```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>Qroll - Smart Attendance Tracking</title>
 <style>
  :root {
   --background: #0f172a;
   --foreground: #f8fafc;
   --primary: #8b5cf6;
   --primary-foreground: #ffffff;
   --secondary: #1e293b;
   --muted: #334155;
   --muted-foreground: #94a3b8;
  }
  body {
   font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI', Roboto, Oxygen,
Ubuntu, Cantarell, 'Open Sans', 'Helvetica Neue', sans-serif;
   margin: 0;
   padding: 0;
   background-color: var(--background);
   color: var(--foreground);
   line-height: 1.6;
  }
  .container {
   max-width: 1200px;
```

```
margin: 0 auto;
 padding: 0 20px;
}
header {
 padding: 30px 0;
 text-align: center;
}
.logo {
 font-size: 2.5rem;
 font-weight: bold;
 color: var(--primary);
 margin-bottom: 0;
}
.tagline {
 font-size: 1.2rem;
 color: var(--muted-foreground);
 margin-top: 10px;
}
.hero {
 display: flex;
 flex-direction: column;
 align-items: center;
 justify-content: center;
 padding: 60px 0;
 text-align: center;
```

```
}
h1 {
 font-size: 3rem;
 margin-bottom: 20px;
 max-width: 800px;
}
.hero p {
 font-size: 1.25rem;
 max-width: 700px;
 margin-bottom: 40px;
 color: var(--muted-foreground);
}
.cta-button {
 display: inline-block;
 background-color: var(--primary);
 color: var(--primary-foreground);
 font-size: 1.1rem;
 font-weight: 600;
 text-decoration: none;
 padding: 14px 32px;
 border-radius: 8px;
 box-shadow: 0 4px 6px rgba(139, 92, 246, 0.25);
 transition: all 0.3s ease;
}
.cta-button:hover {
```

```
transform: translateY(-2px);
 box-shadow: 0 7px 10px rgba(139, 92, 246, 0.3);
}
.features {
 padding: 80px 0;
 background-color: var(--secondary);
}
.features h2 {
 text-align: center;
 font-size: 2rem;
 margin-bottom: 60px;
}
.feature-grid {
 display: grid;
 grid-template-columns: repeat(auto-fit, minmax(300px, 1fr));
 gap: 40px;
}
.feature-card {
 background-color: var(--background);
 border-radius: 12px;
 padding: 30px;
 text-align: center;
 box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
}
```

```
.feature-icon {
 width: 60px;
 height: 60px;
 margin: 0 auto 20px;
 display: flex;
 align-items: center;
 justify-content: center;
 background-color: rgba(139, 92, 246, 0.1);
 border-radius: 50%;
 color: var(--primary);
}
.feature-card h3 {
 font-size: 1.5rem;
 margin-bottom: 15px;
}
.feature-card p {
 color: var(--muted-foreground);
}
footer {
 padding: 40px 0;
 text-align: center;
 color: var(--muted-foreground);
}
@media (max-width: 768px) {
 h1 {
```

```
font-size: 2.2rem;
   }
   .hero p {
    font-size: 1.1rem;
   }
   .feature-grid {
    grid-template-columns: 1fr;
   }
  }
 </style>
</head>
<body>
 <div class="container">
  <header>
   <h2 class="logo">Qroll</h2>
   Smart Attendance Tracking
  </header>
  <section class="hero">
   <h1>The Smart Way to Track Student Attendance</h1>
   >
    Qroll combines QR code scanning, facial recognition, and location verification
    to create a secure and efficient attendance management system for educational
institutions.
   <a href="/auth" class="cta-button">Get Started</a>
  </section>
```

```
</div>
```

```
<section class="features">
  <div class="container">
   <h2>Key Features</h2>
   <div class="feature-grid">
    <div class="feature-card">
      <div class="feature-icon">
       <svg xmlns="http://www.w3.org/2000/svg" width="32" height="32"
viewBox="0 0 24 24" fill="none" stroke="currentColor" stroke-width="2" stroke-
linecap="round" stroke-linejoin="round">
        <path d="M3 7v9a2 2 0 0 0 2 2h13a2 2 0 0 0 2-2V9a2 2 0 0 0-2-2h-</p>
4.5"></path>
        <path d="M3 9h18"></path>
        <path d="M7 13h.01"></path>
        <path d="M11 13h.01"></path>
        <path d="M15 13h.01"></path>
        <path d="M7 17h.01"></path>
        <path d="M11 17h.01"></path>
        <path d="M15 17h.01"></path>
        <path d="M10 2v5"></path>
        <path d="M14 2v5"></path>
       </svg>
      </div>
      <h3>QR Code Scanning</h3>
      Generate and scan QR codes for quick and easy attendance marking.
    </div>
    <div class="feature-card">
      <div class="feature-icon">
```

```
<svg xmlns="http://www.w3.org/2000/svg" width="32" height="32"
viewBox="0 0 24 24" fill="none" stroke="currentColor" stroke-width="2" stroke-
linecap="round" stroke-linejoin="round">
        <path d="M22 8a5 5 0 0 1-3.36 4.7l.99 5.34A1 1 0 0 1 18.66 19H13a2 2 0 0</p>
1-2-2v-5"></path>
        <path d="M12 12a5 5 0 0 1 0-10 4.96 4.96 0 0 1 4.36 2.58"></path></path>
        <path d="M9 10a5 5 0 0 1 0-8"></path>
        <path d="M4.8 17.8l-.68.68a2 2 0 0 0 0 2.82 2 2 0 0 0 2.82 0l.68-</p>
.68"></path>
        <path d="M2 22l3-3"></path>
       </svg>
      </div>
      <h3>Facial Recognition</h3>
      Verify student identity through secure facial recognition technology.
     </div>
     <div class="feature-card">
      <div class="feature-icon">
       <svg xmlns="http://www.w3.org/2000/svg" width="32" height="32"
viewBox="0 0 24 24" fill="none" stroke="currentColor" stroke-width="2" stroke-
linecap="round" stroke-linejoin="round">
        <path d="M20 10c0 4.4-8 12-8 12s-8-7.6-8-12a8 8 0 0 1 16 0z"></path>
        <path d="M12 10a1 1 0 1 0 0-2 1 1 0 0 0 0 2z"></path>
       </svg>
      </div>
      <h3>Location Verification</h3>
      Ensure students are present in the right location using geolocation
verification.
     </div>
   </div>
  </div>
```

```
</section>
 <footer>
  <div class="container">
   © 2025 Qroll. All rights reserved.
   >
    <a href="/qr-url" style="color: var(--primary); text-decoration: none;">
      Get Qroll QR Code
     </a>
   </div>
 </footer>
</body>
</html>
[{"weights":[{"name":"dense0/conv0/filters","shape":[3,3,3,32],"dtype":"float32","quant
ization":{"dtype":"uint8","scale":0.004853619781194949,"min":-
0.5872879935245888}}, "name": "dense0/conv0/bias", "shape": [32], "dtype": "float32", "
quantization":{"dtype":"uint8","scale":0.004396426443960153,"min":-
0.7298067896973853}}, "name": "dense0/conv1/depthwise filter", "shape": [3,3,32,1], "
dtype":"float32","quantization":{"dtype":"uint8","scale":0.00635151559231328,"min":-
0.5589333721235686}},{"name":"dense0/conv1/pointwise filter","shape":[1,1,32,32],
"dtype":"float32","quantization":{"dtype":"uint8","scale":0.009354315552057004,"min"
:-
1.2628325995276957}}, "name": "dense0/conv1/bias", "shape": [32], "dtype": "float32", "
quantization":{"dtype":"uint8","scale":0.0029380727048013726,"min":-
0.5846764682554731}},{"name":"dense0/conv2/depthwise filter","shape":[3,3,32,1],"
dtype":"float32","quantization":{"dtype":"uint8","scale":0.0049374802439820535,"min
0.6171850304977566}}, "name": "dense0/conv2/pointwise filter", "shape": [1,1,32,32],
"dtype":"float32","quantization":{"dtype":"uint8","scale":0.009941946758943446,"min"
:-
1.3421628124573652}}, "name": "dense0/conv2/bias", "shape": [32], "dtype": "float32", "
quantization":{"dtype":"uint8","scale":0.0030300481062309416,"min":-
0.5272283704841838}},{"name":"dense0/conv3/depthwise filter","shape":[3,3,32,1],"
dtype":"float32","quantization":{"dtype":"uint8","scale":0.005672684837790097,"min":
```

```
0.7431217137505026}},{"name":"dense0/conv3/pointwise filter","shape":[1,1,32,32],
"dtype":"float32","quantization":{"dtype":"uint8","scale":0.010712201455060173,"min"
1.5639814124387852}}, "name": "dense0/conv3/bias", "shape": [32], "dtype": "float32", "
quantization":{"dtype":"uint8","scale":0.0030966934035806097,"min":-
0.3839899820439956}},{"name":"dense1/conv0/depthwise filter","shape":[3,3,32,1],"
dtype":"float32","quantization":{"dtype":"uint8","scale":0.0039155554537679636,"min
":-
0.48161332081345953}}, {"name": "dense1/conv0/pointwise filter", "shape": [1,1,32,64]
","dtype":"float32","quantization":{"dtype":"uint8","scale":0.01023082966898002,"min,
1.094698774580862}},{"name":"dense1/conv0/bias","shape":[64],"dtype":"float32","q
uantization":{"dtype":"uint8","scale":0.0027264176630506327,"min":-
0.3871513081531898}},{"name":"dense1/conv1/depthwise filter","shape":[3,3,64,1],"
dtype":"float32","quantization":{"dtype":"uint8","scale":0.004583378632863362,"min":
0.5454220573107401}},{"name":"dense1/conv1/pointwise filter","shape":[1,1,64,64],
"dtype":"float32","quantization":{"dtype":"uint8","scale":0.00915846403907327,"min":-
1.117332612766939}},{"name":"dense1/conv1/bias","shape":[64],"dtype":"float32","q
uantization":{"dtype":"uint8","scale":0.003091680419211294,"min":-
0.5966943209077797}},{"name":"dense1/conv2/depthwise filter","shape":[3,3,64,1],"
dtype":"float32","quantization":{"dtype":"uint8","scale":0.005407439727409214,"min":
0.708374604290607}},{"name":"dense1/conv2/pointwise filter","shape":[1,1,64,64],"
dtype":"float32","quantization":{"dtype":"uint8","scale":0.00946493943532308,"min":-
1.2399070660273235}}, {"name": "dense1/conv2/bias", "shape": [64], "dtype": "float32", "
quantization":{"dtype":"uint8","scale":0.004409168514550901,"min":-
0.9788354102303}},{"name":"dense1/conv3/depthwise filter","shape":[3,3,64,1],"dty
pe":"float32","quantization":{"dtype":"uint8","scale":0.004478132958505668,"min":-
0.6493292789833219}}, "name": "dense1/conv3/pointwise filter", "shape": [1,1,64,64],
"dtype":"float32","quantization":{"dtype":"uint8","scale":0.011063695888893277,"min"
1.2501976354449402}},{"name":"dense1/conv3/bias","shape":[64],"dtype":"float32","
quantization":{"dtype":"uint8","scale":0.003909627596537272,"min":-
0.6646366914113363}},{"name":"dense2/conv0/depthwise filter","shape":[3,3,64,1],"
dtype":"float32","quantization":{"dtype":"uint8","scale":0.003213915404151468,"min":
0.3374611174359041}},{"name":"dense2/conv0/pointwise filter","shape":[1,1,64,128]
","dtype":"float32","quantization":{"dtype":"uint8","scale":0.010917326048308728,"min
":-
1.4520043644250609}}, "name": "dense2/conv0/bias", "shape": [128], "dtype": "float32",
"quantization":{"dtype":"uint8","scale":0.002800439152063108,"min":-
0.38085972468058266}},{"name":"dense2/conv1/depthwise_filter","shape":[3,3,128,
```

- 1],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.0050568851770139206," min":-
- 0.6927932692509071}},{"name":"dense2/conv1/pointwise_filter","shape":[1,1,128,12 8],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.01074961213504567,"min":-
- 1.3222022926106174}},{"name":"dense2/conv1/bias","shape":[128],"dtype":"float32", "quantization":{"dtype":"uint8","scale":0.0030654204242369708,"min":-
- $0.917304206128214\}\}, \{"name": "dense2/conv2/pointwise_filter", "shape": [1,1,128,128], "dtype": "float32", "quantization": \{"dtype": "uint8", "scale": 0.01092823346455892, "min": 1.001092823346455892, "min": 1.0010928282, "min": 1.0010928282, "min": 1.0010928282, "min": 1.00109282, "min":$
- 1.366029183069865}},{"name":"dense2/conv2/bias","shape":[128],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.002681120470458386,"min":-
- $0.36463238398234055\}\}, \{"name": "dense2/conv3/depthwise_filter", "shape": [3,3,128, 20,0], and the convolution of the convolu$
- 1],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.0048311497650894465," min":-
- 0.5797379718107336}},{"name":"dense2/conv3/pointwise_filter","shape":[1,1,128,12 8],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.011227761062921263,"m in":-
- 1.4483811771168429}},{"name":"dense2/conv3/bias","shape":[128],"dtype":"float32", "quantization":{"dtype":"uint8","scale":0.0034643323982463162,"min":-
- 0.49227193874471326}},{"name":"dense3/conv0/pointwise_filter","shape":[1,1,128,2 56],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.010051267287310432," min":-
- $1.2765109454884247\}\}, \{"name":"dense 3/conv0/bias", "shape":[256], "dtype":"float 32", "quantization": \{"dtype":"uint 8", "scale": 0.003142924752889895, "min": -$
- $0.4588670139219247\}, \{"name": "dense 3/conv1/depthwise_filter", "shape": [3,3,256,1], "dtype": "float 32", "quantization": \{"dtype": "uint 8", "scale": 0.00448304671867221, "min": 1.00448304671867221, "min": 1.00448721, "min": 1.00448721, "min": 1.00448721, "min": 1.00448721, "min": 1.00448721, "min": 1.00448721, "min": 1.0048721, "min": 1.00488721, "min": 1.00488721,$
- 0.5872791201460595}},{"name":"dense3/conv1/pointwise_filter","shape":[1,1,256,256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.016063522357566685,"m in":-
- 2.3613377865623026}},{"name":"dense3/conv1/bias","shape":[256],"dtype":"float32", "quantization":{"dtype":"uint8","scale":0.00287135781026354,"min":-
- 0.47664539650374765}},{"name":"dense3/conv2/depthwise_filter","shape":[3,3,256, 1],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.006002906724518421,"m in":-
- 0.7923836876364315}},{"name":"dense3/conv2/pointwise_filter","shape":[1,1,256,25

```
6],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.017087187019048954,"m in":-
```

- 1.6061955797906016}},{"name":"dense3/conv2/bias","shape":[256],"dtype":"float32", "quantization":{"dtype":"uint8","scale":0.003124481205846749,"min":-
- 0.46242321846531886}},{"name":"dense3/conv3/depthwise_filter","shape":[3,3,256,
- 1],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.006576311588287353,"m in":-
- $1.0193282961845398\}, \{"name":"dense 3/conv 3/pointwise_filter", "shape": [1,1,256,256], "dtype": "float 32", "quantization": {"dtype": "uint 8", "scale": 0.015590153955945782, "min": -$
- 1.99553970636106}},{"name":"dense3/conv3/bias","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.004453541601405424,"min":-
- $0.6546706154065973\}\}, \{"name": "fc/weights", "shape": [256,136], "dtype": "float32", "quantization": \{"dtype": "uint8", "scale": 0.010417488509533453, "min": -$
- 1.500118345372817}},{"name":"fc/bias","shape":[136],"dtype":"float32","quantization" :{"dtype":"uint8","scale":0.0025084222648658005,"min":0.07683877646923065}}],"p aths":["face_landmark_68_model-shard1"]}]

[{"weights":[{"name":"conv32_down/conv/filters","shape":[7,7,3,32],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.0005260649557207145,"min":-

- 0.07101876902229645}},{"name":"conv32_down/conv/bias","shape":[32],"dtype":"float32","quantization":{"dtype":"uint8","scale":8.471445956577858e-7,"min":-
- $0.00014740315964445472\}\}, \{"name":"conv32_down/scale/weights", "shape":[32], "dtype":"float32", "quantization": \{"dtype":"uint8", "scale": 0.06814416062598135, "min": 5.788674831390381\}\}, \{"name": "conv32_down/scale/biases", "shape": [32], "dtype": "float32", "quantization": {"dtype": "uint8", "scale": 0.008471635042452345, "min": -$
- 0.931879854669758}},{"name":"conv32_1/conv1/conv/filters","shape":[3,3,32,32],"dt ype":"float32","quantization":{"dtype":"uint8","scale":0.0007328585666768691,"min":-0.0974701893680236}},{"name":"conv32_1/conv1/conv/bias","shape":[32],"dtype":"float32","quantization":{"dtype":"uint8","scale":1.5952091238361e-8,"min":-
- $0.000001978059313556764\}\}, \{"name":"conv32_1/conv1/scale/weights", "shape":[32], "dtype":"float32", "quantization": \{"dtype":"uint8", "scale": 0.02146628510718252, "min": 3.1103382110595703\}\}, \{"name": "conv32_1/conv1/scale/biases", "shape": [32], "dtype": "float32", "quantization": {"dtype": "uint8", "scale": 0.0194976619645661, "min": -$
- $2.3787147596770644\}\}, \{"name": "conv32_1/conv2/conv/filters", "shape": [3,3,32,32], "dtype": "float32", "quantization": \{"dtype": "uint8", "scale": 0.0004114975824075587, "min": 1.0004114975824075587, "min": 1.000411497582407587, "min": 1.000411497587, "min": 1.000411497, "min": 1.0004149, "min": 1.00041497, "min": 1.0004149, "min": 1.0004149$

0.05267169054816751}},{"name":"conv32_1/conv2/conv/bias","shape":[32],"dtype":"float32","quantization":{"dtype":"uint8","scale":4.600177166424806e-9,"min":-5.70421968636676e-

7}},{"name":"conv32_1/conv2/scale/weights","shape":[32],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.03400764932819441,"min":2.1677730083465576}},{"n ame":"conv32_1/conv2/scale/biases","shape":[32],"dtype":"float32","quantization":{"d type":"uint8","scale":0.010974494616190593,"min":-

- $1.240117891629537\}\}, \{"name":"conv32_2/conv1/conv/filters", "shape":[3,3,32,32], "dtype":"float32", "quantization": \{"dtype":"uint8", "scale": 0.0005358753251094444, "min": -0.0760942961655411\}\}, \{"name": "conv32_2/conv1/conv/bias", "shape":[32], "dtype": "float32", "quantization": {"dtype": "uint8", "scale": 5.9886454383719385e-9, "min": -7.366033889197485e-9$
- 7}},{"name":"conv32_2/conv1/scale/weights","shape":[32],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.014633869657329485,"min":2.769575357437134}},{"n ame":"conv32_2/conv1/scale/biases","shape":[32],"dtype":"float32","quantization":{"d type":"uint8","scale":0.022131107367721257,"min":-
- $2.5229462399202234\}\}, \{"name": "conv32_2/conv2/conv/filters", "shape": [3,3,32,32], "dtype": "float32", "quantization": {"dtype": "uint8", "scale": <math>0.00030145110452876373$, "min": -
- 0.03949009469326805}},{"name":"conv32_2/conv2/conv/bias","shape":[32],"dtype":"float32","quantization":{"dtype":"uint8","scale":6.8779549306497095e-9,"min":-9.010120959151119e-
- 7}},{"name":"conv32_2/conv2/scale/weights","shape":[32],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.03929369870354148,"min":4.8010945320129395}},{"name":"conv32_2/conv2/scale/biases","shape":[32],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.010553357180427103,"min":-
- $1.2452961472903983\}\}, \{"name": "conv32_3/conv1/conv/filters", "shape": [3,3,32,32], "dtype": "float32", "quantization": \{"dtype": "uint8", "scale": <math>0.0003133527642371608$, "min": 0.0003133527642371608, "min": 0.00031608, "min": 0.00031608
- 0.040735859350830905}},{"name":"conv32_3/conv1/conv/bias","shape":[32],"dtype": "float32","quantization":{"dtype":"uint8","scale":4.1064200719547974e-9,"min":-3.0387508532465503e-
- 7}},{"name":"conv32_3/conv1/scale/weights","shape":[32],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.009252088210161994,"min":2.333256721496582}},{"n ame":"conv32_3/conv1/scale/biases","shape":[32],"dtype":"float32","quantization":{"d type":"uint8","scale":0.007104101251153385,"min":-
- 0.34810096130651585}},{"name":"conv32_3/conv2/conv/filters","shape":[3,3,32,32]," dtype":"float32","quantization":{"dtype":"uint8","scale":0.00029995629892629733,"mi n":-
- 0.031195455088334923}},{"name":"conv32_3/conv2/conv/bias","shape":[32],"dtype": "float32","quantization":{"dtype":"uint8","scale":5.62726418316814e-9,"min":-6.921534945296811e-
- 7}},{"name":"conv32_3/conv2/scale/weights","shape":[32],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.0467432975769043,"min":5.362040996551514}},{"nam e":"conv32_3/conv2/scale/biases","shape":[32],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.010314425300149357,"min":-
- 1.268674311918371}},{"name":"conv64_down/conv1/conv/filters","shape":[3,3,32,64], "dtype":"float32"},{"name":"conv64_down/conv1/conv/bias","shape":[64],"dtype":"float32","quantization":{"dtype":"uint8","scale":8.373908033218849e-10,"min":-
- 1.172347124650639e-

- 7}},{"name":"conv64_down/conv1/scale/weights","shape":[64],"dtype":"float32","quan tization":{"dtype":"uint8","scale":0.0066875364266189875,"min":2.508840084075927 7}},{"name":"conv64_down/conv1/scale/biases","shape":[64],"dtype":"float32","quanti zation":{"dtype":"uint8","scale":0.01691421620986041,"min":-
- 2.0973628100226906}},{"name":"conv64_down/conv2/conv/filters","shape":[3,3,64,6 4],"dtype":"float32"},{"name":"conv64_down/conv2/conv/bias","shape":[64],"dtype":"float32","quantization":{"dtype":"uint8","scale":2.3252014483766877e-9,"min":-2.673981665633191e-
- 7}},{"name":"conv64_down/conv2/scale/weights","shape":[64],"dtype":"float32","quan tization":{"dtype":"uint8","scale":0.032557439804077146,"min":2.6351239681243896 }},{"name":"conv64_down/conv2/scale/biases","shape":[64],"dtype":"float32","quantiz ation":{"dtype":"uint8","scale":0.015429047509735706,"min":-
- $1.5429047509735707\}, \{"name": "conv64_1/conv1/conv/filters", "shape": [3,3,64,64], "dtype": "float32"\}, \{"name": "conv64_1/conv1/conv/bias", "shape": [64], "dtype": "float32", "quantization": {"dtype": "uint8", "scale": 1.1319172039756998e-9, "min": -$
- 1.4941307092479238e-
- 7}},{"name":"conv64_1/conv1/scale/weights","shape":[64],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.007802607031429515,"min":3.401733160018921}},{"n ame":"conv64_1/conv1/scale/biases","shape":[64],"dtype":"float32","quantization":{"d type":"uint8","scale":0.01425027146058924,"min":-
- $0.6982633015688727\}, \{"name": "conv64_1/conv2/conv/filters", "shape": [3,3,64,64], "dtype": "float32"\}, \{"name": "conv64_1/conv2/conv/bias", "shape": [64], "dtype": "float32", "quantization": {"dtype": "uint8", "scale": 2.5635019893325435e-9, "min": -$
- 2.717312108692496e-
- 7}},{"name":"conv64_1/conv2/scale/weights","shape":[64],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.04062801716374416,"min":3.542381525039673}},{"name":"conv64_1/conv2/scale/biases","shape":[64],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.007973166306813557,"min":-
- 1.8302169685151004e-
- 7}},{"name":"conv64_2/conv1/scale/weights","shape":[64],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.005631206549850164,"min":2.9051668643951416}},{"name":"conv64_2/conv1/scale/biases","shape":[64],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.01859012585060269,"min":-
- 3.5311514452854786e-
- 7}},{"name":"conv64_2/conv2/scale/weights","shape":[64],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.03740917467603497,"min":5.571568965911865}},{"name":"conv64_2/conv2/scale/biases","shape":[64],"dtype":"float32","quantization":{"dtype":"dtype":{"dtype":"dtype":{"dtype":"dtype":{"

- pe":"uint8","scale":0.006418555858088475,"min":-
- 8.47312361763804e-
- 8}},{"name":"conv64_3/conv1/scale/weights","shape":[64],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.006400122362024644,"min":2.268010377883911}},{"na me":"conv64_3/conv1/scale/biases","shape":[64],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.010945847922680425,"min":-
- 1.3353934465670119}},{"name":"conv64_3/conv2/conv/filters","shape":[3,3,64,64],"d type":"float32"},{"name":"conv64_3/conv2/conv/bias","shape":[64],"dtype":"float32","q uantization":{"dtype":"uint8","scale":2.278228722014533e-9,"min":-3.212302498040492e-
- 7}},{"name":"conv64_3/conv2/scale/weights","shape":[64],"dtype":"float32","quantizati on":{"dtype":"uint8","scale":0.029840927498013366,"min":7.038398265838623}},{"name":"conv64_3/conv2/scale/biases","shape":[64],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.010651412197187834,"min":-
- 1.161003929493474}},{"name":"conv128_down/conv1/conv/filters","shape":[3,3,64,1 28],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.0002004054466298982 3,"min":-
- 0.022245004575918704}},{"name":"conv128_down/conv1/conv/bias","shape":[128]," dtype":"float32","quantization":{"dtype":"uint8","scale":4.3550543563576545e-10,"min":-4.311503812794078e-
- 8}},{"name":"conv128_down/conv1/scale/weights","shape":[128],"dtype":"float32","qu antization":{"dtype":"uint8","scale":0.007448580685783835,"min":2.83084607124328 6}},{"name":"conv128_down/conv1/scale/biases","shape":[128],"dtype":"float32","qua ntization":{"dtype":"uint8","scale":0.01211262824488621,"min":-
- 1.6957679542840696}},{"name":"conv128_down/conv2/conv/filters","shape":[3,3,128,128],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.00022380277514457702,"min":-
- $0.02484210804104805\}\}, \{"name": "conv128_down/conv2/conv/bias", "shape": [128], "dtype": "float32", "quantization": {"dtype": "uint8", "scale": 9.031058637304466e-10, "min": 1.1650065642122761e-$
- 7}},{"name":"conv128_down/conv2/scale/weights","shape":[128],"dtype":"float32","qu antization":{"dtype":"uint8","scale":0.027663578706629135,"min":3.11115550994873 05}},{"name":"conv128_down/conv2/scale/biases","shape":[128],"dtype":"float32","qu antization":{"dtype":"uint8","scale":0.008878476946961646,"min":-
- 1.029903325847551}},{"name":"conv128_1/conv1/conv/filters","shape":[3,3,128,128], "dtype":"float32", "quantization":{"dtype":"uint8", "scale":0.00022380667574265425, "min":-
- 0.032899581334170175}},{"name":"conv128_1/conv1/conv/bias","shape":[128],"dtype":"float32","quantization":{"dtype":"uint8","scale":4.4147297756478345e-10,"min":-5.253528433020923e-

- 8}},{"name":"conv128_1/conv1/scale/weights","shape":[128],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.013599334978589825,"min":3.634530782699585}}, {"name":"conv128_1/conv1/scale/biases","shape":[128],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.014059314073300829,"min":-
- 1.4059314073300828}},{"name":"conv128_1/conv2/conv/filters","shape":[3,3,128,128],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.00021715293474057143, "min":-
- 0.02909849325523657}},{"name":"conv128_1/conv2/conv/bias","shape":[128],"dtype ":"float32","quantization":{"dtype":"uint8","scale":9.887046963276768e-10,"min":-1.1370104007768284e-
- 7}},{"name":"conv128_1/conv2/scale/weights","shape":[128],"dtype":"float32","quanti zation":{"dtype":"uint8","scale":0.029993299409454943,"min":3.630716562271118}},{ "name":"conv128_1/conv2/scale/biases","shape":[128],"dtype":"float32","quantization ":{"dtype":"uint8","scale":0.00782704236460667,"min":-
- 0.7200878975438136}},{"name":"conv128_2/conv1/conv/filters","shape":[3,3,128,128],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.00017718105923895743, "min":-
- 0.022324813464108636}},{"name":"conv128_2/conv1/conv/bias","shape":[128],"dtype":"float32","quantization":{"dtype":"uint8","scale":3.567012027797675e-10,"min":-5.243507680862582e-
- 8}},{"name":"conv128_2/conv1/scale/weights","shape":[128],"dtype":"float32","quanti zation":{"dtype":"uint8","scale":0.007940645778880399,"min":4.927767753601074}}, {"name":"conv128_2/conv1/scale/biases","shape":[128],"dtype":"float32","quantizatio n":{"dtype":"uint8","scale":0.015933452867994122,"min":-
- 1.5614783810634238}},{"name":"conv128_2/conv2/conv/filters","shape":[3,3,128,128],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.0001451439717236687," min":-
- 0.01712698866339291}},{"name":"conv128_2/conv2/conv/bias","shape":[128],"dtype ":"float32","quantization":{"dtype":"uint8","scale":1.0383988570966347e-9,"min":-1.2356946399449953e-
- 7}},{"name":"conv128_2/conv2/scale/weights","shape":[128],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.02892604528688917,"min":4.750600814819336}},{"name":"conv128_2/conv2/scale/biases","shape":[128],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.00797275748907351,"min":-
- 0.7414664464838364}},{"name":"conv256_down/conv1/conv/filters","shape":[3,3,128,256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.0002698827827093648,"min":-
- $0.03994265184098599\}\}, \{"name": "conv256_down/conv1/conv/bias", "shape": [256], "dtype": "float32", "quantization": {"dtype": "uint8", "scale": <math>5.036909834755123e-10$, "min": 6.396875490139006e-
- 8}},{"name":"conv256_down/conv1/scale/weights","shape":[256],"dtype":"float32","qu antization":{"dtype":"uint8","scale":0.014870181738161573,"min":4.26990079879760 7}},{"name":"conv256_down/conv1/scale/biases","shape":[256],"dtype":"float32","qua

- ntization":{"dtype":"uint8","scale":0.022031106200872685,"min":-
- 3.1063859743230484}},{"name":"conv256_down/conv2/conv/filters","shape":[3,3,256,256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.00046430734150549946."min":-
- 0.03946612402796745}},{"name":"conv256_down/conv2/conv/bias","shape":[256],"d type":"float32","quantization":{"dtype":"uint8","scale":6.693064577513153e-10,"min":-7.630093618364995e-
- 8}},{"name":"conv256_down/conv2/scale/weights","shape":[256],"dtype":"float32","qu antization":{"dtype":"uint8","scale":0.03475512242784687,"min":3.608360528945923 }},{"name":"conv256_down/conv2/scale/biases","shape":[256],"dtype":"float32","quan tization":{"dtype":"uint8","scale":0.01290142021927179,"min":-
- 1.1482263995151893}},{"name":"conv256_1/conv1/conv/filters","shape":[3,3,256,256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.00037147209924810076, "min":-
- 0.04234781931428348}},{"name":"conv256_1/conv1/conv/bias","shape":[256],"dtype ":"float32","quantization":{"dtype":"uint8","scale":3.2105515457510146e-10,"min":-3.467395669411096e-
- 8}},{"name":"conv256_1/conv1/scale/weights","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.043242172166412955,"min":5.28542947769165}},{"name":"conv256_1/conv1/scale/biases","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.01643658619300992,"min":-
- 1.3149268954407936}},{"name":"conv256_1/conv2/conv/filters","shape":[3,3,256,256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.0003289232651392619,"min":-
- 0.041773254672686264}},{"name":"conv256_1/conv2/conv/bias","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":9.13591691187321e-10,"min":-1.2333487831028833e-
- 7}},{"name":"conv256_1/conv2/scale/weights","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.0573908618852204,"min":4.360693454742432}},{"name":"conv256_1/conv2/scale/biases","shape":[256],"dtype":"float32","quantization":{ "dtype":"uint8","scale":0.0164216583850337,"min":-
- 1.3958409627278647}},{"name":"conv256_2/conv1/conv/filters","shape":[3,3,256,256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.00010476927912118389, "min":-
- 0.015610622589056398}},{"name":"conv256_2/conv1/conv/bias","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":2.418552539068639e-10,"min":-2.539480166022071e-
- 8}},{"name":"conv256_2/conv1/scale/weights","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.06024209564807368,"min":6.598613739013672}},{"name":"conv256_2/conv1/scale/biases","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.01578534350675695,"min":-
- 1.1049740454729864}},{"name":"conv256_2/conv2/conv/filters","shape":[3,3,256,256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.00005543030908002573,

"min":-

- 0.007427661416723448}},{"name":"conv256_2/conv2/conv/bias","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":1.0822061852320308e-9,"min":-1.515088659324843e-
- 7}},{"name":"conv256_2/conv2/scale/weights","shape":[256],"dtype":"float32","quanti zation":{"dtype":"uint8","scale":0.04302893993901272,"min":2.2855491638183594}}, {"name":"conv256_2/conv2/scale/biases","shape":[256],"dtype":"float32","quantizatio n":{"dtype":"uint8","scale":0.006792667566561232,"min":-
- 0.8083274404207865}},{"name":"conv256_down_out/conv1/conv/filters","shape":[3,3,256,256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.000568966465253456,"min":-
- 0.05632768006009214}},{"name":"conv256_down_out/conv1/conv/bias","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":4.5347887884881677e-10,"min":-6.530095855422961e-
- 8}},{"name":"conv256_down_out/conv1/scale/weights","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.017565592597512638,"min":4.59410190582 2754}},{"name":"conv256_down_out/conv1/scale/biases","shape":[256],"dtype":"float 32","quantization":{"dtype":"uint8","scale":0.04850864223405427,"min":-
- 6.306123490427055}},{"name":"conv256_down_out/conv2/conv/filters","shape":[3,3, 256,256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.000373911068719 9761,"min":-
- 0.06954745878191555}},{"name":"conv256_down_out/conv2/conv/bias","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":1.2668428328152895e-9,"min":-2.2549802424112154e-
- 7}},{"name":"conv256_down_out/conv2/scale/weights","shape":[256],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.04351314469879749,"min":4.319566726684 57}},{"name":"conv256_down_out/conv2/scale/biases","shape":[256],"dtype":"float32 ","quantization":{"dtype":"uint8","scale":0.021499746921015722,"min":-
- 1.2039858275768804}},{"name":"fc","shape":[256,128],"dtype":"float32","quantization ":{"dtype":"uint8","scale":0.000357687911566566,"min":-
- 0.04578405268052045}}],"paths":["face_recognition_model-shard1","face_recognition_model-shard2"]}]
- [{"weights":[{"name":"conv0/filters","shape":[3,3,3,16],"dtype":"float32","quantization": {"dtype":"uint8","scale":0.009007044399485869,"min":-
- 1.2069439495311063}},{"name":"conv0/bias","shape":[16],"dtype":"float32","quantiza tion":{"dtype":"uint8","scale":0.005263455241334205,"min":-
- 0.9211046672334858}},{"name":"conv1/depthwise_filter","shape":[3,3,16,1],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.004001977630690033,"min":-
- 0.5042491814669441}},{"name":"conv1/pointwise_filter","shape":[1,1,16,32],"dtype":"float32","quantization":{"dtype":"uint8","scale":0.013836609615999109,"min":-
- $1.411334180831909\}, \{"name": "conv1/bias", "shape": [32], "dtype": "float32", "quantization": \{"dtype": "uint8", "scale": 0.0015159862590771096, "min": -$
- 0.30926119685173037}},{"name":"conv2/depthwise_filter","shape":[3,3,32,1],"dtype":

```
"float32","quantization":{"dtype":"uint8","scale":0.002666276225856706,"min":-
0.317286870876948}}, {"name": "conv2/pointwise filter", "shape": [1,1,32,64], "dtype": "fl
oat32","quantization":{"dtype":"uint8","scale":0.015265831292844286,"min":-
1.6792414422128714}},{"name":"conv2/bias","shape":[64],"dtype":"float32","quantiza
tion":{"dtype":"uint8","scale":0.0020280554598453,"min":-
0.37113414915168985}}, {"name": "conv3/depthwise filter", "shape": [3,3,64,1], "dtype":
"float32","quantization":{"dtype":"uint8","scale":0.006100742489683862,"min":-
0.8907084034938438}},{"name":"conv3/pointwise filter","shape":[1,1,64,128],"dtype"
:"float32","quantization":{"dtype":"uint8","scale":0.016276211832083907,"min":-
2.0508026908425725}},{"name":"conv3/bias","shape":[128],"dtype":"float32","quantiz
ation":{"dtype":"uint8","scale":0.003394414279975143,"min":-
0.7637432129944072}},{"name":"conv4/depthwise filter","shape":[3,3,128,1],"dtype":
"float32", "quantization": {"dtype": "uint8", "scale": 0.006716050119961009, "min": -
0.8059260143953211}},{"name":"conv4/pointwise filter","shape":[1,1,128,256],"dtype
":"float32","quantization":{"dtype":"uint8","scale":0.021875603993733724,"min":-
2.8875797271728514}},{"name":"conv4/bias","shape":[256],"dtype":"float32","quantiz
ation":{"dtype":"uint8","scale":0.0041141652009066415,"min":-
0.8187188749804216}},{"name":"conv5/depthwise filter","shape":[3,3,256,1],"dtype":
"float32", "quantization": {"dtype": "uint8", "scale": 0.008423839597141042, "min": -
0.9013508368940915}}, "name": "conv5/pointwise filter", "shape": [1,1,256,512], "dtyp
e":"float32","quantization":{"dtype":"uint8","scale":0.030007277283014035,"min":-
3.8709387695088107}},{"name":"conv5/bias","shape":[512],"dtype":"float32","quantiz
ation":{"dtype":"uint8","scale":0.008402082966823203,"min":-
1.4871686851277068}}, "name": "conv8/filters", "shape": [1,1,512,25], "dtype": "float32",
"quantization":{"dtype":"uint8","scale":0.028336129469030042,"min":-
4.675461362389957}}, {"name": "conv8/bias", "shape": [25], "dtype": "float32", "quantizati
on":{"dtype":"uint8","scale":0.002268134028303857,"min":-
0.41053225912299807}}],"paths":["tiny face detector model-shard1"]}]
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>Qroll - Smart Attendance Tracking</title>
 <style>
  :root {
   --background: #0f172a;
   --foreground: #f8fafc;
```

```
--primary: #8b5cf6;
   --primary-foreground: #ffffff;
   --secondary: #1e293b;
   --muted: #334155;
   --muted-foreground: #94a3b8;
  }
  body {
   font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI', Roboto, Oxygen,
Ubuntu, Cantarell, 'Open Sans', 'Helvetica Neue', sans-serif;
   margin: 0;
   padding: 0;
   background-color: var(--background);
   color: var(--foreground);
   line-height: 1.6;
  }
  .container {
   max-width: 1200px;
   margin: 0 auto;
   padding: 0 20px;
  }
  header {
   padding: 30px 0;
   text-align: center;
  }
  .logo {
```

```
font-size: 2.5rem;
 font-weight: bold;
 color: var(--primary);
 margin-bottom: 0;
}
.tagline {
 font-size: 1.2rem;
 color: var(--muted-foreground);
 margin-top: 10px;
}
.hero {
 display: flex;
 flex-direction: column;
 align-items: center;
 justify-content: center;
 padding: 60px 0;
 text-align: center;
}
h1 {
 font-size: 3rem;
 margin-bottom: 20px;
 max-width: 800px;
}
.hero p {
 font-size: 1.25rem;
```

```
max-width: 700px;
 margin-bottom: 40px;
 color: var(--muted-foreground);
}
.cta-button {
 display: inline-block;
 background-color: var(--primary);
 color: var(--primary-foreground);
 font-size: 1.1rem;
 font-weight: 600;
 text-decoration: none;
 padding: 14px 32px;
 border-radius: 8px;
 box-shadow: 0 4px 6px rgba(139, 92, 246, 0.25);
 transition: all 0.3s ease;
}
.cta-button:hover {
 transform: translateY(-2px);
 box-shadow: 0 7px 10px rgba(139, 92, 246, 0.3);
}
.features {
 padding: 80px 0;
 background-color: var(--secondary);
}
.features h2 {
```

```
text-align: center;
 font-size: 2rem;
 margin-bottom: 60px;
}
.feature-grid {
 display: grid;
 grid-template-columns: repeat(auto-fit, minmax(300px, 1fr));
 gap: 40px;
}
.feature-card {
 background-color: var(--background);
 border-radius: 12px;
 padding: 30px;
 text-align: center;
 box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
}
.feature-icon {
 width: 60px;
 height: 60px;
 margin: 0 auto 20px;
 display: flex;
 align-items: center;
 justify-content: center;
 background-color: rgba(139, 92, 246, 0.1);
 border-radius: 50%;
 color: var(--primary);
```

```
}
.feature-card h3 {
 font-size: 1.5rem;
 margin-bottom: 15px;
}
.feature-card p {
 color: var(--muted-foreground);
}
footer {
 padding: 40px 0;
 text-align: center;
 color: var(--muted-foreground);
}
@media (max-width: 768px) {
 h1 {
  font-size: 2.2rem;
 }
 .hero p {
  font-size: 1.1rem;
 }
 .feature-grid {
  grid-template-columns: 1fr;
 }
```

```
}
 </style>
</head>
<body>
 <div class="container">
  <header>
   <h2 class="logo">Qroll</h2>
   Smart Attendance Tracking
  </header>
  <section class="hero">
   <h1>The Smart Way to Track Student Attendance</h1>
   >
    Qroll combines QR code scanning, facial recognition, and location verification
    to create a secure and efficient attendance management system for educational
institutions.
   <a href="/auth" class="cta-button">Get Started</a>
  </section>
 </div>
 <section class="features">
  <div class="container">
   <h2>Key Features</h2>
   <div class="feature-grid">
    <div class="feature-card">
      <div class="feature-icon">
       <svg xmlns="http://www.w3.org/2000/svg" width="32" height="32"
viewBox="0 0 24 24" fill="none" stroke="currentColor" stroke-width="2" stroke-
linecap="round" stroke-linejoin="round">
```

```
<path d="M3 7v9a2 2 0 0 0 2 2h13a2 2 0 0 0 2-2V9a2 2 0 0 0-2-2h-</p>
4.5"></path>
        <path d="M3 9h18"></path>
        <path d="M7 13h.01"></path>
        <path d="M11 13h.01"></path>
        <path d="M15 13h.01"></path>
        <path d="M7 17h.01"></path>
        <path d="M11 17h.01"></path>
        <path d="M15 17h.01"></path>
        <path d="M10 2v5"></path>
        <path d="M14 2v5"></path>
       </svg>
      </div>
      <h3>QR Code Scanning</h3>
      Generate and scan QR codes for quick and easy attendance marking.
     </div>
    <div class="feature-card">
      <div class="feature-icon">
       <svg xmlns="http://www.w3.org/2000/svg" width="32" height="32"
viewBox="0 0 24 24" fill="none" stroke="currentColor" stroke-width="2" stroke-
linecap="round" stroke-linejoin="round">
        <path d="M22 8a5 5 0 0 1-3.36 4.7l.99 5.34A1 1 0 0 1 18.66 19H13a2 2 0 0</p>
1-2-2v-5"></path>
        <path d="M12 12a5 5 0 0 1 0-10 4.96 4.96 0 0 1 4.36 2.58"></path>
        <path d="M9 10a5 5 0 0 1 0-8"></path>
        <path d="M4.8 17.8l-.68.68a2 2 0 0 0 0 2.82 2 2 0 0 0 2.82 0l.68-</p>
.68"></path>
        <path d="M2 22l3-3"></path>
       </svg>
      </div>
```

```
<h3>Facial Recognition</h3>
      Verify student identity through secure facial recognition technology.
     </div>
     <div class="feature-card">
      <div class="feature-icon">
       <svg xmlns="http://www.w3.org/2000/svg" width="32" height="32"
viewBox="0 0 24 24" fill="none" stroke="currentColor" stroke-width="2" stroke-
linecap="round" stroke-linejoin="round">
        <path d="M20 10c0 4.4-8 12-8 12s-8-7.6-8-12a8 8 0 0 1 16 0z"></path>
        <path d="M12 10a1 1 0 1 0 0-2 1 1 0 0 0 0 2z"></path>
       </svg>
      </div>
      <h3>Location Verification</h3>
      Ensure students are present in the right location using geolocation
verification.
     </div>
   </div>
  </div>
 </section>
 <footer>
  <div class="container">
   © 2025 Qroll. All rights reserved.
   >
    <a href="/qr-url" style="color: var(--primary); text-decoration: none;">
      Get Qroll QR Code
     </a>
   </div>
```

```
</footer>
</body>
</html>
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>Qroll Attendance App QR Code</title>
 <style>
  body {
   font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI', Roboto, Oxygen,
Ubuntu, Cantarell, 'Open Sans', 'Helvetica Neue', sans-serif;
   display: flex;
   flex-direction: column;
   align-items: center;
   justify-content: center;
   min-height: 100vh;
   margin: 0;
   background-color: #0f172a;
   color: white;
   text-align: center;
   padding: 20px;
  .container {
   max-width: 600px;
   background-color: #1e293b;
   border-radius: 12px;
   padding: 30px;
```

```
box-shadow: 0 10px 25px rgba(0, 0, 0, 0.2);
  }
  h1 {
   color: #8b5cf6;
   margin-bottom: 10px;
  }
  p {
   color: #94a3b8;
   margin-bottom: 25px;
  }
  .qr-code {
   margin: 20px 0;
  }
  .url {
   font-weight: bold;
   background-color: #334155;
   padding: 10px;
   border-radius: 6px;
   word-break: break-all;
  }
 </style>
</head>
<body>
 <div class="container">
  <h1>Qroll Attendance App</h1>
  Scan this QR code with your mobile device to access the Qroll attendance
tracking application
  <div class="qr-code">
```

```
<!-- QR Code will be inserted here by JavaScript -->
  </div>
  Or visit this URL:
  <div class="url" id="app-url"></div>
 </div>
 <script
src="https://cdn.jsdelivr.net/npm/qrcode@1.5.0/build/qrcode.min.js"></script>
 <script>
  document.addEventListener('DOMContentLoaded', function() {
   const appUrl = window.location.origin;
   document.getElementById('app-url').textContent = appUrl;
   // Generate QR code
   QRCode.toCanvas(document.querySelector('.qr-code'), appUrl, {
    width: 256,
    margin: 2,
    color: {
      dark: '#8b5cf6', // Purple color
      light: '#fffff' // White background
    }
   }, function(error) {
    if (error) console.error(error);
    console.log('QR code generated successfully for', appUrl);
   });
  });
 </script>
</body>
```

```
</html>
import { useState, useEffect } from "react";
import { useForm } from "react-hook-form";
import { zodResolver } from "@hookform/resolvers/zod";
import { qrGenerateSchema } from "@shared/schema";
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Label } from "@/components/ui/label";
import { Slider } from "@/components/ui/slider";
import { Switch } from "@/components/ui/switch";
import { useMutation } from "@tanstack/react-query";
import { apiRequest, queryClient } from "@/lib/queryClient";
import { useToast } from "@/hooks/use-toast";
import { Download, Share, Timer, MapPin, Video, Loader2, AlertTriangle } from
"lucide-react";
import { QRCodeSVG as QRCode } from "qrcode.react";
import { format } from "date-fns";
import { useGeolocation } from "@/hooks/use-geolocation";
import { Alert, AlertDescription } from "@/components/ui/alert";
interface QRGeneratorProps {
 className?: string;
}
type QRFormValues = {
 name: string;
 date: string;
 time: string;
 location: string;
```

```
locationLat?: string;
 locationLng?: string;
 validDuration: number;
 locationRange: number;
 requireFaceVerification: boolean;
 requireLocationVerification: boolean;
};
export function QRGenerator({ className }: QRGeneratorProps) {
 const [generatedQR, setGeneratedQR] = useState<any | null>(null);
 const [useCurrentLocation, setUseCurrentLocation] = useState(false);
 const { toast } = useToast();
 // Get current location
 const {
  latitude,
  longitude,
  loading: locationLoading,
  error: locationError,
  getCurrentPosition
 } = useGeolocation({
  enableHighAccuracy: true,
  timeout: 10000,
  maximumAge: 0
 });
 // Form setup
 const form = useForm<QRFormValues>({
  resolver: zodResolver(qrGenerateSchema),
```

```
defaultValues: {
  name: "",
  date: format(new Date(), "yyyy-MM-dd"),
  time: format(new Date(), "HH:mm"),
  location: "",
  locationLat: undefined,
  locationLng: undefined,
  validDuration: 15,
  locationRange: 100,
  requireFaceVerification: true,
  requireLocationVerification: true
 }
});
// Update lat/Ing when current location changes
useEffect(() => {
 if (useCurrentLocation && latitude && longitude) {
  form.setValue("locationLat", latitude.toString());
  form.setValue("locationLng", longitude.toString());
 }
}, [latitude, longitude, useCurrentLocation, form]);
// Handle location toggle
const handleLocationToggle = (checked: boolean) => {
 setUseCurrentLocation(checked);
 if (checked) {
  getCurrentPosition();
 } else {
  form.setValue("locationLat", undefined);
```

```
form.setValue("locationLng", undefined);
 }
};
// Generate QR code mutation
const generateQrMutation = useMutation({
 mutationFn: async (data: QRFormValues) => {
  const res = await apiRequest("POST", "/api/sessions", data);
  return await res.json();
 },
 onSuccess: (data) => {
  setGeneratedQR(data);
  queryClient.invalidateQueries({ queryKey: ["/api/sessions"] });
  toast({
   title: "QR Code Generated",
   description: "The QR code has been successfully generated.",
  });
 },
 onError: (error: Error) => {
  toast({
   title: "Failed to generate QR code",
   description: error.message,
   variant: "destructive",
  });
 }
});
// Handle form submission
const onSubmit = (data: QRFormValues) => {
```

```
generateQrMutation.mutate(data);
 };
 // Handle download QR code
 const handleDownloadQR = () => {
  const svg = document.getElementById('qr-code-canvas');
  if (svg) {
   // Convert SVG to a data URL
   const svgData = new XMLSerializer().serializeToString(svg);
   const svgBlob = new Blob([svgData], { type: 'image/svg+xml;charset=utf-8' });
   const svgUrl = URL.createObjectURL(svgBlob);
   const link = document.createElement('a');
   link.href = svgUrl;
   link.download = `qroll-${generatedQR.name}-${new
Date().toISOString().split('T')[0]}.svg`;
   document.body.appendChild(link);
   link.click();
   document.body.removeChild(link);
   URL.revokeObjectURL(svgUrl);
  }
 };
 // Handle share QR code
 const handleShareQR = () => {
  if (navigator.share) {
   navigator.share({
    title: 'Attendance QR Code for ${generatedQR.name}',
    text: 'Scan this QR code to mark your attendance',
```

```
url: window.location.href
   })
   .catch((error) => {
    toast({
      title: "Share failed",
      description: error.message,
      variant: "destructive",
    });
   });
  } else {
   toast({
    title: "Share not supported",
    description: "Your browser doesn't support the Web Share API.",
    variant: "destructive",
   });
  }
 };
 return (
  <div className={className}>
   <h2 className="text-xl font-semibold text-white mb-6">Generate Attendance
QR Code</h2>
   <form onSubmit={form.handleSubmit(onSubmit)} className="space-y-6">
     <div>
      <Label htmlFor="name" className="text-white">Class/Course Name/Label>
      <Input
       id="name"
```

// In a real app, we'd generate a shareable URL here

```
placeholder="Data Structures & Algorithms"
 {...form.register("name")}
 className="bg-gray-800 border-gray-700 text-white"
/>
{form.formState.errors.name && (
  {form.formState.errors.name.message}
 )}
</div>
<div className="grid grid-cols-1 md:grid-cols-2 gap-4">
<div>
  <Label htmlFor="date" className="text-white">Date</Label>
  <Input
  id="date"
  type="date"
  {...form.register("date")}
  className="bg-gray-800 border-gray-700 text-white"
 />
 {form.formState.errors.date && (
   {form.formState.errors.date.message}
  )}
</div>
<div>
 <Label htmlFor="time" className="text-white">Time</Label>
```

```
<Input
   id="time"
   type="time"
  {...form.register("time")}
   className="bg-gray-800 border-gray-700 text-white"
  />
  {form.formState.errors.time && (
   {form.formState.errors.time.message}
   )}
 </div>
</div>
<div className="space-y-2">
 <Label htmlFor="location" className="text-white">Location/Label>
 <Input
 id="location"
  placeholder="Building A, Room 201"
  {...form.register("location")}
  className="bg-gray-800 border-gray-700 text-white"
/>
 {form.formState.errors.location && (
  {form.formState.errors.location.message}
  )}
{/* Location coordinate capture */}
```

```
<div className="flex items-center space-x-4 mt-2">
       <div className="flex items-center space-x-2">
        <Switch
         id="useCurrentLocation"
         checked={useCurrentLocation}
         onCheckedChange={handleLocationToggle}
        />
        <Label htmlFor="useCurrentLocation" className="text-white cursor-</p>
pointer">
         Use current location coordinates
        </Label>
       </div>
       {locationLoading && (
        <div className="text-gray-400 text-sm flex items-center">
          <Loader2 className="h-3 w-3 mr-1 animate-spin" />
         Getting location...
        </div>
       )}
      </div>
      {locationError && (
       <Alert variant="destructive" className="mt-2 bg-red-900/30 border-red-800</p>
text-sm py-3">
        <AlertTriangle className="h-4 w-4 mr-2" />
        <AlertDescription>
         {locationError | | "Failed to get your current location. Please grant location
permissions."}
        </AlertDescription>
       </Alert>
```

```
)}
      {useCurrentLocation && latitude && longitude && (
       <div className="grid grid-cols-2 gap-3 mt-2">
         <div className="space-y-1">
          <Label htmlFor="locationLat" className="text-xs text-gray-</pre>
400">Latitude</Label>
          <Input
           id="locationLat"
           value={latitude?.toString() || ""}
           readOnly
           className="bg-gray-900 border-gray-700 text-white text-xs font-mono h-
8"
         />
         </div>
         <div className="space-y-1">
          <Label htmlFor="locationLng" className="text-xs text-gray-</pre>
400">Longitude</Label>
          <Input
           id="locationLng"
           value={longitude?.toString() || ""}
           readOnly
           className="bg-gray-900 border-gray-700 text-white text-xs font-mono h-
8"
          />
         </div>
       </div>
      )}
     </div>
```

```
<div className="border-t border-gray-700 pt-6">
     <h3 className="text-lg font-medium text-white mb-4">QR Code
Settings</h3>
     <div className="space-y-6">
      <div>
        <Label htmlFor="validDuration" className="flex items-center text-white">
         <Timer className="h-4 w-4 mr-2 text-primary" />
         QR Code Active Duration: {form.watch("validDuration")} minutes
        </Label>
        <Slider
         id="validDuration"
         min=\{1\}
         max=\{60\}
         step={1}
         value={[form.watch("validDuration")]}
         onValueChange={(value) => form.setValue("validDuration", value[0])}
         className="mt-2"
       />
       {form.formState.errors.validDuration && (
         {form.formState.errors.validDuration.message}
         )}
      </div>
```

<Label htmlFor="locationRange" className="flex items-center text-white">

<div>

```
<MapPin className="h-4 w-4 mr-2 text-primary" />
         Valid Location Range: {form.watch("locationRange")} meters
        </Label>
        <Slider
         id="locationRange"
         min=\{10\}
         max = \{1000\}
         step={10}
         value={[form.watch("locationRange")]}
         onValueChange={(value) => form.setValue("locationRange", value[0])}
         className="mt-2"
        />
        {form.formState.errors.locationRange && (
         {form.formState.errors.locationRange.message}
         )}
       </div>
      {/* Verification requirements */}
       <div className="space-y-4 pt-2 border-t border-gray-800">
        <h4 className="text-sm font-medium text-gray-300">Verification
Requirements</h4>
        <div className="flex items-center justify-between">
         <div className="flex items-center">
          <Video className="h-4 w-4 mr-2 text-primary" />
          <Label htmlFor="requireFaceVerification" className="text-white cursor-</p>
pointer">
           Require face verification
```

```
</Label>
          </div>
          <Switch
           id="requireFaceVerification"
           checked={form.watch("requireFaceVerification")}
           onCheckedChange={(checked) =>
form.setValue("requireFaceVerification", checked)}
         />
         </div>
         <div className="flex items-center justify-between">
          <div className="flex items-center">
           <MapPin className="h-4 w-4 mr-2 text-primary" />
           <Label htmlFor="requireLocationVerification" className="text-white</p>
cursor-pointer">
            Require location verification
           </Label>
          </div>
          <Switch
           id="requireLocationVerification"
           checked={form.watch("requireLocationVerification")}
           onCheckedChange={(checked) =>
form.setValue("requireLocationVerification", checked)}
         />
         </div>
        {!form.watch("requireLocationVerification") && useCurrentLocation && (
          <Alert className="mt-2 bg-amber-900/30 border-amber-800 text-sm py-
3">
           <AlertTriangle className="h-4 w-4 mr-2 text-amber-500" />
```

<AlertDescription className="text-amber-300">

When location verification is disabled, students don't need to be physically present at the class location.

```
</AlertDescription>
      </Alert>
    )}
   </div>
  </div>
 </div>
 <div className="pt-4">
  <Button
   type="submit"
   className="w-full bg-primary hover:bg-primary/80"
   disabled={generateQrMutation.isPending}
  >
   {generateQrMutation.isPending?(
     <>
      <Loader2 className="mr-2 h-4 w-4 animate-spin" />
      Generating QR Code...
     </>
   ):(
    "Generate QR Code"
   )}
  </Button>
 </div>
</form>
{/* Generated QR Code */}
```

```
{generatedQR && (
     <div className="mt-8 border-t border-gray-700 pt-6">
      <div className="text-center">
       <h3 className="text-lg font-medium text-white mb-4">QR Code
Generated</h3>
       <div className="bg-gray-800 border border-gray-700 rounded-lg p-4 inline-</pre>
block mb-4">
        <QRCode
         id="qr-code-canvas"
         value={JSON.stringify({
          sessionId: generatedQR.id,
          qrCode: generatedQR.qrCode,
          name: generatedQR.name,
          time: `${generatedQR.time}`,
          location: generatedQR.location
         })}
         size={192}
         className="w-48 h-48"
         bgColor="#1f2937"
         fgColor="#ffffff"
        />
       </div>
       <div className="max-w-md mx-auto">
        <div className="bg-gray-800 border border-gray-700 rounded-lg p-4 mb-</pre>
4">
         <div className="flex items-center mb-2">
          <Timer className="text-primary mr-2 h-5 w-5" />
           <span className="font-medium text-white">
```

```
Active for: {generatedQR.validDuration} minutes
           </span>
          </div>
          <div className="w-full bg-gray-700 rounded-full h-2 mb-4">
           <div className="bg-primary h-2 rounded-full w-full"></div>
          </div>
          <div className="grid grid-cols-2 gap-3 text-center text-sm">
           <div className={`py-2 px-3 rounded</pre>
${generatedQR.requireLocationVerification
            ? 'bg-green-900/30 text-green-400 border border-green-900'
            : 'bg-gray-900/50 text-gray-500 border border-gray-800'}`}>
            <MapPin className={`h-4 w-4 mx-auto mb-1</pre>
${generatedQR.requireLocationVerification
             ? 'text-green-400'
             : 'text-gray-500'}`} />
            <span className="block">
             Location Check {generatedQR.requireLocationVerification? 'Required'
: 'Disabled'}
            </span>
            {generatedQR.requireLocationVerification && generatedQR.locationLat
&& (
             <span className="block text-xs text-gray-400 mt-1">
              Range: {generatedQR.locationRange}m
             </span>
            )}
           </div>
           <div className={`py-2 px-3 rounded</pre>
${generatedQR.requireFaceVerification
            ? 'bg-green-900/30 text-green-400 border border-green-900'
```

```
: 'bg-gray-900/50 text-gray-500 border border-gray-800'}`}>
            <Video className={`h-4 w-4 mx-auto mb-1
${generatedQR.requireFaceVerification
             ? 'text-green-400'
             : 'text-gray-500'}`} />
            <span className="block">
             Face Verification {generatedQR.requireFaceVerification? 'Required':
'Disabled'}
            </span>
          </div>
         </div>
        </div>
        <div className="flex space-x-3">
         <Button
          className="flex-1 bg-primary hover:bg-primary/80"
          onClick={handleDownloadQR}
          <Download className="mr-2 h-4 w-4" />
          Download
         </Button>
         <Button
          variant="outline"
          className="flex-1 border-gray-700 text-white hover:bg-gray-800"
          onClick={handleShareQR}
          <Share className="mr-2 h-4 w-4" />
          Share
         </Button>
```

```
</div>
       </div>
      </div>
     </div>
   )}
  </div>
 );
}
import { useState, useEffect, useRef } from "react";
import { useForm } from "react-hook-form";
import { zodResolver } from "@hookform/resolvers/zod";
import { loginSchema, registerSchema, InsertUser } from "@shared/schema";
import { useAuth } from "@/hooks/use-auth";
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Label } from "@/components/ui/label";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { Card, CardContent, CardDescription, CardFooter, CardHeader, CardTitle }
from "@/components/ui/card";
import { useToast } from "@/hooks/use-toast";
import { Loader2, Camera, CheckCircle, AlertCircle } from "lucide-react";
import { useFaceRecognition } from "@/hooks/use-face-recognition";
import { Alert, AlertDescription, AlertTitle } from "@/components/ui/alert";
interface AuthFormsProps {
 initialRole?: string;
}
export function AuthForms({ initialRole = "student" }: AuthFormsProps) {
```

```
const { loginMutation, registerMutation } = useAuth();
 const { toast } = useToast();
 // Default to login tab but pre-select the appropriate role
 const [activeTab, setActiveTab] = useState<"login" | "register">("login");
 const [faceData, setFaceData] = useState<string | null>(null);
 const [showFaceCapture, setShowFaceCapture] = useState(false);
 const videoRef = useRef<HTMLVideoElement>(null);
 // Face recognition setup for student registration
 const {
  start: startFaceDetection,
  stop: stopFaceDetection,
  isRunning: isFaceDetectionRunning,
  progress: faceDetectionProgress,
  faceDetected,
  error: faceDetectionError
 } = useFaceRecognition({
  onDetected: (faceDescriptor) => {
   if (faceDescriptor && videoRef.current) {
    // Get the current frame from video as base64 string with lower quality for faster
processing
    const canvas = document.createElement('canvas');
    // Use smaller dimensions for better performance
     const width = videoRef.current.videoWidth;
    const height = videoRef.current.videoHeight;
    canvas.width = width:
    canvas.height = height;
    const ctx = canvas.getContext('2d');
```

```
if (ctx) {
     ctx.drawlmage(videoRef.current, 0, 0, width, height);
     // Lower quality (0.5) for faster processing and smaller size
     const dataUrl = canvas.toDataURL('image/jpeg', 0.5);
     setFaceData(dataUrl);
     stopFaceDetection();
     toast({
      title: "Face captured successfully",
      description: "You can now proceed with your registration",
      variant: "default"
    });
   }
  }
 },
 onError: (error) => {
  toast({
   title: "Face detection error",
   description: error.message,
   variant: "destructive"
  });
 }
});
// Login form
const loginForm = useForm({
 resolver: zodResolver(loginSchema),
 defaultValues: {
  username: "",
```

```
password: ""
 }
});
const onLoginSubmit = (data: { username: string; password: string }) => {
 loginMutation.mutate(data);
};
// Register form
type RegisterFormData = Omit<InsertUser, "role"> & {
 confirmPassword: string;
 role: string;
};
const registerForm = useForm<RegisterFormData>({
 resolver: zodResolver(registerSchema),
 defaultValues: {
  username: "",
  password: "",
  confirmPassword: "",
  fullName: "",
  email: "",
  dob: "",
  mobile: "",
  role: initialRole // Set default role here
 }
});
// Set role when initialRole changes
```

```
useEffect(() => {
 if (initialRole === "admin" || initialRole === "student") {
  registerForm.setValue("role", initialRole);
 }
}, [initialRole, registerForm]);
// Cleanup face recognition when component unmounts
useEffect(() => {
 return () => {
  if (isFaceDetectionRunning) {
   stopFaceDetection();
  }
 };
}, [isFaceDetectionRunning, stopFaceDetection]);
const startFaceCapture = () => {
 setShowFaceCapture(true);
 setTimeout(() => {
  startFaceDetection(videoRef);
 }, 500);
};
const cancelFaceCapture = () => {
 stopFaceDetection();
 setShowFaceCapture(false);
};
const retakeFace = () => {
 setFaceData(null);
```

```
startFaceCapture();
};
const onRegisterSubmit = (data: RegisterFormData) => {
 // Convert to InsertUser type for the API
 const { confirmPassword, ...userData } = data;
 // Only require face data for students
 if (userData.role === 'student' && !faceData) {
  toast({
   title: "Face verification required",
   description: "Please capture your face before registering as a student",
   variant: "destructive"
  });
  return;
 }
 // Add face data to user data if available
 const userDataWithFace = {
  ...userData,
  faceData: faceData || undefined
 };
 registerMutation.mutate(userDataWithFace as InsertUser);
};
return (
 <Card className="w-full max-w-md bg-gray-900 border-gray-800">
  <CardHeader>
```

```
<CardTitle className="text-2xl font-bold text-white">
      {activeTab === "login" ? "Sign In" : "Create Account"}
     </CardTitle>
     <CardDescription className="text-gray-400">
      {activeTab === "login"
       ? "Enter your credentials to access your account"
       : "Fill in your details to create an account"}
     </CardDescription>
   </CardHeader>
   <Tabs value={activeTab} onValueChange={(v) => setActiveTab(v as "login" |
"register")}>
     <TabsList className="grid w-full grid-cols-2 bg-gray-800">
      <TabsTrigger value="login" className="data-[state=active]:bg-primary data-
[state=active]:text-white">Login</TabsTrigger>
      <TabsTrigger value="register" className="data-[state=active]:bg-primary
data-[state=active]:text-white">Register</TabsTrigger>
     </TabsList>
     <TabsContent value="login">
      <form onSubmit={loginForm.handleSubmit(onLoginSubmit)}>
       <CardContent className="space-y-4 pt-4">
        <div className="space-y-2">
         <Label htmlFor="username">Username</Label>
         <Input
           id="username"
           placeholder="your.username"
           autoComplete="username"
           {...loginForm.register("username")}
         />
```

```
{loginForm.formState.errors.username && (
   {loginForm.formState.errors.username.message}
   )}
 </div>
 <div className="space-y-2">
  <div className="flex items-center justify-between">
   <Label htmlFor="password">Password</Label>
   <Button variant="link" className="px-0 text-xs" type="button">
    Forgot password?
   </Button>
  </div>
  <Input
   id="password"
   type="password"
   placeholder="•••••"
   autoComplete="current-password"
   {...loginForm.register("password")}
 />
  {loginForm.formState.errors.password && (
   {loginForm.formState.errors.password.message}
   )}
 </div>
</CardContent>
```

```
<CardFooter className="pt-4">
   <Button
    type="submit"
    className="w-full bg-primary hover:bg-primary/90 text-white"
    disabled={loginMutation.isPending}
    {loginMutation.isPending?(
      <>
       <Loader2 className="mr-2 h-4 w-4 animate-spin" />
       Signing in...
     </>
    ):(
     "Sign In"
    )}
   </Button>
  </CardFooter>
 </form>
</TabsContent>
<TabsContent value="register">
 <form onSubmit={registerForm.handleSubmit(onRegisterSubmit)}>
  <CardContent className="space-y-4 pt-4">
   <div className="flex space-x-4">
    <Button
     type="button"
     variant={registerForm.watch("role") === "student" ? "default" : "outline"}
     className={`flex-1 ${registerForm.watch("role") === "student"
       ? "bg-primary hover:bg-primary/90 text-white"
       : "border-primary text-primary hover:bg-primary/10"}'}
```

```
onClick={() => registerForm.setValue("role", "student")}
 >
  Student
 </Button>
 <Button
  type="button"
  variant={registerForm.watch("role") === "admin" ? "default" : "outline"}
  className={`flex-1 ${registerForm.watch("role") === "admin"
   ? "bg-primary hover:bg-primary/90 text-white"
   : "border-primary text-primary hover:bg-primary/10"}'}
  onClick={() => registerForm.setValue("role", "admin")}
 >
  Admin
 </Button>
</div>
<div className="space-y-2">
 <Label htmlFor="fullName">Full Name</Label>
 <Input
  id="fullName"
  placeholder="John Doe"
  {...registerForm.register("fullName")}
 />
 {registerForm.formState.errors.fullName && (
  {registerForm.formState.errors.fullName.message}
  )}
</div>
```

```
<div className="space-y-2">
 <Label htmlFor="username">Username</Label>
 <Input
 id="username"
 placeholder="john.doe"
 autoComplete="username"
 {...registerForm.register("username")}
/>
 {registerForm.formState.errors.username && (
  {registerForm.formState.errors.username.message}
 )}
</div>
<div className="space-y-2">
 <Label htmlFor="email">Email</Label>
 <Input
 id="email"
 type="email"
 placeholder="your.email@example.com"
 autoComplete="email"
 {...registerForm.register("email")}
/>
 {registerForm.formState.errors.email && (
  {registerForm.formState.errors.email.message}
```

```
)}
</div>
<div className="space-y-2">
 <Label htmlFor="dob">Date of Birth</Label>
 <Input
  id="dob"
  type="date"
 {...registerForm.register("dob")}
/>
{registerForm.formState.errors.dob && (
  {registerForm.formState.errors.dob.message}
  )}
</div>
<div className="space-y-2">
 <Label htmlFor="mobile">Mobile Number</Label>
 <Input
  id="mobile"
 placeholder="+1 (123) 456-7890"
  {...registerForm.register("mobile")}
/>
{registerForm.formState.errors.mobile && (
  {registerForm.formState.errors.mobile.message}
  )}
```

```
</div>
```

```
<div className="space-y-2">
 <Label htmlFor="password">Password</Label>
 <Input
  id="password"
  type="password"
  placeholder=" ********
  autoComplete="new-password"
  {...registerForm.register("password")}
/>
 {registerForm.formState.errors.password && (
  {registerForm.formState.errors.password.message}
  )}
</div>
<div className="space-y-2">
 <Label htmlFor="confirmPassword">Confirm Password</Label>
 <Input
  id="confirmPassword"
  type="password"
  placeholder=" ********
  autoComplete="new-password"
 {...registerForm.register("confirmPassword")}
/>
 {registerForm.formState.errors.confirmPassword && (
```

```
{registerForm.formState.errors.confirmPassword.message}
  )}
</div>
{/* Face capture section - only for students */}
{registerForm.watch("role") === "student" && (
 <div className="space-y-3">
  <div className="flex items-center justify-between">
   <Label>Face Verification/Label>
   {faceData?(
    <Button
      type="button"
      variant="outline"
      size="sm"
      onClick={retakeFace}
      className="text-xs"
      Retake Photo
    </Button>
   ): null}
  </div>
  {faceDetectionError && (
   <Alert variant="destructive" className="py-2">
    <AlertCircle className="h-4 w-4" />
    <AlertTitle>Error</AlertTitle>
    <AlertDescription>{faceDetectionError.message}</AlertDescription>
   </Alert>
```

```
)}
           {/* Face capture UI */}
           {showFaceCapture &&!faceData?(
            <div className="relative border border-gray-700 rounded-md overflow-</pre>
hidden aspect-video bg-black flex items-center justify-center">
              <video
               ref={videoRef}
               autoPlay
               playsInline
               muted
               className="w-full h-full object-cover"
              />
              {/* Progress indicator for face capture */}
              {faceDetectionProgress > 0 && (
               <div className="absolute top-0 left-0 right-0 h-2 bg-gray-800">
                <div
                 className="h-full bg-green-500 transition-all duration-200"
                 style={{ width: `${faceDetectionProgress}%` }}
                />
               </div>
              )}
              <div className="absolute inset-0 flex flex-col items-center justify-</pre>
center">
               {isFaceDetectionRunning?(
                <div className="bg-black/70 p-3 rounded-lg text-center">
                 <Loader2 className="h-8 w-8 animate-spin text-primary mx-auto</p>
mb-2" />
```

```
{faceDetected?
                   `Capturing... ${Math.round(faceDetectionProgress)}%`:
                   "Looking for your face..."
                  }
                 </div>
              ): null}
             </div>
             <Button
              type="button"
              variant="outline"
              size="sm"
              className="absolute bottom-2 right-2 bg-gray-900"
              onClick={cancelFaceCapture}
              Cancel
             </Button>
            </div>
          ):!faceData?(
            <Button
             type="button"
             variant="outline"
             className="w-full border-dashed border-2 py-8 flex flex-col items-
center gap-2"
             onClick={startFaceCapture}
             <Camera className="h-8 w-8 text-gray-400" />
```

```
<span className="text-sm text-gray-400">Capture your face for
verification</span>
           </Button>
          ):(
           <div className="relative border border-gray-700 rounded-md overflow-</pre>
hidden aspect-video">
             <img
             src={faceData}
             alt="Captured face"
             className="w-full h-full object-cover"
            />
            <div className="absolute top-2 right-2 bg-green-500/80 text-white p-1</pre>
rounded-full">
              <CheckCircle className="h-5 w-5" />
            </div>
           </div>
          )}
          {registerForm.watch("role") === "student" && !faceData &&
!showFaceCapture && (
           Students must capture their face for daily attendance verification
           )}
         </div>
        )}
       </CardContent>
       <CardFooter className="pt-2">
        <Button
```

```
type="submit"
          className="w-full bg-primary hover:bg-primary/90 text-white"
         disabled={registerMutation.isPending}
        >
          {registerMutation.isPending?(
           <>
            <Loader2 className="mr-2 h-4 w-4 animate-spin" />
            Creating Account...
           </>
         ):(
           "Create Account"
         )}
        </Button>
       </CardFooter>
      </form>
     </TabsContent>
   </Tabs>
  </Card>
 );
}
import { useState } from "react";
import { User } from "@shared/schema";
import { UserAvatar } from "@/components/ui/user-avatar";
import { Card, CardContent, CardHeader, CardTitle } from "@/components/ui/card";
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Label } from "@/components/ui/label";
import {
 Dialog,
```

```
DialogContent,
 DialogDescription,
 DialogHeader,
 DialogTitle,
 DialogTrigger,
} from "@/components/ui/dialog";
import { useForm } from "react-hook-form";
import { zodResolver } from "@hookform/resolvers/zod";
import { z } from "zod";
import { Lock, Edit } from "lucide-react";
import { useAuth } from "@/hooks/use-auth";
interface ProfileSectionProps {
 user: User;
}
// Change password form schema
const changePasswordSchema = z.object({
 currentPassword: z.string().min(1, "Current password is required"),
 newPassword: z.string().min(6, "New password must be at least 6 characters"),
 confirmPassword: z.string().min(6, "Confirm password is required")
}).refine(data => data.newPassword === data.confirmPassword, {
 message: "Passwords do not match",
 path: ["confirmPassword"]
});
type ChangePasswordFormValues = z.infer<typeof changePasswordSchema>;
export function ProfileSection({ user }: ProfileSectionProps) {
```

```
const { logoutMutation } = useAuth();
 const [changePasswordOpen, setChangePasswordOpen] = useState(false);
 // Format date of birth
 const formattedDob = user.dob ? new Date(user.dob).toLocaleDateString() : "Not
provided";
 // Change password form
 const form = useForm<ChangePasswordFormValues>({
  resolver: zodResolver(changePasswordSchema),
  defaultValues: {
   currentPassword: "",
   newPassword: "",
   confirmPassword: ""
  }
 });
 const onSubmit = (data: ChangePasswordFormValues) => {
  // In a real app, we would call an API to change the password
  console.log("Change password:", data);
  setChangePasswordOpen(false);
  form.reset();
 };
 return (
  <div className="space-y-6">
   <div className="flex items-center space-x-4 mb-6">
    <UserAvatar user={user} size="lg" />
    <div>
```

```
<h2 className="text-xl font-semibold text-white">{user.fullName}</h2>
     {user.role === "admin" ? "Administrator" :
"Student"}
    </div>
   </div>
   <Card className="bg-gray-800 border-gray-700">
    <CardHeader>
     <CardTitle className="text-white">Profile Information</CardTitle>
    </CardHeader>
    <CardContent className="space-y-6">
     <div className="flex flex-col sm:flex-row">
       <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-0">Full
Name</div>
       <div className="sm:w-2/3 text-white">{user.fullName}</div>
     </div>
     <div className="flex flex-col sm:flex-row">
       <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-0">User
ID</div>
       <div className="sm:w-2/3 text-white">{user.username}</div>
     </div>
     <div className="flex flex-col sm:flex-row">
       <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-</pre>
0">Email</div>
       <div className="sm:w-2/3 text-white">{user.email || "Not provided"}</div>
     </div>
     <div className="flex flex-col sm:flex-row">
```

```
<div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-0">Date
of Birth</div>
       <div className="sm:w-2/3 text-white">{formattedDob}</div>
      </div>
      <div className="flex flex-col sm:flex-row">
       <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-</pre>
0">Mobile Number</div>
       <div className="sm:w-2/3 text-white">{user.mobile || "Not provided"}</div>
      </div>
    </CardContent>
   </Card>
   <Card className="bg-gray-800 border-gray-700">
    <CardHeader>
      <CardTitle className="text-white">Account Settings</CardTitle>
    </CardHeader>
    <CardContent>
      <div className="space-y-4">
       <Dialog open={changePasswordOpen}</pre>
onOpenChange={setChangePasswordOpen}>
        <DialogTrigger asChild>
         <Button variant="link" className="flex items-center text-primary
hover:text-blue-700 p-0">
          <Lock className="mr-2 h-4 w-4" />
          Change Password
         </Button>
        </DialogTrigger>
        <DialogContent>
         <DialogHeader>
```

```
<DialogTitle>Change Password</DialogTitle>
 <DialogDescription>
  Enter your current password and a new password below.
 </DialogDescription>
</DialogHeader>
<form onSubmit={form.handleSubmit(onSubmit)} className="space-y-4">
 <div className="space-y-2">
  <Label htmlFor="currentPassword">Current Password</Label>
  <Input
   id="currentPassword"
   type="password"
   {...form.register("currentPassword")}
 />
  {form.formState.errors.currentPassword && (
   {form.formState.errors.currentPassword.message}
   )}
 </div>
 <div className="space-y-2">
  <Label htmlFor="newPassword">New Password</Label>
  <Input
   id="newPassword"
   type="password"
   {...form.register("newPassword")}
  />
  {form.formState.errors.newPassword && (
```

```
{form.formState.errors.newPassword.message}
  )}
</div>
<div className="space-y-2">
 <Label htmlFor="confirmPassword">Confirm New Password
 <Input
 id="confirmPassword"
 type="password"
 {...form.register("confirmPassword")}
/>
 {form.formState.errors.confirmPassword && (
  {form.formState.errors.confirmPassword.message}
  )}
</div>
<div className="flex justify-end space-x-2 pt-2">
 <Button
 type="button"
  variant="outline"
 onClick={() => setChangePasswordOpen(false)}
 >
  Cancel
 </Button>
 <Button type="submit">Save Changes/Button>
```

```
</div>
         </form>
        </DialogContent>
       </Dialog>
       <Button
        variant="link"
        className="flex items-center text-primary hover:text-blue-700 p-0"
        onClick={() => {
         // In a real app we would call an API to update the profile
         console.log("Edit profile clicked");
        }}
        <Edit className="mr-2 h-4 w-4" />
        Edit Profile
       </Button>
      </div>
    </CardContent>
   </Card>
   <Card className="bg-gray-800 border-gray-700">
    <CardHeader>
      <CardTitle className="text-white">App Information</CardTitle>
     </CardHeader>
     <CardContent>
      <div className="space-y-2">
       <div className="flex flex-col sm:flex-row">
        <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-0">App
Version</div>
```

```
<div className="sm:w-2/3 text-white">Qroll v1.0.2</div>
       </div>
       <div className="flex flex-col sm:flex-row">
        <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-0">Last
Updated</div>
        <div className="sm:w-2/3 text-white">June 10, 2023</div>
       </div>
       {user.role === "admin" && (
        <div className="flex flex-col sm:flex-row">
         <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-</pre>
0">Server Status</div>
         <div className="sm:w-2/3 text-white">
           <span className="inline-flex items-center">
            <span className="h-2 w-2 rounded-full bg-green-500 mr-2"></span>
            Online
          </span>
         </div>
        </div>
       )}
      </div>
     </CardContent>
   </Card>
   <Button
    variant="destructive"
    className="w-full"
    onClick={() => logoutMutation.mutate()}
    disabled={logoutMutation.isPending}
```

```
{logoutMutation.isPending? "Logging out...": "Logout"}
   </Button>
  </div>
 );
}
import { useState } from "react";
import { User } from "@shared/schema";
import { UserAvatar } from "@/components/ui/user-avatar";
import { Card, CardContent, CardHeader, CardTitle } from "@/components/ui/card";
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Label } from "@/components/ui/label";
import {
 Dialog,
 DialogContent,
 DialogDescription,
 DialogHeader,
 DialogTitle,
 DialogTrigger,
} from "@/components/ui/dialog";
import { useForm } from "react-hook-form";
import { zodResolver } from "@hookform/resolvers/zod";
import { z } from "zod";
import { Lock, Edit } from "lucide-react";
import { useAuth } from "@/hooks/use-auth";
interface ProfileSectionProps {
 user: User;
```

```
}
// Change password form schema
const changePasswordSchema = z.object({
 currentPassword: z.string().min(1, "Current password is required"),
 newPassword: z.string().min(6, "New password must be at least 6 characters"),
 confirmPassword: z.string().min(6, "Confirm password is required")
}).refine(data => data.newPassword === data.confirmPassword, {
 message: "Passwords do not match",
 path: ["confirmPassword"]
});
type ChangePasswordFormValues = z.infer<typeof changePasswordSchema>;
export function ProfileSection({ user }: ProfileSectionProps) {
 const { logoutMutation } = useAuth();
 const [changePasswordOpen, setChangePasswordOpen] = useState(false);
 // Format date of birth
 const formattedDob = user.dob ? new Date(user.dob).toLocaleDateString() : "Not
provided";
 // Change password form
 const form = useForm<ChangePasswordFormValues>({
  resolver: zodResolver(changePasswordSchema),
  defaultValues: {
   currentPassword: "",
   newPassword: "",
   confirmPassword: ""
```

```
}
 });
 const onSubmit = (data: ChangePasswordFormValues) => {
  // In a real app, we would call an API to change the password
  console.log("Change password:", data);
  setChangePasswordOpen(false);
  form.reset();
 };
 return (
  <div className="space-y-6">
   <div className="flex items-center space-x-4 mb-6">
    <UserAvatar user={user} size="lg" />
    <div>
     <h2 className="text-xl font-semibold text-white">{user.fullName}</h2>
     {user.role === "admin" ? "Administrator" :
"Student"}
    </div>
   </div>
   {/* Profile Information Card */}
   <Card className="bg-gray-800 border-gray-700">
    <CardHeader>
     <CardTitle className="text-white">Profile Information</CardTitle>
    </CardHeader>
    <CardContent className="space-y-6">
     <div className="flex flex-col sm:flex-row">
       <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-0">Full
Name</div>
```

```
<div className="sm:w-2/3 text-white">{user.fullName}</div>
      </div>
      <div className="flex flex-col sm:flex-row">
       <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-0">User
ID</div>
       <div className="sm:w-2/3 text-white">{user.username}</div>
      </div>
      <div className="flex flex-col sm:flex-row">
       <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-</pre>
0">Email</div>
       <div className="sm:w-2/3 text-white">{user.email || "Not provided"}</div>
      </div>
      <div className="flex flex-col sm:flex-row">
       <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-0">Date
of Birth</div>
       <div className="sm:w-2/3 text-white">{formattedDob}</div>
      </div>
      <div className="flex flex-col sm:flex-row">
       <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-</pre>
0">Mobile Number</div>
       <div className="sm:w-2/3 text-white">{user.mobile || "Not provided"}</div>
      </div>
    </CardContent>
   </Card>
   {/* Account Settings Card */}
```

```
<Card className="bg-gray-800 border-gray-700">
    <CardHeader>
     <CardTitle className="text-white">Account Settings</CardTitle>
    </CardHeader>
    <CardContent>
     <div className="space-y-4">
      {/* Change password dialog */}
       <Dialog open={changePasswordOpen}</pre>
onOpenChange={setChangePasswordOpen}>
        <DialogTrigger asChild>
         <Button variant="link" className="flex items-center text-primary
hover:text-blue-700 p-0">
          <Lock className="mr-2 h-4 w-4" />
          Change Password
         </Button>
        </DialogTrigger>
        <DialogContent>
         <DialogHeader>
          <DialogTitle>Change Password</DialogTitle>
          <DialogDescription>
           Enter your current password and a new password below.
          </DialogDescription>
         </DialogHeader>
         <form onSubmit={form.handleSubmit(onSubmit)} className="space-y-4">
          <div className="space-y-2">
           <Label htmlFor="currentPassword">Current Password</Label>
           <Input
            id="currentPassword"
            type="password"
```

```
{...form.register("currentPassword")}
/>
 {form.formState.errors.currentPassword && (
  {form.formState.errors.currentPassword.message}
  )}
</div>
<div className="space-y-2">
 <Label htmlFor="newPassword">New Password/Label>
 <Input
 id="newPassword"
 type="password"
 {...form.register("newPassword")}
/>
 {form.formState.errors.newPassword && (
  {form.formState.errors.newPassword.message}
  )}
</div>
<div className="space-y-2">
 <Label htmlFor="confirmPassword">Confirm New Password</Label>
 <Input
 id="confirmPassword"
 type="password"
  {...form.register("confirmPassword")}
```

```
/>
    {form.formState.errors.confirmPassword && (
     {form.formState.errors.confirmPassword.message}
     )}
   </div>
   <div className="flex justify-end space-x-2 pt-2">
    <Button
     type="button"
     variant="outline"
     onClick={() => setChangePasswordOpen(false)}
    >
     Cancel
    </Button>
    <Button type="submit">Save Changes/Button>
   </div>
  </form>
 </DialogContent>
</Dialog>
<Button
 variant="link"
 className="flex items-center text-primary hover:text-blue-700 p-0"
 onClick={() => {
  // In a real app we would call an API to update the profile
  console.log("Edit profile clicked");
}}
```

```
<Edit className="mr-2 h-4 w-4" />
        Edit Profile
       </Button>
      </div>
    </CardContent>
   </Card>
   {/* App Information Card */}
   <Card className="bg-gray-800 border-gray-700">
    <CardHeader>
      <CardTitle className="text-white">App Information</CardTitle>
    </CardHeader>
    <CardContent>
     <div className="space-y-2">
       <div className="flex flex-col sm:flex-row">
        <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-0">App
Version</div>
        <div className="sm:w-2/3 text-white">Qroll v1.0.2</div>
       </div>
       <div className="flex flex-col sm:flex-row">
        <div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-0">Last
Updated</div>
        <div className="sm:w-2/3 text-white">June 10, 2023</div>
       </div>
       {user.role === "admin" && (
        <div className="flex flex-col sm:flex-row">
```

```
<div className="sm:w-1/3 font-medium text-gray-400 mb-1 sm:mb-</pre>
0">Server Status</div>
          <div className="sm:w-2/3 text-white">
           <span className="inline-flex items-center">
            <span className="h-2 w-2 rounded-full bg-green-500 mr-2"></span>
            Online
           </span>
          </div>
        </div>
       )}
      </div>
     </CardContent>
   </Card>
   {/* Logout Button */}
   <Button
     variant="destructive"
     className="w-full"
     onClick={() => logoutMutation.mutate()}
    disabled={logoutMutation.isPending}
     {logoutMutation.isPending? "Logging out...": "Logout"}
   </Button>
  </div>
 );
}
import React from "react";
import { PieChart, Pie, Cell, ResponsiveContainer, Legend, Tooltip } from "recharts";
```

```
interface AttendanceVisualizationProps {
 className?: string;
}
export function AttendanceVisualization({ className }:
AttendanceVisualizationProps) {
 // Sample data for pie chart
 const data = [
  { name: "Present", value: 57, color: "#10b981" }, // Green
  { name: "Absent", value: 36, color: "#ef4444" }, // Red
  { name: "Holidays", value: 7, color: "#3b82f6" } // Blue
 ];
 return (
  <div className={`${className} bg-gray-900 rounded-lg shadow p-6 border</pre>
border-gray-800'}>
   <h3 className="text-xl font-semibold text-white mb-4">Attendance
Overview</h3>
   <div className="flex flex-col sm:flex-row items-center">
     <div className="w-full sm:w-3/5 h-72">
      <ResponsiveContainer width="100%" height="100%">
       <PieChart>
        <Pie
          data={data}
          cx="50%"
          cy="50%"
          innerRadius={70}
          outerRadius={90}
          paddingAngle={2}
```

```
dataKey="value"
          label={({ name, percent }) => `${name}: ${(percent * 100).toFixed(0)}%`}
         labelLine={false}
        >
          {data.map((entry, index) => (
           <Cell key={`cell-${index}`} fill={entry.color} />
         ))}
        </Pie>
        <Tooltip
         formatter={(value) => [`${value}%`, 'Percentage']}
          contentStyle={{ backgroundColor: '#1f2937', borderColor: '#374151', color:
'white' }}
        />
        <Legend
         verticalAlign="bottom"
         align="center"
         formatter={(value) => <span className="text-white">{value}</span>}
        />
       </PieChart>
      </ResponsiveContainer>
     </div>
     <div className="w-full sm:w-2/5 mt-4 sm:mt-0 pl-0 sm:pl-4">
      <div className="space-y-4">
       <div className="bg-gray-800 rounded-lg p-4">
        <div className="flex items-center justify-between">
          <div className="flex items-center">
           <div className="w-3 h-3 rounded-full bg-green-500 mr-2"></div>
           <span className="text-white font-medium">Present</span>
```

```
</div>
  <span className="text-green-500 font-bold">57%</span>
 </div>
 Attended 28 out of 50 classes
 </div>
<div className="bg-gray-800 rounded-lg p-4">
 <div className="flex items-center justify-between">
  <div className="flex items-center">
   <div className="w-3 h-3 rounded-full bg-red-500 mr-2"></div>
   <span className="text-white font-medium">Absent/span>
  </div>
  <span className="text-red-500 font-bold">36%</span>
 </div>
 Missed 18 out of 50 classes
 </div>
<div className="bg-gray-800 rounded-lg p-4">
 <div className="flex items-center justify-between">
  <div className="flex items-center">
   <div className="w-3 h-3 rounded-full bg-blue-500 mr-2"></div>
   <span className="text-white font-medium">Holidays</span>
  </div>
  <span className="text-blue-500 font-bold">7%</span>
 </div>
```

```
4 official holidays
        </div>
     </div>
    </div>
   </div>
   <div className="mt-6">
    <div className="bg-gray-800 rounded-lg p-4">
     <h4 className="text-white font-medium mb-2">Overall Attendance
Rate</h4>
     <div className="w-full bg-gray-700 rounded-full h-2.5">
       <div className="bg-primary h-2.5 rounded-full" style={{ width: '57%'</pre>
}}></div>
     </div>
     <div className="flex justify-between mt-1">
       <span className="text-gray-400 text-xs">0%</span>
       <span className="text-gray-400 text-xs">Minimum Required: 75%</span>
       <span className="text-gray-400 text-xs">100%</span>
     </div>
    </div>
   </div>
  </div>
 );
}
import { useState, useEffect } from "react";
import { useFaceRecognition } from "@/hooks/use-face-recognition";
import { Button } from "@/components/ui/button";
import { Progress } from "@/components/ui/progress";
```

```
import { useToast } from "@/hooks/use-toast";
import { Loader2, Camera, Check, AlertCircle } from "lucide-react";
import { apiRequest } from "@/lib/queryClient";
interface FaceRecognitionProps {
 onSuccess: () => void;
 onCancel: () => void;
}
export function FaceRecognition({ onSuccess, onCancel }: FaceRecognitionProps) {
 const [stage, setStage] = useState<"initial" | "scanning" | "processing" | "success" |
"error">("initial");
 const { toast } = useToast();
 const {
  videoRef,
  isInitialized,
  isDetecting,
  faceDetected,
  progress,
  error,
  startDetection,
  stopDetection
 } = useFaceRecognition({
  onDetected: async (faceData) => {
    setStage("processing");
    try {
     // In a real app, store the face data for later use
```

```
await apiRequest("POST", "/api/user/face", { faceData });
    setStage("success");
    setTimeout(() => {
     onSuccess();
    }, 1500);
  } catch (err) {
    setStage("error");
    toast({
     title: "Face recognition failed",
     description: "Unable to process your face data. Please try again.",
     variant: "destructive"
   });
  }
 },
 onError: (err) => {
  setStage("error");
  toast({
    title: "Face recognition error",
    description: err.message,
    variant: "destructive"
  });
 }
});
const handleStartDetection = () => {
 setStage("scanning");
 startDetection();
};
```

```
const handleCancel = () => {
  stopDetection();
  onCancel();
 };
 const handleTryAgain = () => {
  setStage("initial");
 };
 useEffect(() => {
  return () => {
   stopDetection();
  };
 }, []);
 return (
  <div className="space-y-6">
   {stage === "initial" && (
    <div className="border-2 border-dashed border-gray-300 rounded-lg p-6 text-</pre>
center">
     <div className="flex justify-center mb-4">
      <Camera className="h-12 w-12 text-gray-400" />
     </div>
     Face recognition required before
scanning QR code
     <Button
      onClick={handleStartDetection}
      className="bg-primary hover:bg-primary/90"
     >
```

```
Start Face Recognition
     </Button>
    </div>
   )}
   {stage === "scanning" && (
    <div className="border-2 border-primary rounded-lg p-6 text-center">
     <div className="relative mx-auto w-64 h-64 bg-gray-100 rounded-lg</pre>
overflow-hidden mb-4">
      <video
       ref={videoRef}
       autoPlay
       playsInline
       muted
       className="w-full h-full object-cover"
      />
      <div className="absolute inset-0 flex items-center justify-center">
       {!faceDetected && (
         <div className="border-2 border-dashed border-gray-400 w-40 h-40</pre>
rounded-full flex items-center justify-center">
          Position your face here
         </div>
       )}
      </div>
     </div>
     {faceDetected
        ? "Face detected! Please keep looking at the camera..."
        : "Please look directly at the camera"
```

```
}
  <Progress value={progress} className="mb-4" />
  <Button
   variant="outline"
   onClick={handleCancel}
   Cancel
  </Button>
 </div>
)}
{stage === "processing" && (
 <div className="border-2 border-primary rounded-lg p-6 text-center">
  <div className="flex justify-center mb-4">
   <Loader2 className="h-12 w-12 text-primary animate-spin" />
  </div>
  Processing your face data...
 </div>
)}
{stage === "success" && (
 <div className="border-2 border-green-500 rounded-lg p-6 text-center">
  <div className="flex justify-center mb-4">
   <Check className="h-12 w-12 text-green-500" />
  </div>
  Face recognized successfully!
```

```
</div>
   )}
   {stage === "error" && (
    <div className="border-2 border-red-500 rounded-lg p-6 text-center">
     <div className="flex justify-center mb-4">
       <AlertCircle className="h-12 w-12 text-red-500" />
     </div>
     {error ? error.message : "Failed to recognize face. Please try again."}
     <div className="flex justify-center space-x-3">
       <Button onClick={handleTryAgain}>Try Again
       <Button variant="outline" onClick={handleCancel}>Cancel/Button>
     </div>
    </div>
   )}
  </div>
 );
import { useState, useEffect } from "react";
import { useGeolocation } from "@/hooks/use-geolocation";
import { Button } from "@/components/ui/button";
import { Card, CardContent } from "@/components/ui/card";
import { Progress } from "@/components/ui/progress";
import { useToast } from "@/hooks/use-toast";
import { MapPin, Check, AlertCircle, Loader2 } from "lucide-react";
interface LocationVerificationProps {
```

}

```
onSuccess: (coords: { latitude: number; longitude: number }) => void;
 onCancel: () => void;
}
export function LocationVerification({ onSuccess, onCancel }:
LocationVerificationProps) {
 const [stage, setStage] = useState<"initial" | "verifying" | "success" |
"error">("initial");
 const [progress, setProgress] = useState(0);
 const { toast } = useToast();
 const {
  latitude,
  longitude,
  accuracy,
  loading,
  error,
  hasPermission,
  getCurrentPosition,
  startWatching,
  stopWatching
 } = useGeolocation({
  enableHighAccuracy: true,
  onError: (err) => {
   setStage("error");
    toast({
     title: "Location error",
     description: err.message,
     variant: "destructive"
   });
```

```
}
});
const handleStartVerification = () => {
 setStage("verifying");
 setProgress(0);
 getCurrentPosition();
 startWatching();
};
const handleCancel = () => {
 stopWatching();
 onCancel();
};
const handleTryAgain = () => {
 setStage("initial");
};
// Process location data once we have a valid reading
useEffect(() => {
 let progressInterval: NodeJS.Timeout;
 if (stage === "verifying" && latitude !== null && longitude !== null) {
  // Simulate a progress bar to show location verification in progress
  progressInterval = setInterval(() => {
    setProgress(prevProgress => {
     const newProgress = prevProgress + 5;
```

```
if (newProgress >= 100) {
      clearInterval(progressInterval);
      setStage("success");
      // Wait a moment before calling onSuccess
      setTimeout(() => {
       onSuccess({ latitude, longitude });
      }, 1000);
      return 100;
     }
     return newProgress;
   });
  }, 50);
 }
 return () => {
  if (progressInterval) clearInterval(progressInterval);
 };
}, [stage, latitude, longitude]);
// Cleanup on unmount
useEffect(() => {
 return () => {
  stopWatching();
 };
}, []);
```

```
return (
  <div className="space-y-6">
   {stage === "initial" && (
    <div className="border-2 border-dashed border-gray-300 rounded-lg p-6 text-</p>
center">
     <div className="flex justify-center mb-4">
      <MapPin className="h-12 w-12 text-primary" />
     </div>
     <h3 className="text-lg font-medium text-gray-800 mb-2">Location
Verification Required</h3>
     You need to verify your location before proceeding with attendance
     <Button
      onClick={handleStartVerification}
      className="bg-primary hover:bg-primary/90 text-white"
      Verify Location
     </Button>
    </div>
   )}
   {stage === "verifying" && (
    <div className="border-2 border-primary rounded-lg p-6 text-center">
     <div className="flex justify-center mb-4">
      <Loader2 className="h-12 w-12 text-primary animate-spin" />
     </div>
     <h3 className="text-lg font-medium text-gray-800 mb-2">Verifying Your
Location</h3>
```

```
Please wait while we verify your location...
     <Progress value={progress} className="mb-4" />
     {accuracy && (
      Location accuracy: {Math.round(accuracy)} meters
      )}
     <Button
      variant="outline"
      onClick={handleCancel}
      Cancel
     </Button>
    </div>
   {stage === "success" && (
    <div className="border-2 border-green-500 rounded-lg p-6 text-center">
     <div className="flex justify-center mb-4">
      <Check className="h-12 w-12 text-green-500" />
     </div>
     <h3 className="text-lg font-medium text-green-800 mb-2">Location
Verified!</h3>
     Your location has been successfully verified
```

)}

```
</div>
   )}
   {stage === "error" && (
    <div className="border-2 border-red-500 rounded-lg p-6 text-center">
     <div className="flex justify-center mb-4">
      <AlertCircle className="h-12 w-12 text-red-500" />
     </div>
     <h3 className="text-lg font-medium text-red-800 mb-2">Location Error</h3>
     {error || "Failed to access your location. Please ensure location services are
enabled."}
     <div className="flex justify-center space-x-3">
      <Button
       onClick={handleTryAgain}
       className="bg-primary hover:bg-primary/90 text-white"
      >
       Try Again
      </Button>
      <Button
       variant="outline"
       onClick={handleCancel}
      >
        Cancel
      </Button>
     </div>
    </div>
```

```
)}
  </div>
 );
import { useState, useEffect } from "react";
import { useQRScanner } from "@/hooks/use-gr-scanner";
import { useGeolocation } from "@/hooks/use-geolocation";
import { Button } from "@/components/ui/button";
import { Card, CardContent } from "@/components/ui/card";
import { useToast } from "@/hooks/use-toast";
import { apiRequest } from "@/lib/queryClient";
import { Camera, MapPin, CheckCircle, AlertCircle, Loader2 } from "lucide-react";
interface QRScannerProps {
 onSuccess: (sessionData: any) => void;
 onCancel: () => void;
}
interface QRCodeData {
 sessionId: number;
 qrCode: string;
 name: string;
 time: string;
 location: string;
}
export function QRScanner({ onSuccess, onCancel }: QRScannerProps) {
 const [stage, setStage] = useState<"initial" | "scanning" | "processing" | "success" |
"error">("initial");
```

```
const [locationPermissionGranted, setLocationPermissionGranted] =
useState(false);
 const [qrCodeData, setQrCodeData] = useState<QRCodeData | null>(null);
 const [error, setError] = useState<string | null>(null);
 const { toast } = useToast();
 // QR Scanner Hook
 const {
  videoRef,
  isScanning,
  hasPermission,
  error: scannerError,
  startScanning,
  stopScanning
 } = useQRScanner({
  onDetected: (result) => {
   handleQRCodeDetected(result);
  },
  onError: (err) => {
   setStage("error");
   setError(err.message);
   toast({
    title: "QR Scanner error",
    description: err.message,
    variant: "destructive"
   });
  }
});
```

```
// Geolocation Hook
const {
 latitude,
 longitude,
 hasPermission: hasLocationPermission,
 getCurrentPosition,
 startWatching,
 stopWatching
} = useGeolocation({
 enableHighAccuracy: true,
 onError: (err) => {
  toast({
   title: "Location error",
   description: err.message,
   variant: "destructive"
  });
 }
});
// Handle QR code detection
const handleQRCodeDetected = async (result: string) => {
 try {
  stopScanning();
  setStage("processing");
  // Parse QR code data
  let data: QRCodeData;
  try {
```

```
data = JSON.parse(result);
 } catch (err) {
  throw new Error("Invalid QR code format");
 }
 setQrCodeData(data);
 // Submit attendance with location and face verification data
 const response = await apiRequest("POST", "/api/attendance", {
  sessionId: data.sessionId,
  qrCode: data.qrCode,
  verificationMethod: hasLocationPermission? "both": "face",
  latitude,
  longitude,
  faceVerified: true // Face is already verified in the authentication flow
 });
 setStage("success");
 // Pass the session data to parent component
 setTimeout(() => {
  onSuccess(data);
 }, 2000);
} catch (err: any) {
 setStage("error");
 setError(err.message || "Failed to process QR code");
 toast({
  title: "Attendance marking failed",
```

```
description: err.message | "Failed to process QR code",
   variant: "destructive"
  });
 }
};
// Handle location permission
const handleRequestLocationPermission = () => {
 getCurrentPosition();
 startWatching();
 setLocationPermissionGranted(true);
};
// Handle start scanning
const handleStartScanning = () => {
 setStage("scanning");
 startScanning();
};
// Handle cancel
const handleCancel = () => {
 stopScanning();
 stopWatching();
 onCancel();
};
// Handle try again
const handleTryAgain = () => {
 setStage("initial");
```

```
setError(null);
};
 // Cleanup on unmount
 useEffect(() => {
  return () => {
   stopScanning();
   stopWatching();
  };
 }, []);
 return (
  <div className="space-y-6">
   {/* Initial state */}
   {stage === "initial" && (
    <div className="border-2 border-green-500 rounded-lg p-6 text-center">
     <div className="flex justify-center mb-4">
      <Camera className="h-12 w-12 text-green-500" />
     </div>
     Face recognized! Scan your attendance
QR code
     <Button
      onClick={handleStartScanning}
      className="mb-4"
     >
      Start QR Scanner
     </Button>
     {!locationPermissionGranted && (
```

```
<div className="bg-blue-50 border border-blue-200 rounded-lg p-4">
        <div className="flex">
         <div className="flex-shrink-0">
          <MapPin className="h-5 w-5 text-blue-500" />
         </div>
         <div className="ml-3">
          <h3 className="text-sm font-medium text-blue-800">Location
Permission Required</h3>
          This app needs access to your location to verify your attendance.
          <div className="mt-2">
           <Button
            variant="link"
            className="text-xs font-medium text-blue-800 hover:text-blue-900 p-
0"
            onClick={handleRequestLocationPermission}
            Grant Permission
           </Button>
          </div>
         </div>
        </div>
      </div>
     )}
    </div>
   )}
   {/* Scanning state */}
   {stage === "scanning" && (
```

```
<div className="border-2 border-green-500 rounded-lg p-6 text-center">
     <div className="relative w-64 h-64 mx-auto bg-gray-100 rounded-lg"</pre>
overflow-hidden mb-4">
      <video
        ref={videoRef}
        className="absolute inset-0 w-full h-full object-cover"
        autoPlay
        playsInline
        muted
      />
      <div className="absolute inset-0 flex items-center justify-center">
        <div className="border-2 border-primary border-dashed w-40 h-</pre>
40"></div>
      </div>
     </div>
     Position the QR code within the
frame
     <Button
      variant="outline"
      onClick={handleCancel}
     >
      Cancel
     </Button>
    </div>
   )}
   {/* Processing state */}
   {stage === "processing" && (
    <div className="border-2 border-primary rounded-lg p-6 text-center">
     <div className="flex justify-center mb-4">
```

```
<Loader2 className="h-12 w-12 text-primary animate-spin" />
    </div>
    Processing QR code...
   </div>
  )}
  {/* Success state */}
  {stage === "success" && qrCodeData && (
    <div className="bg-green-50 border border-green-200 rounded-lg p-6 text-</p>
center">
    <div className="flex justify-center mb-4">
     <CheckCircle className="h-12 w-12 text-green-500" />
    </div>
    <h3 className="text-lg font-medium text-green-800 mb-2">Attendance
Recorded!</h3>
    Successfully marked present for:
    <div className="bg-white rounded-md p-4 mb-4">
     {grCodeData.name}
     {qrCodeData.time}
     {grCodeData.location}
    </div>
   </div>
  )}
  {/* Error state */}
  {stage === "error" && (
    <div className="border-2 border-red-500 rounded-lg p-6 text-center">
    <div className="flex justify-center mb-4">
     <AlertCircle className="h-12 w-12 text-red-500" />
    </div>
```

```
{error | Terror scanning QR code. Please try again."}
     <div className="flex justify-center space-x-3">
       <Button onClick={handleTryAgain}>Try Again
       <Button variant="outline" onClick={handleCancel}>Cancel/Button>
     </div>
    </div>
   )}
  </div>
 );
}
import * as React from "react"
import * as AccordionPrimitive from "@radix-ui/react-accordion"
import { ChevronDown } from "lucide-react"
import { cn } from "@/lib/utils"
const Accordion = AccordionPrimitive.Root
const AccordionItem = React.forwardRef<
 React.ElementRef<typeof AccordionPrimitive.Item>,
 React.ComponentPropsWithoutRef<typeof AccordionPrimitive.Item>
>(({ className, ...props }, ref) => (
 <AccordionPrimitive.Item
  ref={ref}
  className={cn("border-b", className)}
  {...props}
 />
```

```
))
AccordionItem.displayName = "AccordionItem"
const AccordionTrigger = React.forwardRef<
 React.ElementRef<typeof AccordionPrimitive.Trigger>,
 React.ComponentPropsWithoutRef<typeof AccordionPrimitive.Trigger>
>(({ className, children, ...props }, ref) => (
 <AccordionPrimitive.Header className="flex">
  <AccordionPrimitive.Trigger
   ref={ref}
   className={cn(
    "flex flex-1 items-center justify-between py-4 font-medium transition-all
hover:underline [&[data-state=open]>svg]:rotate-180",
    className
   )}
   {...props}
   {children}
   <ChevronDown className="h-4 w-4 shrink-0 transition-transform duration-200"</p>
/>
  </AccordionPrimitive.Trigger>
 </AccordionPrimitive.Header>
))
AccordionTrigger.displayName = AccordionPrimitive.Trigger.displayName
const AccordionContent = React.forwardRef<
 React.ElementRef<typeof AccordionPrimitive.Content>,
 React.ComponentPropsWithoutRef<typeof AccordionPrimitive.Content>
>(({ className, children, ...props }, ref) => (
 <AccordionPrimitive.Content
```

```
ref={ref}
  className="overflow-hidden text-sm transition-all data-[state=closed]:animate-
accordion-up data-[state=open]:animate-accordion-down"
  {...props}
  <div className={cn("pb-4 pt-0", className)}>{children}</div>
 </AccordionPrimitive.Content>
))
AccordionContent.displayName = AccordionPrimitive.Content.displayName
export { Accordion, AccordionItem, AccordionTrigger, AccordionContent
@tailwind base;
@tailwind components;
@tailwind utilities;
@layer base {
 * {
  @apply border-border;
 }
 body {
  @apply font-sans antialiased bg-background text-foreground;
 }
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8"/>
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
 k rel="icon" type="image/svg+xml" href="/favicon.svg" />
 <title>Qroll - Student Attendance System</title>
 <meta name="description" content="Student attendance tracking application</pre>
using QR codes with face recognition verification and geolocation features" />
 <!-- Google Fonts -->
 k
href="https://fonts.googleapis.com/css2?family=Inter:wght@300;400;500;600;7
00&display=swap" rel="stylesheet">
 <link href="https://fonts.googleapis.com/icon?family=Material+Icons"</pre>
rel="stylesheet">
 <!-- Load face-api.js models at the root level -->
 <script>
  // Create a function to preload face-api.js models
  async function loadModels() {
   try {
    // Create models directory if it doesn't exist
    const modelsDir = '/models':
    // Dynamically create a models folder with the required files
    // This would normally be handled by serving actual model files,
    // but for this example we'll use placeholder data to avoid errors
    const files = [
     'face_landmark_68_model-weights_manifest.json',
     'face_landmark_68_model-shard1',
     'face_recognition_model-weights_manifest.json',
     'face recognition model-shard1',
     'tiny_face_detector_model-weights_manifest.json',
```

```
'tiny_face_detector_model-shard1'
    ];
    console.log('Face recognition models ready to be loaded');
   } catch (error) {
    console.error('Error setting up face-api models:', error);
   }
  }
  // Call the function
  loadModels();
 </script>
</head>
<body>
 <div id="root"></div>
 <script type="module" src="/src/main.tsx"></script>
</body>
</html>
import QRCode from 'qrcode';
import fs from 'fs';
// Generate QR Code for the Qroll attendance app
const appUrl = 'http://localhost:5000';
// Generate QR code as a data URL
QRCode.toDataURL(appUrl, {
 errorCorrectionLevel: 'H',
 type: 'image/png',
 margin: 1,
```

```
color: {
  dark: '#8b5cf6', // Purple color for QR code
  light: '#ffffff' // White background
 }
})
.then(url => {
 // Save base64 data to a file (remove the data:image/png;base64, prefix)
 const data = url.replace(/^data:image\/png;base64,/, ");
 fs.writeFileSync('qroll-app-url.txt', url);
 console.log('QR Code for Qroll App generated successfully!');
 console.log('App URL:', appUrl);
 console.log('QR Code data saved to groll-app-url.txt');
})
.catch(err => {
 console.error('Error generating QR code:', err);
});
#!/usr/bin/env node
const QRCode = require('qrcode');
const { writeFileSync } = require('fs');
const path = require('path');
// Get command line arguments
const args = process.argv.slice(2);
const sessionId = args[0];
const sessionName = args[1] || 'Attendance Session';
if (!sessionId) {
```

```
console.error('Usage: node generate-session-qr.js <sessionId>
[sessionName]');
 process.exit(1);
}
// Create data for QR code
const qrData = JSON.stringify({
 type: 'qroll-session',
 sessionId: parseInt(sessionId),
 timestamp: Date.now(),
});
// Output file name
const outputFile = `qroll-session-${sessionId}.png`;
// Generate QR code
QRCode.toFile(
 outputFile,
 qrData,
  color: {
   dark: '#8b5cf6', // Purple color
   light: '#ffffff' // White background
  },
  width: 512,
  margin: 1,
 },
 function(err) {
  if (err) {
```

```
console.error('Error generating QR code:', err);
process.exit(1);
}

console.log(`QR code for session ${sessionId} (${sessionName}) generated successfully!`);
console.log(`File saved as: ${outputFile}`);
console.log(`\nScan this QR code with the Qroll app to mark attendance.`);
}
);
export default {
plugins: {
tailwindcss: {},
autoprefixer: {},
},
}
```