

```
from flask import Flask, render_template, request, redirect, url_for, session
```

```
from flask_mysqlldb import MySQL
```

```
import MySQLdb.cursors
```

```
import re
```

```
app = Flask(__name__)
```

```
app.secret_key = 'your secret key'
```

```
app.config['MYSQL_HOST'] = 'localhost'
```

```
app.config['MYSQL_USER'] = 'root'
```

```
app.config['MYSQL_PASSWORD'] = 'your password'
```

```
app.config['MYSQL_DB'] = 'geeklogin'
```

```
mysql = MySQL(app)
```

```
@app.route('/')
```

```
@app.route('/login', methods=['GET', 'POST'])
```

```
def login():
```

```
    msg = "
```

```
    if request.method == 'POST' and 'username' in request.form and 'password' in request.form:
```

```
        username = request.form['username']
```

```
        password = request.form['password']
```

```
        cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
```

```
cursor.execute('SELECT * FROM accounts WHERE username = % s AND password = % s', (username, password, ))
```

```
account = cursor.fetchone()
```

```
if account:
```

```
    session['loggedin'] = True
```

```
    session['id'] = account['id']
```

```
    session['username'] = account['username']
```

```
    msg = 'Logged in successfully !'
```

```
    return render_template('index.html', msg = msg)
```

```
else:
```

```
    msg = 'Incorrect username / password !'
```

```
return render_template('login.html', msg = msg)
```

```
@app.route('/logout')
```

```
def logout():
```

```
    session.pop('loggedin', None)
```

```
    session.pop('id', None)
```

```
    session.pop('username', None)
```

```
    return redirect(url_for('login'))
```

```
@app.route('/register', methods =['GET', 'POST'])
```

```
def register():
```

```
    msg = "
```

```
    if request.method == 'POST' and 'username' in request.form and 'password' in request.form and 'email' in request.form :
```

```
        username = request.form['username']
```

```
password = request.form['password']

email = request.form['email']

cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)

cursor.execute('SELECT * FROM accounts WHERE username = % s', (username, ))

account = cursor.fetchone()

if account:

    msg = 'Account already exists !'

elif not re.match(r'^@]+@[^@]+\.[^@]+', email):

    msg = 'Invalid email address !'

elif not re.match(r'[A-Za-z0-9]+', username):

    msg = 'Username must contain only characters and numbers !'

elif not username or not password or not email:

    msg = 'Please fill out the form !'

else:

    cursor.execute('INSERT INTO accounts VALUES (NULL, % s, % s, % s)',
(username, password, email, ))

    mysql.connection.commit()

    msg = 'You have successfully registered !'

elif request.method == 'POST':

    msg = 'Please fill out the form !'

return render_template('register.html', msg = msg)
```