

Homework VI Report

Name: Dazhi Li

RUID:197007456

Course: Sp.20 Software Engineering Web Application

Professor: Yinglung Liang

Requirement:

1. MongoDB service
2. The default mongo database is running on local host with port 27017, you could change the access in the server.py
3. Import Flask library
4. Import pymongo library
5. Import random library

Server source code:

#Server based on Flask

```
from flask import Flask,render_template,url_for,request,redirect,abort
from werkzeug.datastructures import ImmutableMultiDict
import pymongo
import random

def invitation_code():
    ret = ""
    for i in range(6):
        num = random.randint(0, 9)
        # num = chr(random.randint(48,57))
        letter = chr(random.randint(97, 122))#Lower class
        Letter = chr(random.randint(65, 90))#Uper class
        s = str(random.choice([num,letter,Letter]))
        ret += s
    return ret

app=Flask(__name__)

@app.route('/')
def index():
    return render_template('index.html')

# @app.route('/login',methods=['POST'])
# def login():
#     user = request.form['nm']
#     return redirect(url_for('success',name=user))
```

```

@app.route('/signin',methods=['GET','POST'])
def sign_in():
    if request.method=='GET':
        return render_template('signin.html')
    elif request.method=='POST':
        invitation=request.form['invitation_num']
        guest=collection.find_one({'invitation_num':invitation})
        if(guest):
            return render_template('login.html',guest=guest)
        else:
            return render_template('fault.html')
    else:
        abort(400)

@app.route('/signup',methods=['GET','POST'])
def sign_up():
    if request.method == 'GET':
        return render_template('signup.html')
    elif request.method == 'POST':
        new_guest=request.form
        new_guest=new_guest.to_dict(flat=True)
        new_guest['invitation_num']=invitation_code()
        while(collection.find_one({'invitation_num':new_guest['invitation_num']})):
            new_guest['invitation_num'] = invitation_code()
        collection.insert_one(new_guest)
        return render_template('success.html',new_guest=new_guest)
    else:
        abort(400)

if __name__=='__main__':
    client = pymongo.MongoClient(host='localhost', port=27017)
    db = client.guest
    collection = db.guest_list
    app.run(debug=True)

```

Running result:

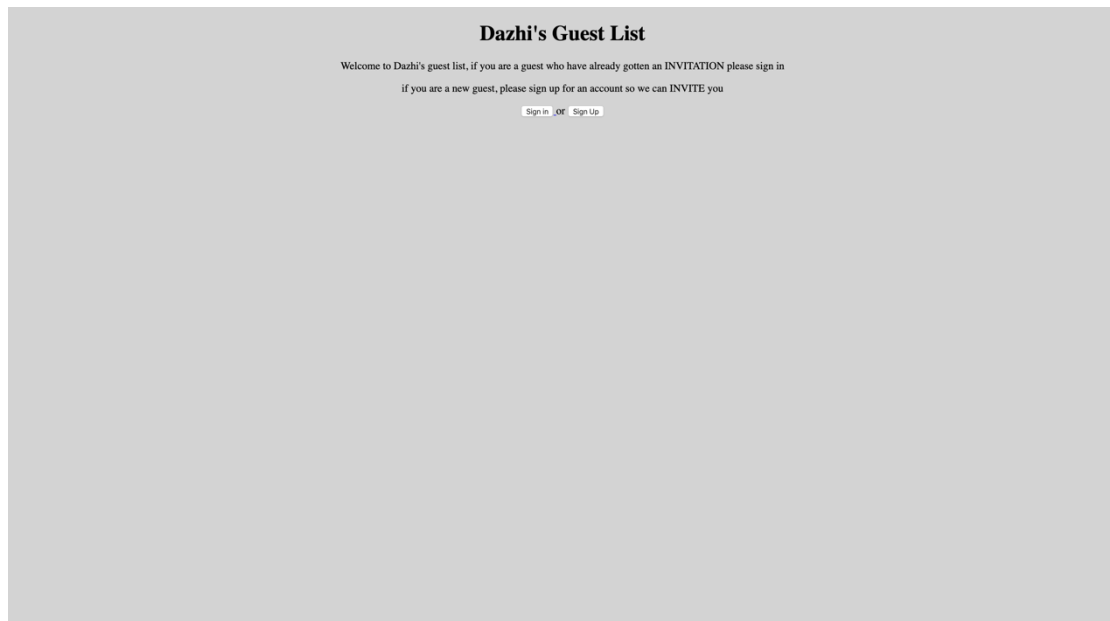


Fig 1-1 Main page

Fig 1-1 shows the main page of my server, I simulate how to register and login process. There are two questions shown in this page, if you are a new guest without a INVITATION you need to sign up first.

Fig 1-2 Sign Up page

Fig 1-2 is the sign up page where you need to fill a form. You do not have to input your real data since I am not setting restriction to them. After you type your fake or real information on this, by clicking “Next” button you will finish your sign up to be a new guest.

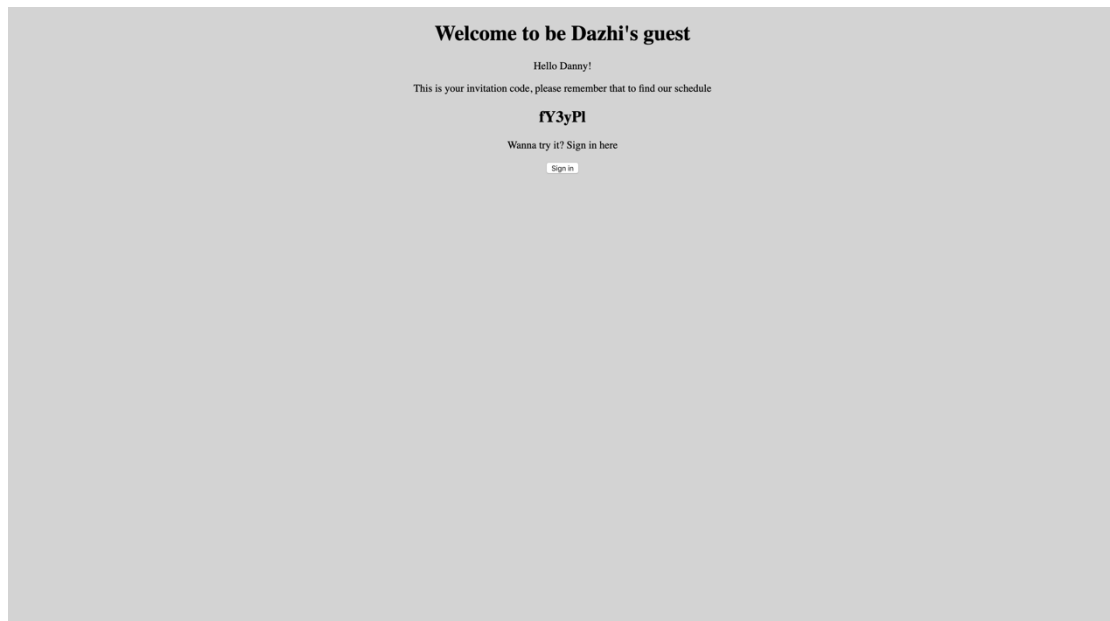


Fig 1-3 Successful Sign Up

Fig 1-3 shows when you finish your sign up process you will receive a sentence “Hello your input last page” with an INVITATION code. All your sign up information including your invitation code will be stored into my database. Please remember and copy your invitation code to sign in.

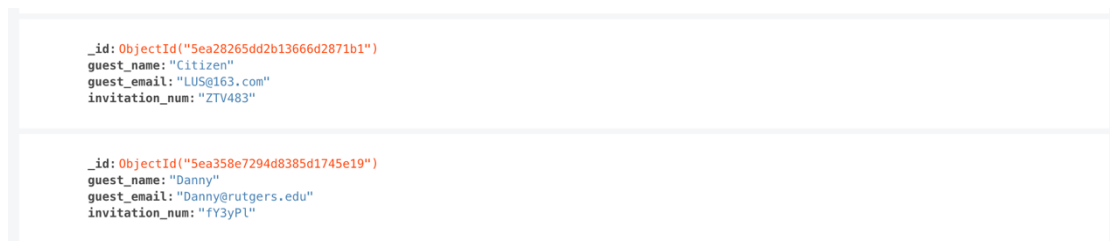


Fig 1-4 Database status

Fig 1-4 shows two data I have already collected in my database. **You should be reminded that this is a local database, which means you cannot directly use.** If you need to run my code on your computer please check the **requirement** paragraph.

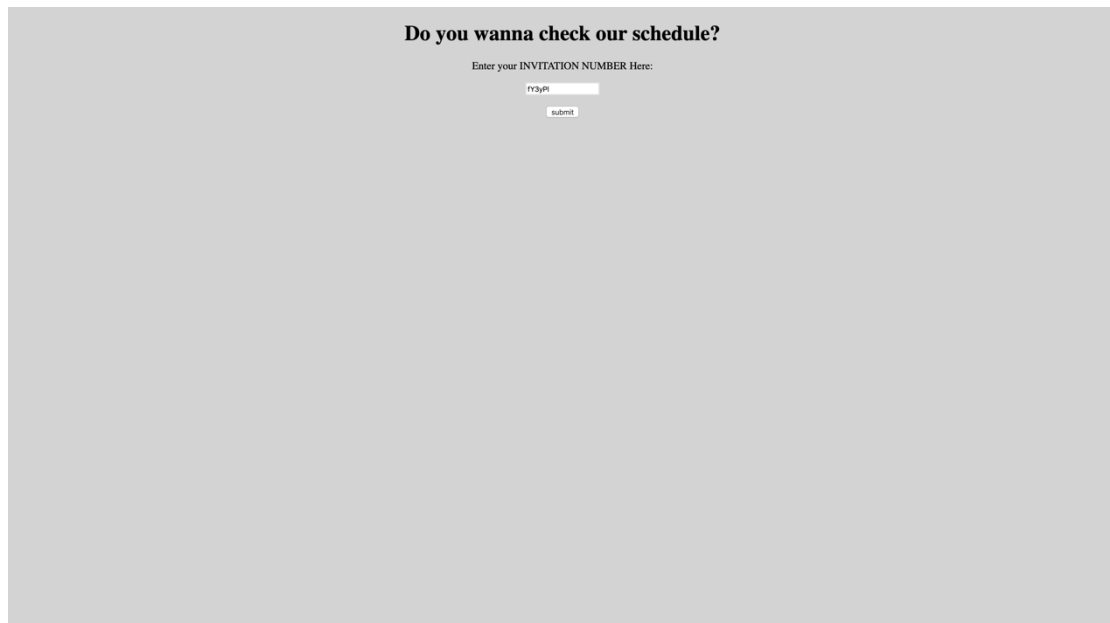


Fig 1-5 Sign In page

Fig 1-5 shows the sign in page, you can access this page from main page or the successful sign up page. By input your INVITATION code you will be successfully redirected to check our schedule.

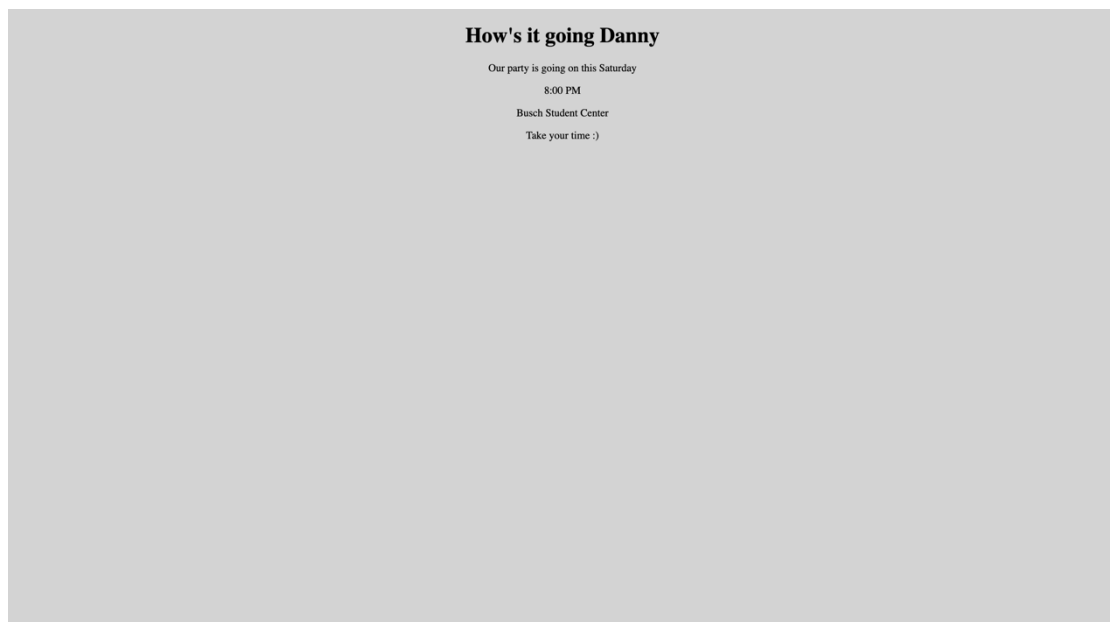


Fig 1-6 Successful login page

Fig 1-6 shows our schedule if you are already one guest of mine.



Fig 1-7 Invalid invitation code

Fig 1-7 shows when you type a wrong invitation code in the sign in page which will be shown. You are reminded to sign up first with a sign up button.

HTML Source code:

Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Homework6</title>
</head>
<body bgcolor="lightgray">
  <h1 align="center">Dazhi's Guest List</h1>
  <p align="center">Welcome to Dazhi's guest list, if you are a guest who have already gotten an INVITATION
please sign in</p>
  <p align="center">if you are a new guest, please sign up for an account so we can INVITE you</p>
  <div align="center">
    <a href="/signin">
      <button>Sign in</button>
    </a>
    or
    <a href="/signup">
      <button>Sign Up</button>
    </a>
  </div>
</body>
```

```
</html>
```

Signup.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Sign up</title>
</head>
<body bgcolor="lightgray">
  <h1 align="center">Welcome to be a new guest</h1>
  <p align="center">Here you need to finish a form about you and you will receive a INVITATION</p>
  <div align="center">
    <form action = "http://localhost:5000/signup" method = "post">
      <p>How do we call you?</p>
      <p><input type = "text" name = "guest_name" /></p>
      <p>What's your e-mail address?</p>
      <p><input type = "text" name = "guest_email" /></p>
      <p><input type = "submit" value = "Next" /></p>
    </form>
  </div>
</body>
</html>
```

Success.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Success Signed up</title>
</head>
<body bgcolor="lightgray">
  <h1 align="center">Welcome to be Dazhi's guest</h1>
  <p align="center">Hello {{new_guest['guest_name']}}!</p>
  <p align="center">This is your invitation code, please remember that to find our schedule</p>
  <h2 align="center">{{new_guest['invitation_num']}}</h2>
  <p align="center">Wanna try it? Sign in here</p>
  <div align="center">
    <a href="/signin">
      <button>Sign in</button>
    </a>
  </div>
</body>
</html>
```

Signin.html

```
<!DOCTYPE html>
```

```

<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Sign in</title>
</head>
<body bgcolor="lightgray">
    <h1 align="center">Do you wanna check our schedule?</h1>
    <div align="center">
        <form action = "http://localhost:5000/signin" method = "post">
            <p>Enter your INVITATION NUMBER Here:</p>
            <p><input type = "text" name = "invitation_num" /></p>
            <p><input type = "submit" value = "submit" /></p>
        </form>
    </div>
</body>
</html>

```

Login.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Schedule</title>
</head>
<body bgcolor="lightgray">
    <h1 align="center">How's it going {{guest['guest_name']}}</h1>
    <p align="center">Our party is going on this Saturday</p>
    <p align="center">8:00 PM</p>
    <p align="center">Busch Student Center</p>
    <p align="center">Take your time :)</p>
</body>
</html>

```

Fault.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Invalid Invitation</title>
</head>
<body bgcolor="lightgray">
    <h1 align="center">INVALID INVITATION</h1>
    <p align="center">If you are not in my guest list, please sign up first</p>
    <div align="center">
        <a href="/signup">
            <button>Sign Up</button>

```



```
        </a>
    </div>
</body>
</html>
```