



## Flask II

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# Jinja2 (review)

- Jinja2 is a modern and designer-friendly templating language for Python.
- /templates folder for HTML template files

Index.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Home Page</title>
  </head>
  <body>
    <h1>this is the homepage</h1>
  </body>
</html>
```

song-all.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>User Page</title>
  </head>
  <body>
    <h1>Coldplay Top Hits:</h1>
    {# This is a loop #}
    <ul>
      {% for song in songs %}
        <li>{{song}}</li>
      {% endfor %}
    </ul>
  </body>
</html>
```

**Lots of HTML code are repeated!!!**

# Template Reuse via Inheritance

## base.html

```
<html>
<head>
  {% block head %}
  <title>{% block title %}{% endblock %} - My Application</title>
  {% endblock %}
</head>
<body>
  {% block body %}
  {% endblock %}
</body>
</html>
```

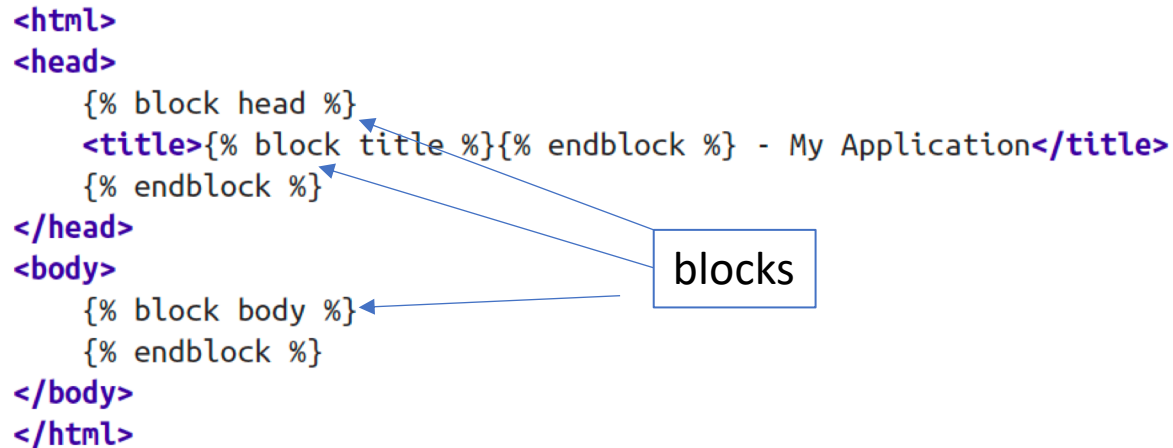


Diagram illustrating the inheritance structure. A box labeled "blocks" points to the corresponding block definitions in both templates:

- base.html: `{% block head %}`, `<title>{% block title %}{% endblock %} - My Application</title>`, `{% endblock %}`, `{% block body %}`, `{% endblock %}`
- index.html: `{% block title %}`, `{% block head %}`, `{% block body %}`

## index.html

- *block* tags define elements that a derived template can change.
- *super()* is used to retain the original contents.

```
{% extends "base.html" %}
{% block title %}Index{% endblock %}
{% block head %}
  {{ super() }}
  <style>
  </style>
{% endblock %}
{% block body %}
  <h1>Hello, World!</h1>
{% endblock %}
```

# Example

## New home-base.html

```
<!DOCTYPE html>
<html>
  <head>
    {% block head %}
    <meta charset="utf-8">
    <title>{% block title %}{% endblock %} - SongBase</title>
    {% endblock %}
  </head>
  <body>
    {% block body %}
    {% endblock %}
  </body>
</html>
```

## Original Index.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Home Page</title>
  </head>
  <body>
    <h1>this is the homepage</h1>
  </body>
</html>
```



## New Index.html

```
{% extends "home-base.html"%}
{% block title %}Home Page{% endblock %}
{% block head %}
  {{ super() }}
  <style>
    h1 {
      color:red;
    }
  </style>
{% endblock %}
{% block body %}
  <h1>this is the homepage</h1>
{% endblock %}
```

# Exercise (see songbase repo for details)

- Use template inheritance to add Bootstrap, jQuery, FontAwesome via CDN so that they are available for every page
- Add a navigation bar for every page using the template at <https://startbootstrap.com/template-overviews/logo-nav/> and use the SongBase logo
- Note: it's important to have a block for page content and a block for javascripts
- Create a songbase.css file to define custom css style
- Use ``git checkout v2`` to see the code