

```
from flask import Flask, render_template, request, redirect, url_for, session, flash
from flask_login import LoginManager, UserMixin, login_user, logout_user, login_required,
current_user
from werkzeug.security import generate_password_hash, check_password_hash
```

```
app = Flask(__name__)
app.secret_key = 'segredo'
```

```
login_manager = LoginManager()
login_manager.init_app(app)
login_manager.login_view = 'login'
```

```
# Banco de dados em memória
usuarios = {}
```

```
class User(UserMixin):
    def __init__(self, matricula, email, senha_hash):
        self.id = matricula
        self.email = email
        self.senha_hash = senha_hash
```

```
@login_manager.user_loader
def load_user(user_id):
    return usuarios.get(user_id)
```

```
@app.route('/')
def index():
    return redirect(url_for('login'))
```

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

```
    if request.method == 'POST':
        matricula = request.form['matricula']
        email = request.form['email']
        senha = request.form['senha']
```

```
    if not matricula or not email or not senha:
        flash('Preencha todos os campos!')
        return redirect(url_for('register'))
```

```
    if any(u.email == email for u in usuarios.values()):
        flash('Email já cadastrado!')
        return redirect(url_for('register'))
```

```
    senha_hash = generate_password_hash(senha)
    usuario = User(matricula, email, senha_hash)
    usuarios[matricula] = usuario
    flash('Usuário cadastrado com sucesso!')
```

```

        return redirect(url_for('login'))

    return render_template('register.html')

@app.route('/login', methods=['GET', 'POST'])
def login():
    if request.method == 'POST':
        matricula = request.form['matricula']
        senha = request.form['senha']
        usuario = usuarios.get(matricula)

        if usuario and check_password_hash(usuario.senha_hash, senha):
            login_user(usuario)
            session['matricula'] = matricula
            flash('Login realizado com sucesso!')
            return redirect(url_for('dashboard'))
        else:
            flash('Login inválido!')
            return redirect(url_for('login'))

    return render_template('login.html')

@app.route('/dashboard')
@login_required
def dashboard():
    return render_template('dashboard.html', email=current_user.email)

@app.route('/logout')
@login_required
def logout():
    logout_user()
    session.clear()
    flash('Logout realizado com sucesso!')
    return redirect(url_for('login'))

if __name__ == '__main__':
    app.run(debug=True)

```

```

BASE
<!DOCTYPE html>
<html lang="pt-br">
<head>
    <meta charset="UTF-8">
    <title>{% block title %}Sistema{% endblock %}</title>
</head>
<body>

```

```

<nav>
  <a href="{{ url_for('login') }}">Login</a> |
  <a href="{{ url_for('register') }}">Cadastro</a> |
  <a href="{{ url_for('dashboard') }}">Área Restrita</a> |
  <a href="{{ url_for('logout') }}">Logout</a>
</nav>
<hr>
{% with messages = get_flashed_messages() %}
  {% if messages %}
    <ul>
      {% for msg in messages %}
        <li>{{ msg }}</li>
      {% endfor %}
    </ul>
  {% endif %}
{% endwith %}
{% block content %}{% endblock %}
</body>
</html>

```

REGISTER

```

{% extends "base.html" %}
{% block title %}Cadastro{% endblock %}
{% block content %}
<h2>Cadastro</h2>
<form method="POST">
  Matrícula: <input type="text" name="matricula"><br>
  Email: <input type="email" name="email"><br>
  Senha: <input type="password" name="senha"><br>
  <input type="submit" value="Cadastrar">
</form>
{% endblock %}

```

LOGIN

```

{% extends "base.html" %}
{% block title %}Login{% endblock %}
{% block content %}
<h2>Login</h2>
<form method="POST">
  Matrícula: <input type="text" name="matricula"><br>

```

```
        Senha: <input type="password" name="senha"><br>
        <input type="submit" value="Entrar">
    </form>
{% endblock %}
```

DASH

```
{% extends "base.html" %}
{% block title %}Área Restrita{% endblock %}
{% block content %}
    <h2>Bem-vindo à Área Restrita!</h2>
    <p>Você está logado como: <strong>{{ email }}</strong></p>
{% endblock %}
```