     src={selectedImage}
                     alt="Uploaded crop"
                     className="w-full h-64 object-contain rounded-lg"
                   />
                   Image uploaded
successfully
                 </div>
               ):(
                 <div className="space-y-4">
                   <div className="w-16 h-16 bg-green-100 rounded-2xl flex</pre>
items-center justify-center mx-auto">
                     <i className="fas fa-plus text-green-500 text-2xl"></i>
                   </div>
                   <div>
                     Click to upload
crop image
                     Supports JPG, PNG up to
10MB
                   </div>
                 </div>
               )}
             </div>
             <input
               ref={fileInputRef}
               type="file"
               accept="image/*"
```

```
onChange={handleImageUpload}
                 className="hidden"
              />
              {selectedImage && (
                 <div className="flex space-x-3 mt-4">
                   <but
                     onClick={() => fileInputRef.current?.click()}
                     className="flex-1 bg-gray-100 text-gray-800 py-3 px-6 rounded-lg
font-medium hover:bg-gray-200 transition"
                      <i className="fas fa-sync-alt mr-2"></i>
                      Change Image
                   </button>
                   <button
                     onClick={analyzeImage}
                     disabled={isAnalyzing}
                      className="flex-1 btn-primary py-3 px-6 rounded-lg font-medium
disabled:opacity-70"
                      {isAnalyzing?(
                        <>
                           <i className="fas fa-spinner fa-spin mr-2"></i>
                          Analyzing...
                        </>
                     ):(
                        <>
                           <i className="fas fa-search mr-2"></i>
                          Analyze
                        </>
                      )}
                   </button>
                 </div>
              )}
            </div>
            {/* Results Section */}
            <div className="bg-white rounded-2xl shadow-sm p-6">
              <h3 className="text-lg font-semibold text-gray-800 mb-4 flex items-center">
                 <i className="fas fa-chart-pie text-blue-500 mr-3"></i>
                 Analysis Results
              </h3>
              {isAnalyzing && (
                 <div className="space-y-4">
                   <div className="flex items-center space-x-3">
                      <div className="w-8 h-8 border-2 border-blue-500</pre>
border-t-transparent rounded-full animate-spin"></div>
```

```
<span className="text-gray-600">AI is analyzing your crop
image...</span>
                   </div>
                   <div className="space-y-3">
                     \{[1, 2, 3].map((i) => (
                        <div key={i} className="h-4 bg-gray-200 rounded-lg</pre>
animate-pulse"></div>
                     ))}
                   </div>
                 </div>
              )}
              {results && !isAnalyzing && (
                 <div className="space-y-6">
                   <div className="bg-blue-50 rounded-xl p-4">
                     <div className="flex items-center justify-between mb-3">
                        <span className="text-gray-700 font-medium">Confidence
Level</span>
                        <span className="text-green-600"</pre>
font-bold">{confidence}%</span>
                     </div>
                     <div className="w-full bg-gray-200 rounded-full h-2">
                          className="bg-green-500 h-2 rounded-full"
                          style={{ width: `${confidence}%` }}
                        ></div>
                     </div>
                   </div>
                   <div className="space-y-4">
                     {results.map((result, index) => (
                        <div key={index} className="border border-gray-200 rounded-xl</pre>
p-4">
                          <div className="flex items-start justify-between mb-3">
                             <div>
                               <h4 className="text-gray-800"
font-semibold">{result.disease}</h4>
                               Probability:
{result.probability}%
                             </div>
                             <div className={`px-3 py-1 rounded-full text-xs font-medium</pre>
${
                               result.severity === 'None' ? 'bg-green-100 text-green-800' :
                               result.severity === 'Moderate' ? 'bg-yellow-100
text-yellow-800':
                               'bg-red-100 text-red-800'
                            }`}>
                               {result.severity}
```

```
</div>
                           </div>
                           <div className="space-y-2">
                              <div>
                                <span className="text-gray-700 text-sm</pre>
font-medium">Treatment: </span>
                                <span className="text-gray-600</pre>
text-sm">{result.treatment}</span>
                              </div>
                              <div>
                                <span className="text-gray-700 text-sm</pre>
font-medium">Prevention: </span>
                                <span className="text-gray-600</pre>
text-sm">{result.prevention}</span>
                              </div>
                           </div>
                        </div>
                      ))}
                   </div>
                 </div>
               )}
               {!selectedImage && !isAnalyzing && (
                 <div className="text-center py-12">
                    <div className="w-16 h-16 bg-gray-100 rounded-2xl flex items-center</p>
justify-center mx-auto mb-4">
                      <i className="fas fa-microscope text-gray-400 text-2xl"></i>
                    </div>
                    Upload an image to see AI analysis
results
                 </div>
               )}
            </div>
          </div>
       </div>
     );
  };
  // Market Intelligence Component
  const MarketIntelligence = ({ setActiveTab }) => {
     const [selectedMarket, setSelectedMarket] = useState('all');
     const [priceAlerts, setPriceAlerts] = useState([]);
     const [showAlertForm, setShowAlertForm] = useState(false);
     const [alertCrop, setAlertCrop] = useState("");
     const [alertPrice, setAlertPrice] = useState("");
     const [alertCondition, setAlertCondition] = useState('above');
     const alertSectionRef = useRef(null);
```

```
const markets = [
  { id: 'all', name: 'All Markets', count: 500 },
  { id: 'ap', name: 'Andhra Pradesh', count: 45 },
  { id: 'tn', name: 'Tamil Nadu', count: 38 },
  { id: 'ka', name: 'Karnataka', count: 42 },
  { id: 'mh', name: 'Maharashtra', count: 55 }
];
const handleSetAlert = (crop) => {
  setAlertCrop(crop.name);
  setAlertPrice(crop.price.replace('$', ").replace(',', "));
  setShowAlertForm(true);
  // Scroll to alert section
  setTimeout(() => {
     alertSectionRef.current?.scrollIntoView({ behavior: 'smooth' });
  }, 100);
};
const handleSaveAlert = () => {
  if (alertCrop && alertPrice) {
     setPriceAlerts([...priceAlerts, {
       id: Date.now(),
       crop: alertCrop,
       price: alertPrice,
       condition: alertCondition
     setShowAlertForm(false);
     setAlertCrop("");
     setAlertPrice("");
  }
};
return (
  <div className="container mx-auto px-4 py-8 space-y-8 slide-in">
     <div className="back-button" onClick={() => setActiveTab('dashboard')}>
       <i className="fas fa-arrow-left"></i>
       <span>Back to Dashboard</span>
     </div>
     <div className="text-center">
       <h2 className="text-2xl md:text-3xl font-bold text-gray-800 mb-2">
          Market Intelligence
       </h2>
       Real-time market data from 500+ mandis across India with price predictions
       </div>
```

```
{/* Market Filters */}
         <div className="bg-white rounded-2xl shadow-sm p-6">
            <div className="flex flex-wrap gap-2">
              {markets.map((market) => (
                <button
                   key={market.id}
                   onClick={() => setSelectedMarket(market.id)}
                   className={`tab-button ${selectedMarket === market.id ? 'active' : "}`}
                   {market.name}
                   <span className="ml-1 text-xs opacity-70">({market.count})/span>
                </button>
              ))}
            </div>
         </div>
         {/* Price Cards */}
         <div className="grid grid-cols-1 md:grid-cols-2 gap-6">
            {mockCrops.map((crop, index) => (
              <div key={index} className="card bg-white rounded-2xl shadow-sm p-6">
                <div className="flex items-center justify-between mb-4">
                   <div className="flex items-center space-x-4">
                     <div className="w-12 h-12 bg-green-100 rounded-xl flex</pre>
items-center justify-center">
                        <i className="fas fa-seedling text-green-600"></i>
                     </div>
                     <div>
                        <h3 className="text-gray-800 font-semibold">{crop.name}</h3>
                        {crop.quality}
                     </div>
                   </div>
                   <div className="text-right">
                     <div className="text-xl font-bold text-gray-800">{crop.price}</div>
                     <div className="text-gray-500 text-sm">{crop.unit}</div>
                   </div>
                </div>
                <div className="space-y-3">
                   <div className="flex items-center justify-between">
                     <span className="text-gray-600 text-sm">24h Change</span>
                     <span className={`font-semibold ${crop.trend === 'up' ?</pre>
'text-green-600': 'text-red-600'}`}>
                       {crop.change}
                     </span>
                   </div>
                   <div className="flex items-center justify-between">
                     <span className="text-gray-600 text-sm">Volume</span>
```

```
<span className="text-gray-800</pre>
font-medium">{crop.volume}</span>
                    </div>
                    <div className="flex items-center justify-between">
                      <span className="text-gray-600 text-sm">Forecast</span>
                      <span className={`px-2 py-1 rounded-full text-xs font-medium ${</pre>
                         crop.forecast === 'bullish' ? 'bg-green-100 text-green-800' :
                         crop.forecast === 'stable' ? 'bg-blue-100 text-blue-800' :
'bg-yellow-100 text-yellow-800'
                         {crop.forecast}
                      </span>
                    </div>
                 </div>
                 <div className="mt-4 pt-4 border-t border-gray-100">
                   <button
                      onClick={() => handleSetAlert(crop)}
                      className="btn-secondary w-full py-2 px-4 rounded-lg"
                      <i className="fas fa-bell mr-2"></i>
                      Set Price Alert
                    </button>
                 </div>
               </div>
            ))}
          </div>
         {/* Price Alerts Section */}
          <div className="bg-white rounded-2xl shadow-sm p-6" ref={alertSectionRef}>
            <div className="flex justify-between items-center mb-4">
               <h3 className="text-xl font-semibold text-gray-800 flex items-center">
                 <i className="fas fa-bell text-yellow-500 mr-3"></i>
                 Your Price Alerts
               </h3>
               <but
                 onClick={() => setShowAlertForm(true)}
                 className="btn-primary px-4 py-2 rounded-lg"
               >
                 <i className="fas fa-plus mr-2"></i>
                 Add New Alert
               </button>
            </div>
            {priceAlerts.length > 0 ? (
               <div className="alert-section space-y-3">
                 {priceAlerts.map((alert) => (
```

```
<div key={alert.id} className="border border-gray-200 rounded-lg p-4</pre>
flex justify-between items-center">
                    <div>
                      {alert.crop}
                      Alert when price goes {alert.condition} ${alert.price}
                      </div>
                    <but
                      onClick={() => setPriceAlerts(priceAlerts.filter(a => a.id !==
alert.id))}
                      className="text-red-500 hover:text-red-700"
                      <i className="fas fa-trash"></i>
                    </button>
                  </div>
               ))}
             </div>
           ):(
             <div className="text-center py-8">
               <div className="w-16 h-16 bg-gray-100 rounded-2xl flex items-center</p>
justify-center mx-auto mb-4">
                  <i className="fas fa-bell-slash text-gray-400 text-2xl"></i>
               No price alerts set up yet
             </div>
           )}
         </div>
         {/* Alert Form */}
         {showAlertForm && (
           <div className="bg-white rounded-2xl shadow-sm p-6">
             <div className="flex justify-between items-center mb-4">
               <h3 className="text-xl font-semibold text-gray-800">Set Price Alert</h3>
               <but
                 onClick={() => {
                    setShowAlertForm(false);
                    setAlertCrop("");
                    setAlertPrice("");
                 }}
                 className="text-gray-500 hover:text-gray-700"
                  <i className="fas fa-times"></i>
               </button>
             </div>
             <div className="space-y-4">
               <div>
```

```
<a href="labelclassName="block text-sm">labelclassName="block text-sm</a> font-medium text-gray-700
mb-1">Crop</label>
                     <input
                       type="text"
                       value={alertCrop}
                       onChange={(e) => setAlertCrop(e.target.value)}
                       className="w-full input-field py-2 px-3 rounded-lg"
                       placeholder="Enter crop name"
                    />
                  </div>
                  <div>
                     <a href="labelclassName="block text-sm">labelclassName="block text-sm</a> font-medium text-gray-700
mb-1">Alert When Price</label>
                    <div className="flex items-center space-x-3">
                       <select
                          value={alertCondition}
                          onChange={(e) => setAlertCondition(e.target.value)}
                          className="input-field py-2 px-3 rounded-lg"
                       >
                          <option value="above">Goes Above</option>
                          <option value="below">Goes Below
                       </select>
                       <div className="relative flex-1">
                          <span className="absolute left-3 top-1/2 transform</pre>
-translate-y-1/2 text-gray-500">$</span>
                          <input
                            type="number"
                            value={alertPrice}
                            onChange={(e) => setAlertPrice(e.target.value)}
                            className="w-full input-field py-2 px-3 pl-8 rounded-lg"
                            placeholder="Enter price"
                          />
                       </div>
                     </div>
                  </div>
                  <div className="flex justify-end space-x-3 mt-6">
                     <but
                       onClick={() => {
                          setShowAlertForm(false);
                          setAlertCrop("");
                          setAlertPrice("");
                       }}
                       className="bg-gray-100 text-gray-800 px-4 py-2 rounded-lg
hover:bg-gray-200 transition"
                       Cancel
```

```
</button>
                    <but
                      onClick={handleSaveAlert}
                      className="btn-primary px-4 py-2 rounded-lg"
                      Save Alert
                    </button>
                 </div>
               </div>
            </div>
          )}
       </div>
    );
  };
  // Voice Assistant Component
  const VoiceAssistant = ({ setActiveTab }) => {
    const { isListening, transcript, startListening, stopListening } = useVoiceRecognition();
    const [messages, setMessages] = useState([
       {
          type: 'assistant',
          content: 'Welcome to Your Smart Farming Assistant. Get Al-powered insights to
maximize your crop yield and profits!',
          timestamp: new Date()
       }
    ]);
     const [isProcessing, setIsProcessing] = useState(false);
    const handleSendMessage = (message) => {
       if (!message.trim()) return;
       const userMessage = {
          type: 'user',
          content: message,
          timestamp: new Date()
       };
       setMessages(prev => [...prev, userMessage]);
       setIsProcessing(true);
       // Simulate AI response
       setTimeout(() => {
          const responses = [
            'आपकी फसल के लिए यह एक बह्त अच्छा समय है। मौसम अनुकूल है और बाजार की स्थिति
भी अच्छी है।',
            'वर्तमान मौसम की स्थिति के अन्सार, आपको सिंचाई की आवृत्ति बढ़ानी चाहिए।',
            'बाजार की जानकारी के अनुसार, चावल की कीमतें अगले महीने 8-10% बढ़ सकती हैं।',
            'आपकी फसल में कोई रोग के लक्षण नजर नहीं आ रहे। नियमित देखभाल जारी रखें।'
```

```
const aiResponse = {
           type: 'assistant',
           content: responses[Math.floor(Math.random() * responses.length)],
           timestamp: new Date()
         };
         setMessages(prev => [...prev, aiResponse]);
         setIsProcessing(false);
      }, 2000):
    };
    useEffect(() => {
       if (transcript) {
         handleSendMessage(transcript);
    }, [transcript]);
    return (
       <div className="container mx-auto px-4 py-8 space-y-8 slide-in">
         <div className="back-button" onClick={() => setActiveTab('dashboard')}>
           <i className="fas fa-arrow-left"></i>
           <span>Back to Dashboard
         </div>
         <div className="text-center">
           <h2 className="text-2xl md:text-3xl font-bold text-gray-800 mb-2">
              Voice Al Assistant
           </h2>
           Speak naturally in Hindi, English, or Telugu - Your Al farming expert
understands them all
           </div>
         <div className="bg-white rounded-2xl shadow-sm p-6 max-w-4xl mx-auto">
           {/* Chat Messages */}
           <div className="h-96 overflow-y-auto mb-6 p-4 bg-gray-50 rounded-lg">
              <div className="space-y-4">
                {messages.map((message, index) => (
                  <div
                    key={index}
                    className={`flex ${message.type === 'user' ? 'justify-end' :
'justify-start'}`}
                     <div
                       className={`max-w-xs lg:max-w-md px-4 py-3 rounded-2xl ${
```

];

```
message.type === 'user'
                             ? 'bg-blue-500 text-white'
                             : 'bg-gray-200 text-gray-800'
                       }`}
                        {message.content}
                        {message.timestamp.toLocaleTimeString()}
                        </div>
                   </div>
                ))}
                {isProcessing && (
                   <div className="flex justify-start">
                     <div className="bg-gray-200 text-gray-800 px-4 py-3 rounded-2xl">
                        <div className="flex items-center space-x-2">
                          <div className="w-2 h-2 bg-gray-600 rounded-full</pre>
animate-pulse"></div>
                          <div className="w-2 h-2 bg-gray-600 rounded-full</pre>
animate-pulse" style={{ animationDelay: '0.2s' }}></div>
                          <div className="w-2 h-2 bg-gray-600 rounded-full</pre>
animate-pulse" style={{ animationDelay: '0.4s' }}></div>
                        </div>
                     </div>
                   </div>
                )}
              </div>
            </div>
            {/* Voice Controls */}
            <div className="flex flex-col items-center space-y-4">
              <but
                onClick={isListening ? stopListening : startListening}
                className={`w-16 h-16 rounded-full flex items-center justify-center
transition-all ${
                   isListening
                     ? 'bg-red-500 hover:bg-red-600 animate-pulse'
                     : 'bg-green-500 hover:bg-green-600'
                }`}
                <i className={`fas ${isListening ? 'fa-stop' : 'fa-microphone'} text-white</pre>
text-xl`}></i>
              </button>
              {isListening && (
                <div className="flex items-center space-x-1 h-8">
                   \{[1, 2, 3, 4, 5].map((i) => (
```

```
<div
                        key={i}
                        className="w-1 bg-green-500 rounded-full voice-wave"
                        style={{ animationDelay: `${i * 0.1}s` }}
                      ></div>
                   ))}
                 </div>
              )}
              <div className="text-center">
                 {isListening? 'Listening... Speak now': 'Press the microphone button
and start speaking'}
                 </div>
            </div>
         </div>
       </div>
    );
  };
  // Smart Recommendations Component
  const SmartRecommendations = ({ setActiveTab }) => {
    const [selectedSeason, setSelectedSeason] = useState('rabi');
    const [selectedSoil, setSelectedSoil] = useState('loamy');
    const [recommendations, setRecommendations] = useState([]);
    const [selectedCrop, setSelectedCrop] = useState(null);
    const seasons = ['rabi', 'kharif', 'zaid'];
    const soilTypes = ['loamy', 'clay', 'sandy', 'red', 'black'];
    const cropRecommendations = {
       rabi: {
         loamy: [
            {
              name: 'Wheat',
              yield: '45-50 quintals/hectare',
              profit: '$45,000-60,000',
              duration: '120-150 days',
              guide: {
                 planting: 'October to November',
                 irrigation: '4-6 times during growth period',
                 fertilizer: '120 kg N, 60 kg P205, 40 kg K20 per hectare',
                 pests: 'Aphids, termites, and rust diseases',
                 harvesting: 'March to April when grains are hard'
              }
            },
```

```
name: 'Barley',
     yield: '35-40 quintals/hectare',
     profit: '$35,000-45,000',
     duration: '110-140 days',
     guide: {
        planting: 'October to November',
        irrigation: '3-4 times during growth period',
        fertilizer: '80 kg N, 40 kg P205, 20 kg K20 per hectare',
        pests: 'Aphids and rust diseases',
        harvesting: 'March when grains are hard'
     }
  },
     name: 'Mustard',
     yield: '15-20 quintals/hectare',
     profit: '$50,000-70,000',
     duration: '90-120 days',
     guide: {
        planting: 'October to November',
        irrigation: '2-3 times during growth period',
        fertilizer: '60 kg N, 30 kg P205, 20 kg K20 per hectare',
        pests: 'Aphids and white rust',
        harvesting: 'February to March when pods turn yellow'
     }
  }
],
clay: [
  {
     name: 'Wheat',
     yield: '40-45 quintals/hectare',
     profit: '$40,000-55,000',
     duration: '120-150 days',
     guide: {
        planting: 'October to November',
        irrigation: '5-7 times during growth period',
        fertilizer: '100 kg N, 50 kg P205, 40 kg K20 per hectare',
        pests: 'Aphids, termites, and rust diseases',
        harvesting: 'March to April when grains are hard'
     }
  },
     name: 'Gram',
     yield: '15-20 quintals/hectare',
     profit: '$30,000-40,000',
     duration: '100-130 days',
     guide: {
        planting: 'October to November',
        irrigation: '2-3 times during growth period',
```

```
fertilizer: '20 kg N, 50 kg P205, 20 kg K20 per hectare',
             pests: 'Pod borer and wilt disease',
             harvesting: 'March when pods are dry'
          }
       }
     ]
  },
  kharif: {
     loamy: [
       {
          name: 'Rice',
          yield: '50-60 quintals/hectare',
          profit: '$50,000-70,000',
          duration: '150-180 days',
          guide: {
             planting: 'June to July',
             irrigation: 'Continuous flooding (5-7cm water depth)',
             fertilizer: '120 kg N, 60 kg P205, 60 kg K20 per hectare',
             pests: 'Stem borer, leaf folder, and blast disease',
             harvesting: 'November to December when 80% grains are ripe'
          }
       },
          name: 'Maize',
          yield: '40-50 quintals/hectare',
          profit: '$45,000-60,000',
          duration: '120-150 days',
          guide: {
             planting: 'June to July',
             irrigation: '8-10 times during growth period',
             fertilizer: '150 kg N, 75 kg P205, 75 kg K20 per hectare',
             pests: 'Stem borer and leaf blight',
             harvesting: 'October when husks turn yellow'
          }
       }
     ]
  }
};
useEffect(() => {
  const recs = cropRecommendations[selectedSeason]?.[selectedSoil] || [];
  setRecommendations(recs);
}, [selectedSeason, selectedSoil]);
const handleShowGuide = (crop) => {
  setSelectedCrop(crop);
};
```

```
return (
                   <div className="container mx-auto px-4 py-8 space-y-8 slide-in">
                        {!selectedCrop ? (
                               <>
                                     <div className="back-button" onClick={() => setActiveTab('dashboard')}>
                                           <i className="fas fa-arrow-left"></i>
                                           <span>Back to Dashboard</span>
                                     </div>
                                     <div className="text-center">
                                           <h2 className="text-2xl md:text-3xl font-bold text-gray-800 mb-2">
                                                 Smart Crop Recommendations
                                           </h2>
                                           Get personalized crop suggestions based on your soil, climate, and
market conditions
                                           </div>
                                     {/* Selection Filters */}
                                     <div className="bg-white rounded-2xl shadow-sm p-6">
                                           <div className="grid grid-cols-1 md:grid-cols-2 gap-6">
                                                 <div>
                                                        <a href="labelclassName="block text-gray-700 font-medium">labelclassName="block text-g
mb-3">Season</label>
                                                        <div className="flex flex-wrap gap-2">
                                                             {seasons.map((season) => (
                                                                    <but
                                                                          key={season}
                                                                          onClick={() => setSelectedSeason(season)}
                                                                          className={`tab-button ${selectedSeason === season ?
'active' : "}`}
                                                                    >
                                                                          {season.charAt(0).toUpperCase() + season.slice(1)}
                                                                    </button>
                                                             ))}
                                                       </div>
                                                 </div>
                                                 <div>
                                                       <a href="mailto:</a> <a href="lassName="block text-gray-700 font-medium mb-3">Soil
Type</label>
                                                       <div className="flex flex-wrap gap-2">
                                                             {soilTypes.map((soil) => (
                                                                    <but
                                                                          key={soil}
                                                                          onClick={() => setSelectedSoil(soil)}
                                                                          className={`tab-button ${selectedSoil === soil ? 'active' : "}`}
```

```
{soil.charAt(0).toUpperCase() + soil.slice(1)}
                           </button>
                        ))}
                      </div>
                    </div>
                 </div>
               </div>
               {/* Recommendations */}
               {recommendations.length > 0 ? (
                 <div className="grid grid-cols-1 md:grid-cols-2 lg:grid-cols-3 gap-6">
                   {recommendations.map((crop, index) => (
                      <div key={index} className="card bg-white rounded-2xl shadow-sm</pre>
p-6">
                        <div className="flex items-center justify-between mb-4">
                           <h3 className="text-gray-800 font-semibold"
text-lg">{crop.name}</h3>
                           <div className="w-10 h-10 bg-green-100 rounded-xl flex</pre>
items-center justify-center">
                              <i className="fas fa-seedling text-green-600"></i>
                           </div>
                         </div>
                        <div className="space-y-3">
                           <div className="bg-gray-50 rounded-lg p-3">
                              <div className="text-gray-600 text-sm">Expected
Yield</div>
                              <div className="text-gray-800</pre>
font-semibold">{crop.yield}</div>
                           </div>
                           <div className="bg-gray-50 rounded-lg p-3">
                              <div className="text-gray-600 text-sm">Profit Potential</div>
                              <div className="text-green-600"</pre>
font-semibold">{crop.profit}</div>
                           </div>
                           <div className="bg-gray-50 rounded-lg p-3">
                              <div className="text-gray-600 text-sm">Duration</div>
                              <div className="text-gray-800</pre>
font-semibold">{crop.duration}</div>
                           </div>
                        </div>
                         <but
                           onClick={() => handleShowGuide(crop)}
                           className="btn-primary w-full mt-4 py-2 px-4 rounded-lg"
```

```
<i className="fas fa-info-circle mr-2"></i>
                        Detailed Guide
                      </button>
                   </div>
                 ))}
               </div>
             ):(
               <div className="bg-white rounded-2xl shadow-sm p-8 text-center">
                 <div className="w-16 h-16 bg-gray-100 rounded-2xl flex items-center</pre>
justify-center mx-auto mb-4">
                   <i className="fas fa-seedling text-gray-400 text-2xl"></i>
                 </div>
                 <h3 className="text-gray-800 font-semibold mb-2">No
recommendations found</h3>
                 Try different season and soil type
combinations
               </div>
             )}
           </>
        ):(
           <div className="bg-white rounded-2xl shadow-sm p-6">
             <div className="back-button" onClick={() => setSelectedCrop(null)}>
               <i className="fas fa-arrow-left"></i>
               <span>Back to Recommendations/span>
             </div>
             <h3 className="text-xl font-semibold text-gray-800"
mb-4">{selectedCrop.name} Detailed Guide</h3>
             <div className="space-y-4">
               <div className="grid grid-cols-1 md:grid-cols-2 gap-4">
                 <div className="bg-gray-50 rounded-lg p-4">
                   <h4 className="text-gray-800 font-medium mb-2">Planting
Time</h4>
                   {selectedCrop.guide.planting}
                 </div>
                 <div className="bg-gray-50 rounded-lg p-4">
                   <h4 className="text-gray-800 font-medium mb-2">Irrigation</h4>
                   {selectedCrop.guide.irrigation}
                 </div>
                 <div className="bg-gray-50 rounded-lg p-4">
                   <h4 className="text-gray-800 font-medium mb-2">Fertilizer
Recommendation</h4>
                   {selectedCrop.guide.fertilizer}
                 <div className="bg-gray-50 rounded-lg p-4">
```

```
<h4 className="text-gray-800 font-medium mb-2">Common
Pests/Diseases</h4>
                    {selectedCrop.guide.pests}
                  </div>
                </div>
                <div className="bg-yellow-50 rounded-lg p-4 border border-yellow-200">
                  <h4 className="text-yellow-800 font-medium mb-2">Harvesting
Time</h4>
                  {selectedCrop.guide.harvesting}
                </div>
             </div>
           </div>
         )}
      </div>
    );
  };
  // Government Schemes Component
  const GovernmentSchemes = ({ setActiveTab }) => {
    const [selectedCategory, setSelectedCategory] = useState('all');
    const [appliedSchemes, setAppliedSchemes] = useState([]);
    const [selectedScheme, setSelectedScheme] = useState(null);
    const categories = [
      { id: 'all', name: 'All Schemes' },
      { id: 'central', name: 'Central Schemes' },
      { id: 'state', name: 'State Schemes' },
      { id: 'insurance', name: 'Insurance' },
      { id: 'credit', name: 'Credit' }
    ];
    const handleApplyScheme = (schemeld) => {
      if (!appliedSchemes.includes(schemeld)) {
         setAppliedSchemes([...appliedSchemes, schemeld]);
      }
    };
    const handleShowSchemeDetails = (scheme) => {
      setSelectedScheme(scheme);
    };
    const filteredSchemes = selectedCategory === 'all'
      ? mockSchemes
      : mockSchemes.filter(scheme => scheme.type.toLowerCase() ===
selectedCategory);
    return (
```

```
<div className="container mx-auto px-4 py-8 space-y-8 slide-in">
         {!selectedScheme ? (
              <div className="back-button" onClick={() => setActiveTab('dashboard')}>
                <i className="fas fa-arrow-left"></i>
                <span>Back to Dashboard/span>
              </div>
              <div className="text-center">
                <h2 className="text-2xl md:text-3xl font-bold text-gray-800 mb-2">
                  Government Schemes
                </h2>
                Discover and apply for government schemes tailored for farmers across
India
                </div>
              {/* Category Filters */}
              <div className="bg-white rounded-2xl shadow-sm p-6">
                <div className="flex flex-wrap gap-2">
                  {categories.map((category) => (
                     <button
                       key={category.id}
                       onClick={() => setSelectedCategory(category.id)}
                       className={`tab-button ${selectedCategory === category.id ?
'active' : "}`}
                       {category.name}
                     </button>
                  ))}
                </div>
              </div>
              {/* Schemes Grid */}
              <div className="grid grid-cols-1 md:grid-cols-2 gap-6">
                {filteredSchemes.map((scheme, index) => (
                  <div key={index} className="card bg-white rounded-2xl shadow-sm</pre>
p-6">
                     <div className="flex items-center justify-between mb-4">
                       <div className="flex items-center space-x-3">
                          <div className="w-12 h-12 bg-green-100 rounded-xl flex</pre>
items-center justify-center">
                            <i className={`fas fa-${scheme.icon} text-green-600`}></i>
                          </div>
                          <div>
                            <h3 className="text-gray-800"
font-semibold">{scheme.name}</h3>
```

```
{scheme.type}
Government
                          </div>
                       </div>
                       <div className={`px-3 py-1 rounded-full text-xs font-medium ${</pre>
                          scheme.status === 'Active' ? 'bg-green-100 text-green-800' :
'bg-red-100 text-red-800'
                       }`}>
                          {scheme.status}
                       </div>
                     </div>
                     <div className="space-y-3 mb-6">
                       <div className="bg-gray-50 rounded-lg p-3">
                          <div className="flex items-center justify-between">
                            <span className="text-gray-600 text-sm">Benefit
Amount</span>
                            <span className="text-gray-800</pre>
font-semibold">{scheme.amount}</span>
                          </div>
                          <div className="text-gray-500 text-xs</pre>
mt-1">{scheme.period}</div>
                       </div>
                       <div className="bg-gray-50 rounded-lg p-3">
                          <div className="flex items-center justify-between">
                            <span className="text-gray-600 text-sm">Total
Beneficiaries</span>
                            <span className="text-blue-600"</pre>
font-semibold">{scheme.beneficiaries}</span>
                          </div>
                       </div>
                     </div>
                     <div className="space-y-2">
                       <but
                          onClick={() => handleApplyScheme(index)}
                          disabled={appliedSchemes.includes(index)}
                          className={`w-full py-2 px-4 rounded-lg font-medium transition
${
                            appliedSchemes.includes(index)
                              ? 'bg-green-100 text-green-800 cursor-not-allowed'
                              : 'btn-primary'
                         }`}
                          {appliedSchemes.includes(index)?(
                              <i className="fas fa-check mr-2"></i>
```

```
Applied Successfully
                           </>
                        ):(
                           <>
                             <i className="fas fa-paper-plane mr-2"></i>
                             Apply Now
                           </>
                        )}
                      </button>
                      <but
                         onClick={() => handleShowSchemeDetails(scheme)}
                         className="w-full bg-gray-100 text-gray-800 py-2 px-4
rounded-lg font-medium hover:bg-gray-200 transition"
                         <i className="fas fa-info-circle mr-2"></i>
                         Learn More
                      </button>
                    </div>
                  </div>
               ))}
             </div>
           </>
         ):(
           <div className="bg-white rounded-2xl shadow-sm p-6">
             <div className="back-button" onClick={() => setSelectedScheme(null)}>
               <i className="fas fa-arrow-left"></i>
               <span>Back to Schemes</span>
             </div>
             <div className="flex items-center space-x-3 mb-6">
                <div className="w-12 h-12 bg-green-100 rounded-xl flex items-center</pre>
justify-center">
                  <i className={`fas fa-${selectedScheme.icon} text-green-600`}></i>
               </div>
                <div>
                  <h3 className="text-xl font-semibold"
text-gray-800">{selectedScheme.name}</h3>
                  {selectedScheme.type} Government
Scheme
               </div>
             </div>
             <div className="space-y-4">
               <div className="bg-gray-50 rounded-lg p-4">
                  <h4 className="text-gray-800 font-medium mb-2">Description</h4>
                  {selectedScheme.description}
               </div>
```

```
<div className="grid grid-cols-1 md:grid-cols-2 gap-4">
                 <div className="bg-gray-50 rounded-lg p-4">
                   <h4 className="text-gray-800 font-medium mb-2">Benefits</h4>
                   {selectedScheme.amount}
{selectedScheme.period}
                 </div>
                 <div className="bg-gray-50 rounded-lg p-4">
                   <h4 className="text-gray-800 font-medium"
mb-2">Beneficiaries</h4>
                   {selectedScheme.beneficiaries}
farmers
                 </div>
               </div>
               <div className="bg-blue-50 rounded-lg p-4">
                 <h4 className="text-blue-800 font-medium mb-2">Eligibility
Criteria</h4>
                 {selectedScheme.eligibility}
               </div>
               <div className="bg-yellow-50 rounded-lg p-4">
                 <h4 className="text-yellow-800 font-medium mb-2">Required
Documents</h4>
                 {selectedScheme.documents}
               </div>
             </div>
          </div>
        )}
      </div>
    );
  };
  // Main App Component
  const KisanAI = () => {
    const [activeTab, setActiveTab] = useState('login');
    const [isLoggedIn, setIsLoggedIn] = useState(false);
    const [farmerDetails, setFarmerDetails] = useState(null);
    const handleLoginSuccess = (details) => {
      setFarmerDetails(details);
      setIsLoggedIn(true);
      setActiveTab('dashboard');
    };
    const handleLogout = () => {
      setIsLoggedIn(false);
      setFarmerDetails(null);
      setActiveTab('login');
```

```
};
    if (!isLoggedIn) {
       return <LoginPage onLoginSuccess={handleLoginSuccess} />;
    }
    return (
       <div className="min-h-screen bg-gray-50">
         <Navigation
            activeTab={activeTab}
            setActiveTab={setActiveTab}
            onLogout={handleLogout}
         />
         <main className="transition-all duration-500">
            {activeTab === 'dashboard' && <Dashboard setActiveTab={setActiveTab} />}
            {activeTab === 'crop-disease' && <CropDiseaseDetection
setActiveTab={setActiveTab} />}
            {activeTab === 'market' && <MarketIntelligence setActiveTab={setActiveTab} />}
            {activeTab === 'voice' && <VoiceAssistant setActiveTab={setActiveTab} />}
            {activeTab === 'recommendations' && <SmartRecommendations
setActiveTab={setActiveTab} />}
            {activeTab === 'schemes' && <GovernmentSchemes
setActiveTab={setActiveTab} />}
         </main>
         <footer className="bg-white border-t border-gray-200 py-8">
            <div className="container mx-auto px-4">
              <div className="flex flex-col md:flex-row justify-between items-center">
                 <div className="flex items-center space-x-2 mb-4 md:mb-0">
                   <div className="w-8 h-8 bg-green-600 rounded-lg flex items-center</p>
justify-center">
                      <i className="fas fa-seedling text-white"></i>
                   </div>
                   <h3 className="text-lg font-bold text-gray-800">Kisan Al</h3>
                 </div>
                 <div className="flex space-x-6">
                   <a href="#" className="text-gray-600 hover:text-green-600">
                      <i className="fab fa-facebook-f"></i>
                   <a href="#" className="text-gray-600 hover:text-green-600">
                      <i className="fab fa-twitter"></i>
                   <a href="#" className="text-gray-600 hover:text-green-600">
                      <i className="fab fa-instagram"></i>
                   <a href="#" className="text-gray-600 hover:text-green-600">
                      <i className="fab fa-youtube"></i>
```

```
</a>
               </div>
             </div>
             <div className="border-t border-gray-200 mt-6 pt-6 text-center
md:text-left">
               © 2023 Kisan Al. All rights reserved. Empowering farmers with
Al-powered insights.
               </div>
          </div>
        </footer>
      </div>
    );
  };
  // Render the app
  ReactDOM.render(<KisanAl />, document.getElementById('root'));
</script>
</body>
</html>
```