

Web 作业 3 说明文档

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实现内容：

1. 通过 express 框架实现注册和登录功能，详见 app.js
2. 通过 mongodb 存放用户的数据，详见 models.js；数据表导出到 users.json
3. 通过 bcrypt 实现了密码加密，详见 models.js

```
const User = mongoose.model('User', new mongoose.Schema({
  username: {type: String, unique: true},
  password: {type: String, set(val){
    return require('bcrypt').hashSync(val, 10);
  }},
}));
```

4. 通过 ajax 发送 post 请求，详见 login.html 和 signup.html

```
$.ajax({
    type: "POST",
    dataType: "json",
    crossDomain: true,
    url: 'http://localhost:3000/api/register',
    contentType: "application/json",
    data: JSON.stringify({
        'username' : username,
        "password" : password,
    }),
    success: function (result){
        console.log(result);
        alert("Sign up succeed!");
        window.location.href="login.html";
    },
    error: function (result){
        console.log(result);
        alert(result.responseJSON.message);
    }
});
```

5. 实现了验证码验证，详见 login.html，通过 createCode()函数生成随机的验证码，在发送请求前验证验证码正确与否，若验证码正确才发送 post 请求

```
var code;
function createCode() {
    code = new Array();
    var len = 4;
    var vcode = document.getElementById("vcode");
    vcode.value = "";
    var char = new Array(2,3,4,5,6,7,8,9,'A','B','C','D','E','F','G',
    for(var i=0;i<len;i++){
        var index = Math.floor(Math.random()*32);
        code += char[index];
    }
    if(code.length != len){
        createCode();
    }
    vcode.value = code;
}
```

6. 采用正则表达式规定了密码的格式，规定了用户名为 4-20

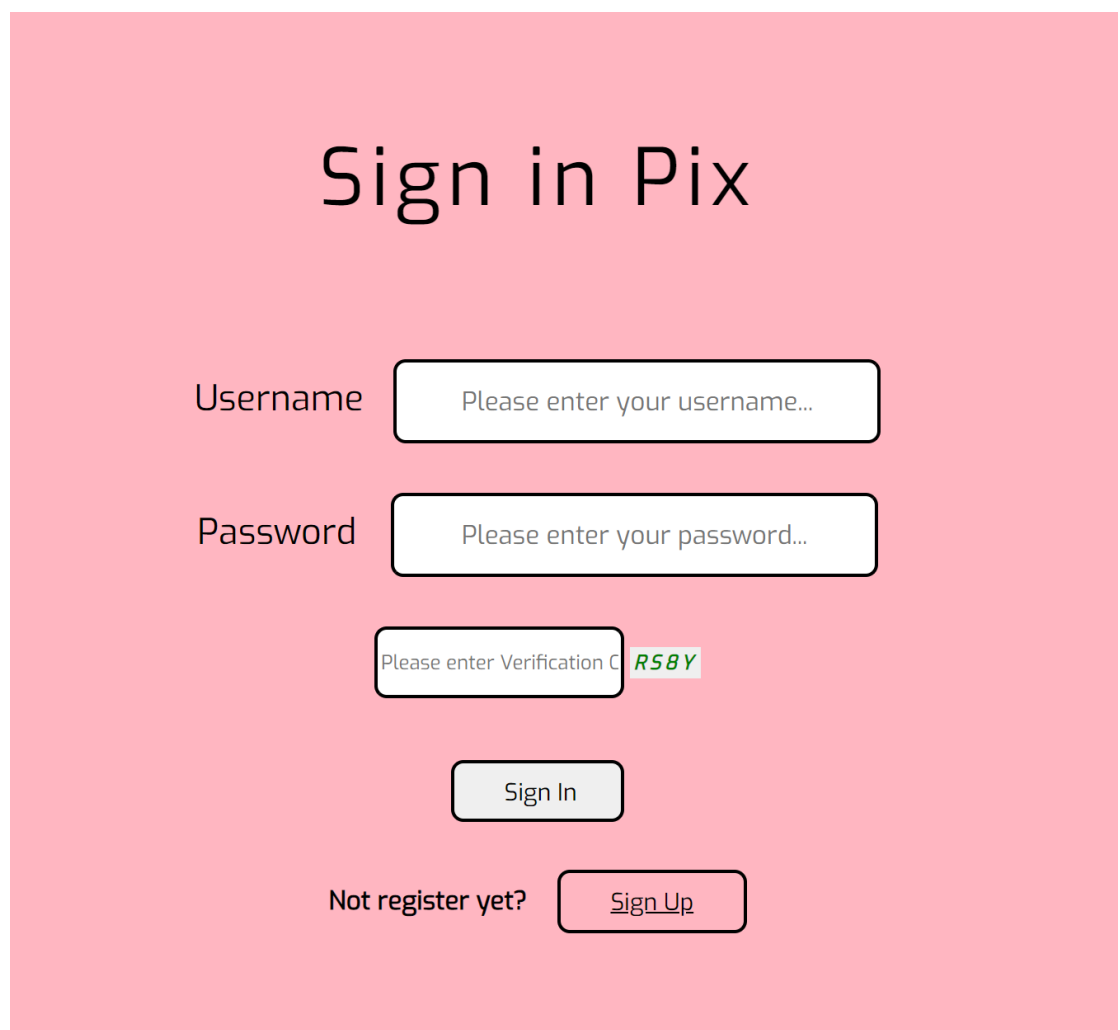
位的字母或数字，密码为 6-16 位的字母或数字

```
<input class="input" id="username" type="text" pattern="^[a-zA-Z0-9]{3,19}$" placeholder="Latin symb
<br />
<span class="hint">Password </span>
<input class="input1" id="password" type="password" pattern="^[a-zA-Z0-9]{5,15}$" placeholder="Latin
```

7. 实现了简单的密码轻度提示，当密码为空时提示“password is blank”；当密码不足 6 位时提示“not long enough”；当密码为 6-10 位时提示“could be stronger”；当密码为 10-16 位时提示“strong enough”；当密码超过 16 位时提示“too long”。详见 signup.html

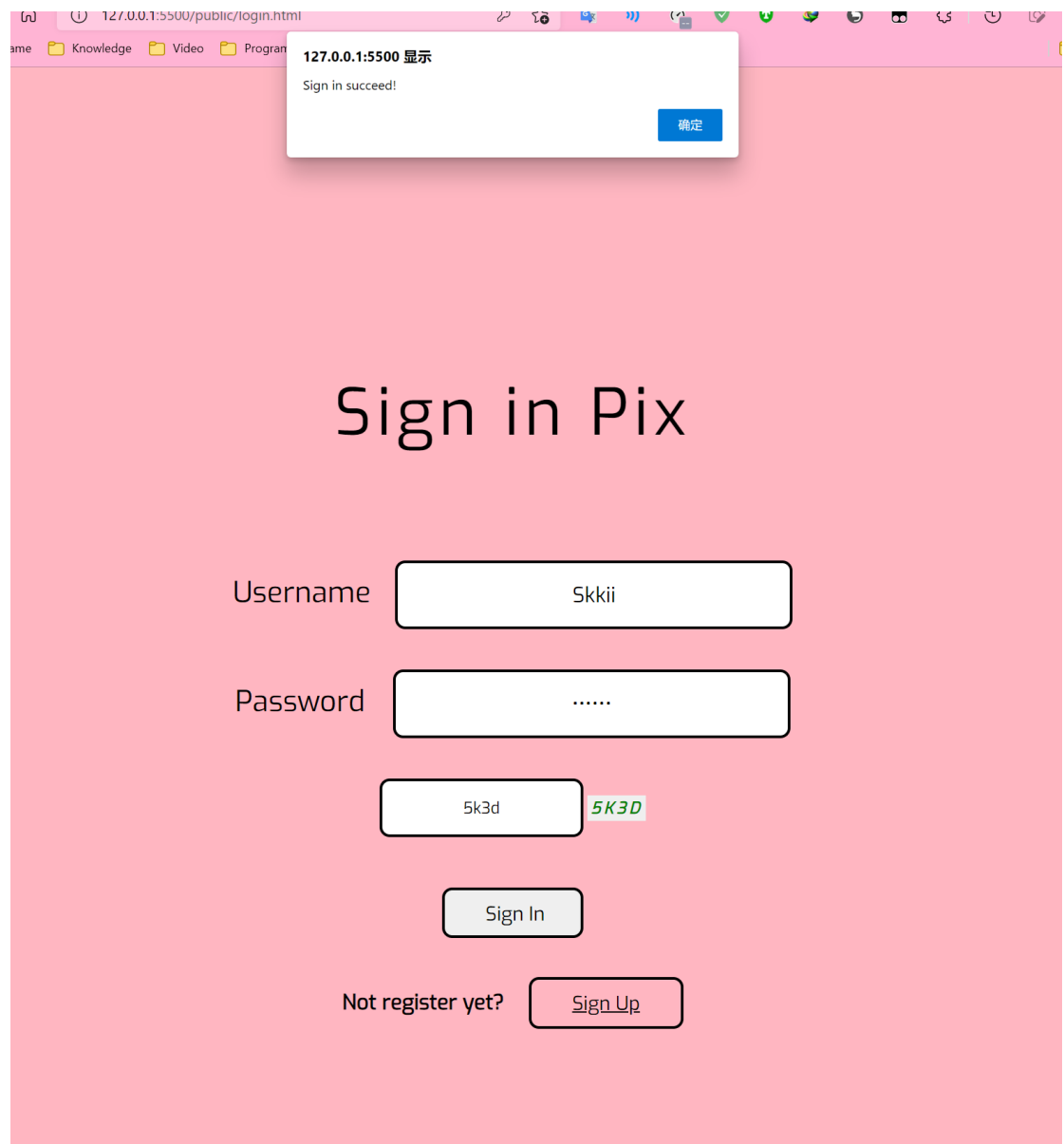
8. 界面截图：

登录界面



The image shows a login interface titled "Sign in Pix" on a pink background. It features three input fields: "Username" with a placeholder "Please enter your username...", "Password" with a placeholder "Please enter your password...", and a verification code field with a placeholder "Please enter Verification Code" and a green box containing the code "RSBY". Below the input fields are two buttons: "Sign In" and "Sign Up". The "Sign Up" button is preceded by the text "Not register yet?".

登录成功



注册界面

Sign up Pix

Username

Latin symbols(A-z),digits(0-9) 4 to 20 ch

Password

Latin symbols(A-z),digits(0-9) 6 to 16 ch

Password is blank

Sign Up

Already register?

[Sign In](#)

注册成功

ame Knowledge Video Program

127.0.0.1:5500 显示
Sign up succeed!
确定

Sign up Pix

Username

Skkii

Password

.....
Could be stronger

Sign Up

Already register? [Sign In](#)

数据表

connect View Collection Help

Local

4 DBS 2 COLLECTIONS

☆ FAVORITE

localhost:27017

CLUSTER

Standalone

EDITION

MongoDB 5.0.5 Community

Filter your data

admin

config

local

user

users

+

user:users

Documents

+

user:users

DOCUMENTS 8

TOTAL SIZE 1.0KB

AVG. SIZE 127B

INDEXES 2

TOTAL SIZE 73.7KB

AVG. SIZE 36.9KB

Documents Aggregations Schema Explain Plan Indexes Validation

1 FILTER

{ field: 'value' }

➤ OPTIONS

FIND

RESET

⋮

➕ ADD DATA

VIEW

⌵

⌶

⌷

Displaying documents 1 - 8 of 8

➤

🔄 REFRESH

users

	_id ObjectId	username String	password String	_v Int32	
1	61b4b7bb67c465edd9ae4dc	"sdfase"	"\$2b\$10\$TmlnKTI12jc6b37FqjX0Beh	0	✎ 🔄 🗑
2	61b4b808eac1d26cd7d421e8	"sdfaefaf"	"\$2b\$10\$veP34FzYXlGye76zeDr.O.)	0	✎ 🔄 🗑
3	61b4b830eac1d26cd7d421eb	"sdfaes"	"\$2b\$10\$TlfevY4Xfun8JcVQhc3/.w	0	✎ 🔄 🗑
4	61b4b926eac1d26cd7d421ef	"user"	"\$2b\$10\$f15jXtbyzbVzSSKPHtcCus	0	✎ 🔄 🗑
5	61b4b977eac1d26cd7d421f4	"user1"	"\$2b\$10\$6+G063110q4PAzATQ0ABBuR	0	✎ 🔄 🗑
6	61b4bae6eac1d26cd7d421f9	"user3"	"\$2b\$10\$K8BKa2IA/kh21RkGnekDH.1	0	✎ 🔄 🗑
7	61b5686f47baa53daebe9cde	"skkii"	"\$2b\$10\$98UQ8xbQAkfn/poyH14XtuG	0	✎ 🔄 🗑
8	61b5db1a92c6dcabe6159be1	"skkii"	"\$2b\$10\$.u2FvtpP2028r830Zem10ur	0	✎ 🔄 🗑

MONGOSH