



SDEV 1001

Programming Fundamentals

More Loops and Exceptions - 1

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Expectations - What I expect from you

- No Late Assignments
- No Cheating
- Be a good classmate
- Don't waste your time
- Show up to class

Agenda

On the right is what we will cover today.

- Base Templates and Inheritance in Django
- Extending the Base Template
- Adding a Navigation Bar
- Using the `url` Template Tag
- Keeping and Extending Block Content
- Using Template Filters
- Challenge
- Summary

Base Templates and Inheritance in Django

- Use a base template to avoid repeating HTML structure across pages.
- Define blocks in the base template for sections like title, header, content, and footer.
- Example blocks:
 - `{% block title %}{% endblock %}`
 - `{% block content %}{% endblock %}`

Extending the Base Template

- Child templates use `{% extends "base.html" %}` at the top.
- Fill in or override blocks from the base template.
- Example:

```
{% extends "base.html" %}
{% block title %}Adopt a Friend{% endblock %}
{% block content %}
    <h2>Meet our adorable animals!</h2>
{% endblock %}
```

Adding a Navigation Bar

- Place navigation links in the base template's header block.
- Example:

```
{% block header %}  
  <nav>  
    <a href="{% url 'home' %}">Home</a>  
    <a href="{% url 'about' %}">About</a>  
  </nav>  
{% endblock %}
```



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Using the `url` Template Tag

- The `{% url %}` tag generates links to named views.
- Example:

```
<a href="{% url 'animal_detail' animal_id=animal.id %}">{{ animal.name }}</a>
```

Keeping and Extending Block Content

- Use `{{ block.super }}` to keep the original block content and add more.
- Example:

```
{% block content %}  
    {{ block.super }}  
    <p>Check out our latest arrivals!</p>  
{% endblock %}
```


Using Template Filters

- Template filters modify the display of variables in templates.
- Syntax: `{{ value|filter_name }}`
- Common examples:
 - `{{ name|upper }}` → Converts to uppercase.
 - `{{ date|date:"Y-m-d" }}` → Formats a date.
 - `{{ description|truncatechars:20 }}` → Truncates to 20 characters.
- You can chain filters: `{{ name|lower|capfirst }}`

Challenge

- Create a new template called `contact.html` that extends the base template.
- Add a contact form in the content block.
- Add a link to the contact page in the navigation bar using the `url` tag.

Summary

- Base templates and inheritance help maintain consistent layouts.
- Use blocks to define sections that can be overridden in child templates.
- The `url` tag generates links to views by name.
- Template filters modify variable output for better presentation.



Example

Let's go run a few examples together

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