```
<template>
  <div class="back-image">
    <div class="head-container">PKPM钢结构全生命周期管控平台</div>
   <div class="login">
     <div class="login-title">
     <el-row ><u>欢迎登陆</u></el-row>
     </div>
      <div class="input-textfield account">
         <div class="txtaccount">
         账户
         </div>
       <el-col :span="20" class="user-textfield">
        <input type="text" class="input-text" placeholder="请输入用户
名" v-model="userNameString" />
        </el-col>
     </el-row>
       <div class="input-textfield password">
         <div class=" txtpassword">
        密码
        </div>
        <el-col :span="20" class="user-textfield">
         <input type="password" class="input-text" placeholder="请输入密</pre>
码" v-model="passwordString" />
      </div>
     <el-button ref="loginbtn" class="login-
登录</el-button>
      <!--验证码弹窗-->
       <el-popover popper-class="popover-
style" ref="popover" trigger="manual" v-model="visible" placement="top"
       visible-arrow="false" >
       <div class="sliding-pictures">
          <div class="operation">
            <div class = "tip-text">请拖动滑块到正确地方验证</div>
             <div title="关闭验证
码" @click="visible = false" class="close-btn"></div>
           <div title="刷新验证码" @click="canvasInit" class="refresh-
btn"></div>
```

```
<div class="vimg">
             <canvas id="sliderBlock"></canvas>
             <canvas id="codeImg"></canvas>
           <div class="slider">
             <div class="track" :class="{ pintuTrue: puzzle }">{{ tips }}
             <div class="button trackbtn" @mousedown.prevent="drag">&rar
             <div class="drag-bg"></div>
     </div>
        </div>
    </el-popover>
    </el-row>
   </div>
/template>
<script>
export default {
 name: "login",
 components: {
 },
 data() {
   return {
     userNameString: "",
     passwordString: "",
     tips: "拖动左边滑块完成上方拼图",
     visible: false,
     //滑块×轴数据
     slider: {
     mx: 0,
     bx: 0
     },
     //拼图是否正确
     puzzle: false,
     loginBtnStyle: {
       marginTop: "118px"
   };
 watch: {
```

```
visible(e) {
     if (e === true) {
      this.canvasInit();
      this.puzzle = false;
 create() {
 mounted() {
 methods: {
   loginClick() {
     let self = this;
     this.$router.push({
                path: "../enterprise"
   //拼图验证码初始化
   canvasInit() {
     //生成指定区间的随机数
     const random = (min, max) => {
      return Math.floor(Math.random() * (max - min + 1) + min);
     };
    let mx = random(200, 405),
       bx = random(10, 40),
       y = random(10, 99);
     this.slider = { mx, bx };
     this.draw(mx, bx, y);
   },
   //鼠标按下
   drag(e) {
     let dom = e.target; //dom元素
    let slider = document.querySelector("#sliderBlock"); //滑块dom
     const downCoordinate = { x: e.x, y: e.y };
     //正确的滑块数据
     let checkx = Number(this.slider.mx) - Number(this.slider.bx) + 42; /
/滑块宽
     //×轴数据
     let x = 0;
     const move = moveEV => {
```

```
x = moveEV.x - downCoordinate.x;
   if (x \ge 405 \mid x \le 0) return false;
   dom.style.left = x + "px";
    slider.style.left = x + "px";
   let drag bg = document.getElementsByClassName("drag-bg");
    drag bg[0].style.width = x + "px";
 };
  const up = () => {
    document.removeEventListener("mousemove", move);
    document.removeEventListener("mouseup", up);
    dom.style.left = "";
    // console.log(x, checkx);
    let max = checkx + 20;
    let min = checkx - 20;
    //允许正负误差1
    if ((max >= x \&\& x >= min) | | x === checkx) {
     console.log("滑动解锁成功");
     this.puzzle = true;
     this.tips = "验证成功";
      dom.style.left = x + "px";
      setTimeout(() => {
      this.visible = false;
      this.loginClick();
      }, 500);
    } else {
     console.log("拼图位置不正确");
     let drag bg = document.getElementsByClassName("drag-bg");
     drag_bg[0].style.width = "0px";
     this.tips = "验证失败,请重试";
     this.puzzle = false;
     this.canvasInit();
  };
  document.addEventListener("mousemove", move);
  document.addEventListener("mouseup", up);
},
draw(mx = 200, bx = 20, y = 50) {
 let mainDom = document.querySelector("#codeImg");
 let bg = mainDom.getContext("2d");
  let width = mainDom.width;
  let height = mainDom.height;
  let blockDom = document.querySelector("#sliderBlock");
  let block = blockDom.getContext("2d");
  //重新赋值,让canvas进行重新绘制
  blockDom.height = height;
 mainDom.height = height;
```

```
let imgsrc = require("../../assets/img/login/Code.png");
  let img = document.createElement("img");
  img.style.objectFit = "scale-down";
  img.src = imgsrc;
  img.onload = function() {
    bg.drawImage(img, 0, 0, width, height);
   block.drawImage(img, 0, 0, width, height);
  let mainxy = { x: mx, y: y, r: 9 };
  let blockxy = \{ x: bx, y: y, r: 9 \};
  this.drawBlock(bg, mainxy, "fill");
  this.drawBlock(block, blockxy, "clip");
},
//绘制拼图
drawBlock(ctx, xy = { x: 254, y: 79, r: 9 }, type) {}
  let x = xy.x,
   y = xy.y
r = xy.r
 w = 40;
  let PI = Math.PI;
 //绘制
  ctx.beginPath();
  //left
  ctx.moveTo(x, y);
 //top
  ctx.arc(x + (w + 5) / 2, y, r, -PI, 0, true);
  ctx.lineTo(x + w + 5, y);
 ctx.arc(x + w + 5, y + w / 2, r, 1.5 * PI, 0.5 * PI, false);
 ctx.lineTo(x + w + 5, y + w);
 //bottom
  ctx.arc(x + (w + 5) / 2, y + w, r, 0, PI, false);
  ctx.lineTo(x, y + w);
  ctx.arc(x, y + w / 2, r, 0.5 * PI, 1.5 * PI, true);
  ctx.lineTo(x, y);
 //修饰,没有会看不出效果
  ctx.lineWidth = 3;
 ctx.fillStyle = "#rgba(234, 234, 234, 1)";
 ctx.strokeStyle = "rgba(191, 191, 191, 0.8)";
 ctx.stroke();
 ctx[type]();
  ctx.globalCompositeOperation = "xor";
loginBtnClick() {
  if (this.userNameString == "" || this.passwordString == "") {
    this.$message({
   message: "用户名或密码不能为空",
```

```
type: "warning"
        });
       return false;
      } else {
        this.visible = true;
        this.tips = "拖动左边滑块完成上方拼图";
       let drag bg = document.getElementsByClassName("drag-bg");
       drag bg[0].style.width = "0px";
       let trackbtn = document.getElementsByClassName("trackbtn");
        trackbtn[0].style.left = "0px";
       this.puzzle = false;
       let dom = document.getElementsByClassName("login-button");
       if (dom[0].style.marginTop == "118px") {
         let popover = document.getElementsByClassName("slidingPictures")
         setTimeout(() => {
          popover[0].style.top =
            popover[0].style.top.split("px")[0] - 46 + "px";
         });
  }
</script>
<style>
.slidingPictures {
padding: 0;
 width: 5.2rem;
 height: 3.7rem;
 border: none;
background: transparent;
<style lang="scss" >
input:-webkit-autofill,
input:-webkit-autofill:hover,
input:-webkit-autofill:focus,
input:-webkit-autofill:active {
  -webkit-transition-delay: 99999s;
-webkit-transition: color 99999s ease-out, background-color 99999s ease-
out;
.back-image {
position: relative;
```

```
height: 100%;
 width: 100%;
 background-
image: url("../../assets/img/login/loginimg.png"),url("../../assets/img/login/loginimg.png")
gin/loginbackground.png");
 background-repeat: no-repeat, no-repeat;
background-size: cover;
 -webkit-background-size: cover;
-o-background-size: cover;
 background-position: center 0;
.head-container {
 width: 19.2rem;
 height: 0.8rem;
 background: url("../../assets/img/layout/head.png") no-repeat;
 background-size: 100% 100%;
 text-align: center;
font-size: 0.32rem;
font-family: Source Han Sans CN;
font-weight: 400;
 color: #ffffff;
.logo-text {
 position: relative;
 width: 878px;
height: 42px;
margin-top: 103px;
left: 50%;
margin-left: -439px;
.logo-line {
position: relative;
width: 978px;
height: 2px;
 margin-top: 18px;
left: 50%;
 margin-left: -489px;
.logo-left {
width: 100%;
height: 100%;
.login {
 width: 5.8rem;
```

height: 5.8rem;

```
background: url("../../assets/img/login/logincircle.png");
 background-repeat: no-repeat;
 background-size: cover;
 -webkit-background-size: cover;
  -o-background-size: cover;
  margin-left: 6.7rem;
 margin-top: 1.57rem;
 .login-title {
 text-align: center;
 padding-top:1.22rem;
 font-size: 0.24rem;
 font-family: SourceHanSansCN-Regular;
font-weight: Regular;
color:#63F4F9;
.input-textfield {
 width: 3.2rem;
 height:0.38rem;
 border: solid 1px #63F4F9;
 opacity: 0.6;
 margin-left: 49px;
.account {
 margin-top: 0.51rem;
 margin-left: 1.59rem;
font-size: 0.2rem;
font-family: SourceHanSansCN-Regular;
font-weight: Regular;
color: #FFFFFF;
.txtaccount
  margin-left: 1.29rem;
   margin-left: -0.60rem;
.password {
margin-top: 0.4rem;
margin-left: 1.59rem;
 font-size: 0.2rem;
 font-family: SourceHanSansCN-Regular;
font-weight: Regular;
color: #FFFFFF;
.txtpassword{
```

```
margin-left: -0.60rem;
.verification {
 margin-top: 26px;
.login-button {
 width:3.78rem;
height: 0.4rem;
 margin-left: 1.01rem;
 margin-bottom: 1.61rem;
 background-color: rgba(99, 244, 249, 0.4);
.user-icon {
 margin-left: 10px;
 margin-top: 6px;
.user-textfield {
 height: 0.38rem;
 margin-top:-0.3rem;
.input-text {
 width: 100%;
 height: 43px;
 font-size: 16px;
 color: #8ad5fe;
 background-color: rgba(0, 0, 0, 0) !important;
 border: none;
 outline: none;
margin-bottom: 0.5rem;
input::-webkit-input-placeholder {
 color: #8ad5fe;
.popover-style {
   top: 336px !important;
   width: 5.2rem;
  height: 3.7rem;
   padding: 0px !important;
  margin:0px;
 *该样式最终是以弹窗插入*/
.sliding-pictures {
 width: 100%;
.vimg {
   width: 5.18rem;
   height: 248px !important;
```

```
background-color: #000;
 #codeIma,
 #sliderBlock {
   // padding: 7px 7px 0 7px;
   height: inherit;
 #sliderBlock {
  position: absolute;
   z-index: 4000;
  .close-btn {
   float: right;
   z-index: 9999;
   //position: absolute;
   margin-top:120px;
   margin-left:0.5rem;
   font-size: 24px;
   color: rgba(234, 234, 234, 0.7);
   cursor: pointer;
   background-image: url("../../assets/img/login/close-btn.png");
   background-repeat: no-repeat;
   background-size: cover;
   width: 0.24px !important;
   height:0.24px;
   background-color: red;;
 .refresh-btn {
   float: right;
   z-index: 9999;
  position: absolute;
   right: 10px;
   top: 5px;
   font-size: 24px;
   color: rgba(234, 234, 234, 0.7);
   cursor: pointer;
.slider {
 width: 5.2rem;
 height: 67px;
 // height: 65px;
 background-color: #FFFFFF;
 display: flex;
 align-items: center;
 justify-content: flex-start;
 .track {
```

```
width: 5.2rem;
  height: 42px;
  background: transparent;
  border: 1px solid rgba(100, 160, 228, 0.6);
  // border-radius: 25px;
 font-size: 14px;
  text-align: center;
  line-height: 36px;
  // padding-right: 15px;
// padding-left: 70px;
 font-family: MicrosoftYaHei;
  font-size: 12px;
  color: rgba(138, 213, 254, 0.4);
.pintuTrue {
  // background: #67c23a;
     color: #ffffff;
  padding-left: 50px;
 color: #ffffff;
  text-align: left;
// background: #c0fcfe;
.button {
 position: absolute;
 width: 0.6rem;
 height: 0.4rem;
 line-height: 36px;
 background: transparent;
 background-color: #B9B668;
  // box-shadow: #b9bdc8 0 0 3px;
      border-radius: 50%;
  // left: 7px;
  border: solid 1px #406baa;
  text-align: center;
 font-size: 20px;
 color: #3e5d8b;
 cursor: pointer;
  // &:hover, &:focus, &:active {
  // color: #000;
.drag-bg {
 position: absolute;
float: left;
```

```
background-color: #ffffff;
    height: 36px;
    width: 0px;
 .operation {
  width: 100%;
  height: 55px;
  background-color: #FFFFFF;
   display: flex;
  .tip-text{
    width: 192px;
  height: 16px;
    font-size: 16px;
    font-family: Source Han Sans CN;
    font-weight: 400;
    margin-top: 0.2rem;
    margin-left:0.28rem;
  > span {
     color: #9fa3ac;
     display: inline-block;
    width: 40px;
    font-size: 25px;
    line-height: 40px;
    text-align: center;
    float: right;
   &:hover{
    background: #e2e8f5;
</style>
```