

# Google App Engine Adding a Login Screen

ae-08-login

Textbook: Using Google App Engine (Chapter 6)



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## Adding a Login Screen

- One of the benefits of using a “Base” template and extending it is the ability to easily add new screens
- We will quickly add a login screen to our application

A screenshot of a web browser window. The address bar shows "http://localhost:8080/login". The page title is "App Engine" and there are links for "Sites", "Topics", and "Login". The main content area has the heading "Please Log In" and a sub-heading "Please enter your id and password to log in to this site." Below this are two input fields: "Account:" and "Password:". At the bottom of the form are two buttons: "Submit" and "Cancel".

## Steps

- Make a bit of utility code to do the render steps
- Determine a URL for the login screen
  - GET will display the screen
  - POST will check the password and optionally log you in
- Add a LoginHandler and add a route for /login to that handler
- Build the template for loginscreen.htm
- Build the Python code for LoginHandler

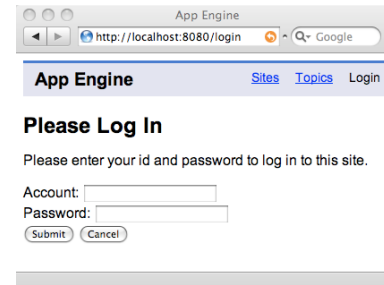
```

def doRender(handler, tname='index.htm', values={}):
    temp = os.path.join(
        os.path.dirname(__file__),
        'templates/' + tname)
    if not os.path.isfile(temp):
        return False

    # Make a copy and add the path
    newval = dict(values)
    newval['path'] = handler.request.path

    outstr = template.render(temp, newval)
    handler.response.out.write(outstr)
    return True

```



/login will be our path for the login screen

GET = display the screen

POST = check the password

```

class LoginHandler(webapp.RequestHandler):

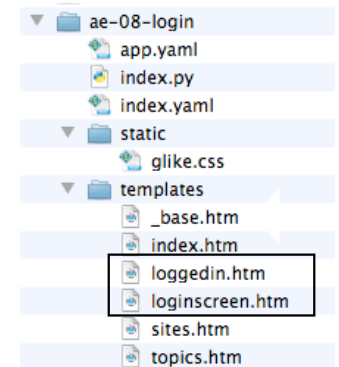
    def get(self):
        doRender(self, 'loginscreen.htm')

def main():
    application = webapp.WSGIApplication([
        ('/login', LoginHandler),
        ('/*.*', MainHandler)],
        debug=True)
    wsgiref.handlers.CGIHandler().run(application)

if __name__ == '__main__':
    main()

```

Modify `_base.htm`  
 Add two new template files



\_base.htm

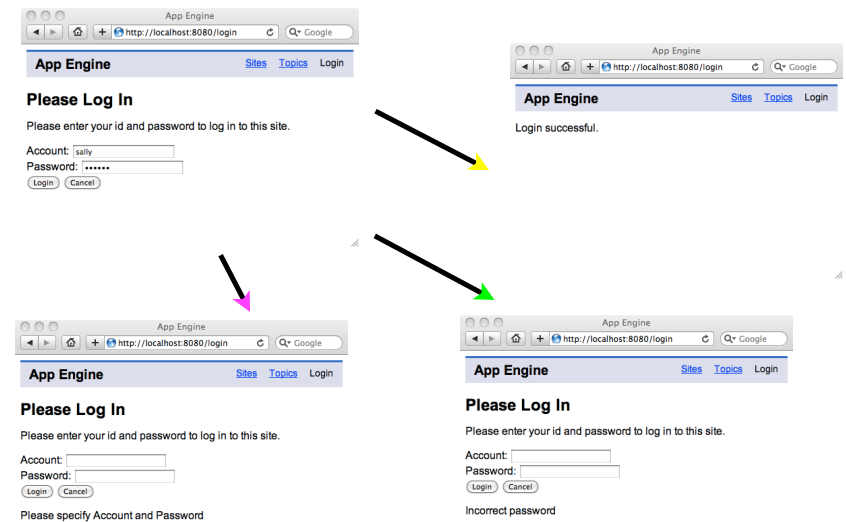
```
<li><a href="sites.htm"
  {% ifequal path '/sites.htm' %}
    class="selected"
  {% endifequal %}
  >Sites</a></li>
<li><a href="topics.htm"
  {% ifequal path '/topics.htm' %}
    class="selected"
  {% endifequal %}
  >Topics</a></li>
<li><a href="/login"
  {% ifequal path '/login' %}
    class="selected"
  {% endifequal %}
  >Login</a></li>
</ul>
```

```
{% extends "_base.htm" %}
{% block bodycontent %}
  <h2>Please Log In</h2>
  <p>
    Please enter your id and password to log in to this site.
  </p>
  <form method="post" action="/login">
    Account: <input type="text" name="account"/> <br>
    Password: <input type="password" name="password"/> <br>
    <input type="submit" value="Login"/>
    <input type="submit" value="Cancel"
      onclick="window.location='/'; return false;"/>
  </form>
</p>
{% endblock %}
```

loginscreen.htm

## Handling the POST

- The incoming fields come as “account” and “password”
- We check for empty fields, or bad password, and if the users knows the right password, we give them a nice message.



```

def post(self):
    acct = self.request.get('account')
    pw = self.request.get('password')
    logging.info('Checking account='+acct+' pw='+pw)

    if pw == '' or acct == '':
        doRender(
            self,
            'loginscreen.htm',
            {'error' : 'Specify Acct and PW' } )
    elif pw == 'secret':
        doRender(self, 'loggedin.htm', { } )
    else:
        doRender(
            self,
            'loginscreen.htm',
            {'error' : 'Incorrect password' } )

```

```

{% extends "_base.htm" %}
{% block bodycontent %}
    <h2>Please Log In</h2>
    <p>
        Please enter your id and password to log in to this site.
    </p>
    <p>
        <form method="post" action="/login">
            Account: <input type="text" name="account"/> <br>
            Password: <input type="password" name="password"/> <br/>
            <input type="submit" value="Login"/>
            <input type="submit" value="Cancel"
                onclick="window.location='/'; return false;"/>
        </form>
    </p>
    {% ifnotequal error None %}
    <p>
        {{ error }}
    </p>
    {% endifnotequal %}
{% endblock %}

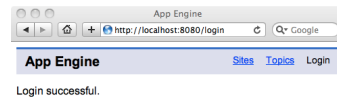
```

loginscreen.htm

```

{% extends "_base.htm" %}
{% block bodycontent %}
    <p>
        Login successful.
    </p>
{% endblock %}

```



loggedin.htm