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<!doctype html>
<html lang="en">
<head>
 <meta charset="utf-8" />
 <meta name="viewport" content="width=device-width,initial-scale=1" />
 <title>IBM-FE - Dynamic Image Slider (Single File)</title>
 <style>
  /* -----
    Reset & base
    ----*/
  *{box-sizing:border-box;margin:0;padding:0}
   --bg:#0f1724; --card:#0b1220; --muted:#98a0b3; --accent:#06b6d4;
   --width:min(1100px, 94%);
  }
  body{font-family:Inter, ui-sans-serif, system-ui, -apple-system, "Segoe UI", Roboto, "Helvetica
Neue", Arial; background:linear-gradient(180deg,var(--bg),#071025 120%); color:#e6eef7;
min-height:100vh; display:flex; align-items:center; justify-content:center; padding:32px}/*
 Slider card
 ----*/
.slider-wrap{width:var(--width); max-width:100%; background:linear-gradient(180deg,
rgba(255,255,255,0.02), rgba(0,0,0,0.06)); border-radius:14px; padding:18px; box-shadow:0
10px 30px rgba(2,6,23,0.6);}
.header{display:flex;align-items:center;gap:12px;margin-bottom:12px}
.logo{width:44px;height:44px;background:linear-gradient(135deg,var(--accent),#7c3aed);border-
radius:10px;display:grid;place-items:center;font-weight:700}
.title{font-size:16px}
.subtitle{font-size:12px;color:var(--muted)}
/* -----
 Viewport & slides
 ----*/
.viewport{position:relative;overflow:hidden;border-radius:12px}
.slides{display:flex;transition:transform 520ms cubic-bezier(.2,.9,.3,1);touch-action:pan-y}
.slide{min-width:100%;position:relative}
.slide img{width:100%;height:52vh;max-height:560px;object-fit:cover;display:block}
/* Caption */
.caption{position:absolute;left:18px;bottom:18px;background:linear-gradient(90deg,
rgba(2,6,23,0.6), rgba(2,6,23,0.25));backdrop-filter:blur(6px);padding:10px
14px;border-radius:10px}
.caption h3{font-size:16px;margin-bottom:4px}
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.caption p{font-size:13px;color:var(--muted)}
/* Prev/Next Buttons */
.btn{position:absolute;top:50%;transform:translateY(-50%);z-index:10;border:0;background:rgba
(2,6,23,0.45);backdrop-filter:blur(6px);width:44px;height:44px;border-radius:10px;display:grid;pl
ace-items:center;cursor:pointer}
.btn:hover{background:rgba(2,6,23,0.6)}
.prev{left:12px}
.next{right:12px}
.btn svg{width:18px;height:18px;opacity:0.95}
/* Dots */
.dots{display:flex;gap:8px;position:absolute;left:50%;transform:translateX(-50%);bottom:12px;pa
dding:6px 8px;background:rgba(2,6,23,0.22);border-radius:999px}
.dot{width:10px;height:10px;border-radius:50%;background:rgba(255,255,255,0.15);cursor:point
er}
.dot.active{background:var(--accent);box-shadow:0 0 8px rgba(6,182,212,0.18)}
/* Thumbnails row */
.thumbs{display:flex;gap:8px;margin-top:12px;overflow:auto;padding-bottom:6px}
.thumb{flex:0 0 110px;
height:66px;border-radius:8px;overflow:hidden;cursor:pointer;position:relative;border:2px solid
transparent}
.thumb img{width:100%;height:100%;object-fit:cover;display:block}
.thumb.active{border-color:var(--accent);box-shadow:0 6px 18px rgba(2,6,23,0.6)}
/* Controls row */
.controls{display:flex;align-items:center;justify-content:space-between;margin-top:10px}
.left-controls{display:flex;gap:10px;align-items:center}
.small-btn{background:#071b2a;padding:8px 12px;border-radius:8px;border:1px solid
rgba(255,255,255,0.03);cursor:pointer}
.small-btn input{vertical-align:middle}
/* Responsive tweaks */
@media (max-width:640px){ .caption{left:12px;right:12px} .thumb{flex:0 0 84px} .slide
img{height:40vh} }
 </style>
</head>
<body>
 <main class="slider-wrap" aria-label="Dynamic image slider">
  <div class="header">
   <div class="logo">IBM</div>
   <div>
```

```
<div class="title">IBM-FE Dynamic Image Slider</div>
     <div class="subtitle">Autoplay • Hover to pause • Keyboard & Touch support</div>
   </div>
  </div><div class="viewport" id="viewport">
 <button class="btn prev" id="prev" aria-label="Previous slide">
  <svg viewBox="0 0 24 24" fill="none" stroke="currentColor" stroke-width="2"><path d="M15"</pre>
18I-6-6 6-6" stroke-linecap="round" stroke-linejoin="round"/></svg>
 </button>
 <div class="slides" id="slides">
  <!-- Slides: change image src or data-caption as needed -->
  <div class="slide" data-caption="Aurora over mountains">
   <img loading="lazy" src="https://picsum.photos/id/1018/1600/900" alt="Aurora over</p>
mountains">
   <div class="caption"><h3>Aurora Peaks</h3>Night sky and northern lights above the
range.</div>
  </div>
  <div class="slide" data-caption="Coastal sunrise">
   <img loading="lazy" src="https://picsum.photos/id/1025/1600/900" alt="Coastal sunrise">
   <div class="caption"><h3>Coastal Sunrise</h3>Golden hour at the cliffs.</div>
  </div>
  <div class="slide" data-caption="City skyline at dusk">
   <img loading="lazy" src="https://picsum.photos/id/1031/1600/900" alt="City skyline at dusk">
   <div class="caption"><h3>City Dusk</h3>Lights turning on across the
skyline.</div>
  </div>
  <div class="slide" data-caption="Forest path in autumn">
   <img loading="lazy" src="https://picsum.photos/id/1056/1600/900" alt="Forest path in</pre>
autumn">
   <div class="caption"><h3>Autumn Path</h3>A quiet trail covered in leaves.</div>
  </div>
 </div>
 <button class="btn next" id="next" aria-label="Next slide">
  <svq viewBox="0 0 24 24" fill="none" stroke="currentColor" stroke-width="2"><path d="M9"
6l6 6-6 6" stroke-linecap="round" stroke-linejoin="round"/></svg>
 </button>
 <div class="dots" id="dots" aria-hidden="false"></div>
</div>
```

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<div class="thumbs" id="thumbs" aria-label="Slide thumbnails"></div>
<div class="controls">
 <div class="left-controls">
  <button class="small-btn" id="playPause" aria-pressed="false">Pause/button>
  <div style="font-size:13px;color:var(--muted)">Auto-play interval:
   <select id="intervalSelect"</pre>
style="margin-left:8px;background:transparent;border:0;color:inherit">
    <option value="2000">2s</option>
    <option value="3000" selected>3s</option>
    <option value="5000">5s</option>
   </select>
  </div>
 </div>
 <div style="font-size:13px;color:var(--muted)">Use ← → or swipe</div>
</div>
 </main> <script>
  /* -----
    Slider logic (Vanilla JS)
    Features:
    - Autoplay with pause on hover
    - Prev/Next buttons
    - Dots + thumbnails navigation
    - Keyboard and touch support
    - Lazy images (via loading="lazy")
  ----*/
  (function(){
   const slidesEl = document.getElementById('slides');
   const slides = Array.from(slidesEl.children);
   const prevBtn = document.getElementById('prev');
   const nextBtn = document.getElementById('next');
   const dotsEl = document.getElementById('dots');
   const thumbsEl = document.getElementById('thumbs');
   const playPauseBtn = document.getElementById('playPause');
   const intervalSelect = document.getElementById('intervalSelect');
   const viewport = document.getElementById('viewport');
   let index = 0;
   let timer = null;
   let autoplay = true;
   let interval = parseInt(intervalSelect.value, 10) || 3000;
```

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// Build dots & thumbs
    slides.forEach((s, i) => {
     const d = document.createElement('button'); d.className='dot';
d.setAttribute('aria-label','Go to slide '+(i+1));
     d.addEventListener('click', ()=>goTo(i));
     dotsEl.appendChild(d);
     const t = document.createElement('div'); t.className='thumb'; t.tabIndex=0;
     const img = document.createElement('img'); img.src = s.querySelector('img').src; img.alt =
s.querySelector('img').alt || ('Slide '+(i+1));
     t.appendChild(img);
     t.addEventListener('click', ()=>goTo(i));
     t.addEventListener('keydown', (e)=>{ if(e.key==='Enter' || e.key===' ') { e.preventDefault();
goTo(i);} });
     thumbsEl.appendChild(t);
    });
    const dotEls = Array.from(dotsEl.children);
    const thumbEls = Array.from(thumbsEl.children);
    function refresh(){
     // move slides container
     slidesEl.style.transform = `translateX(${-index * 100}%)`;
     dotEls.forEach((d, i)=> d.classList.toggle('active', i===index));
     thumbEls.forEach((t, i)=> t.classList.toggle('active', i===index));
    }
    function prev(){ index = (index - 1 + slides.length) % slides.length; refresh(); }
    function next(){ index = (index + 1) % slides.length; refresh(); }
    function goTo(i){ index = Math.max(0, Math.min(i, slides.length-1)); refresh(); resetTimer(); }
    prevBtn.addEventListener('click', ()=>{ prev(); resetTimer(); });
    nextBtn.addEventListener('click', ()=>{ next(); resetTimer(); });
   // autoplay
   function startTimer(){ if(timer) clearInterval(timer); timer = setInterval(()=>{ next(); }, interval);
}
    function stopTimer(){ if(timer) { clearInterval(timer); timer = null; } }
    function resetTimer(){ if(autoplay) { stopTimer(); startTimer(); } }
    // Play/pause control
    function updatePlayButton(){ playPauseBtn.textContent = autoplay ? 'Pause' : 'Play';
playPauseBtn.setAttribute('aria-pressed', String(!autoplay)); }
```

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playPauseBtn.addEventListener('click', ()=>{ autoplay = !autoplay; if(autoplay) startTimer();
else stopTimer(); updatePlayButton(); });
   // interval change
    intervalSelect.addEventListener('change', (e)=>{ interval = parseInt(e.target.value,10);
resetTimer(); });
   // Pause on hover/focus
    [viewport, prevBtn, nextBtn, playPauseBtn].forEach(el=>{
     el.addEventListener('mouseenter', ()=>{ if(autoplay) stopTimer(); });
     el.addEventListener('mouseleave', ()=>{ if(autoplay) startTimer(); });
     el.addEventListener('focusin', ()=>{ if(autoplay) stopTimer(); });
     el.addEventListener('focusout', ()=>{ if(autoplay) startTimer(); });
   });
    // Keyboard navigation
   window.addEventListener('keydown', (e)=>{
     if(e.key==='ArrowLeft') { prev(); resetTimer(); }
     if(e.key==='ArrowRight') { next(); resetTimer(); }
   });
   // Touch / swipe support
    let startX = 0, startTime = 0;
    slidesEl.addEventListener('pointerdown', (e)=>{ startX = e.clientX; startTime = Date.now();
slidesEl.setPointerCapture(e.pointerId); });
    slidesEl.addEventListener('pointerup', (e)=>{
     const dx = e.clientX - startX; const dt = Date.now() - startTime;
     const threshold = Math.min(window.innerWidth * 0.12, 80);
     if(Math.abs(dx) > threshold && dt < 600){ if(dx < 0) next(); else prev(); resetTimer(); }
   });
   // Make first render
    refresh();
    updatePlayButton();
    if(autoplay) startTimer();
   // Accessibility: announce slide changes (simple)
    const live = document.createElement('div'); live.setAttribute('aria-live', 'polite');
live.style.position='absolute'; live.style.left='-9999px';
    document.body.appendChild(live);
   const observer = new MutationObserver(()=>{ live.textContent = `Slide ${index+1} of
${slides.length}: ${slides[index].dataset.caption || "}`; });
    observer.observe(slidesEl, {attributes:true, subtree:true, childList:true});
  })();
```

</script></body>
</html>