3PILLAR
GLOBAL

Python in Web Development

Recap

- **HTML elements**
- **CSS**
  - **positioning**
  - **selectors**
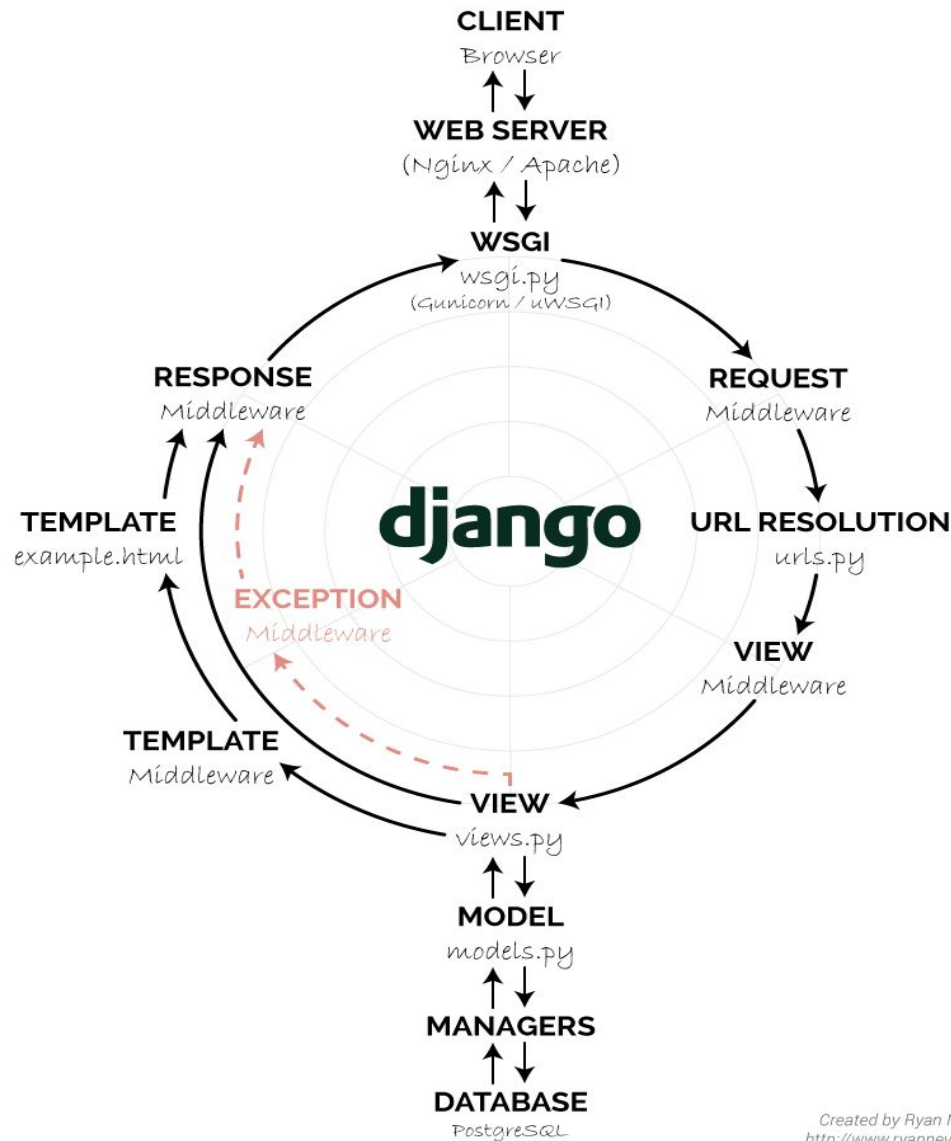
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LAB 7
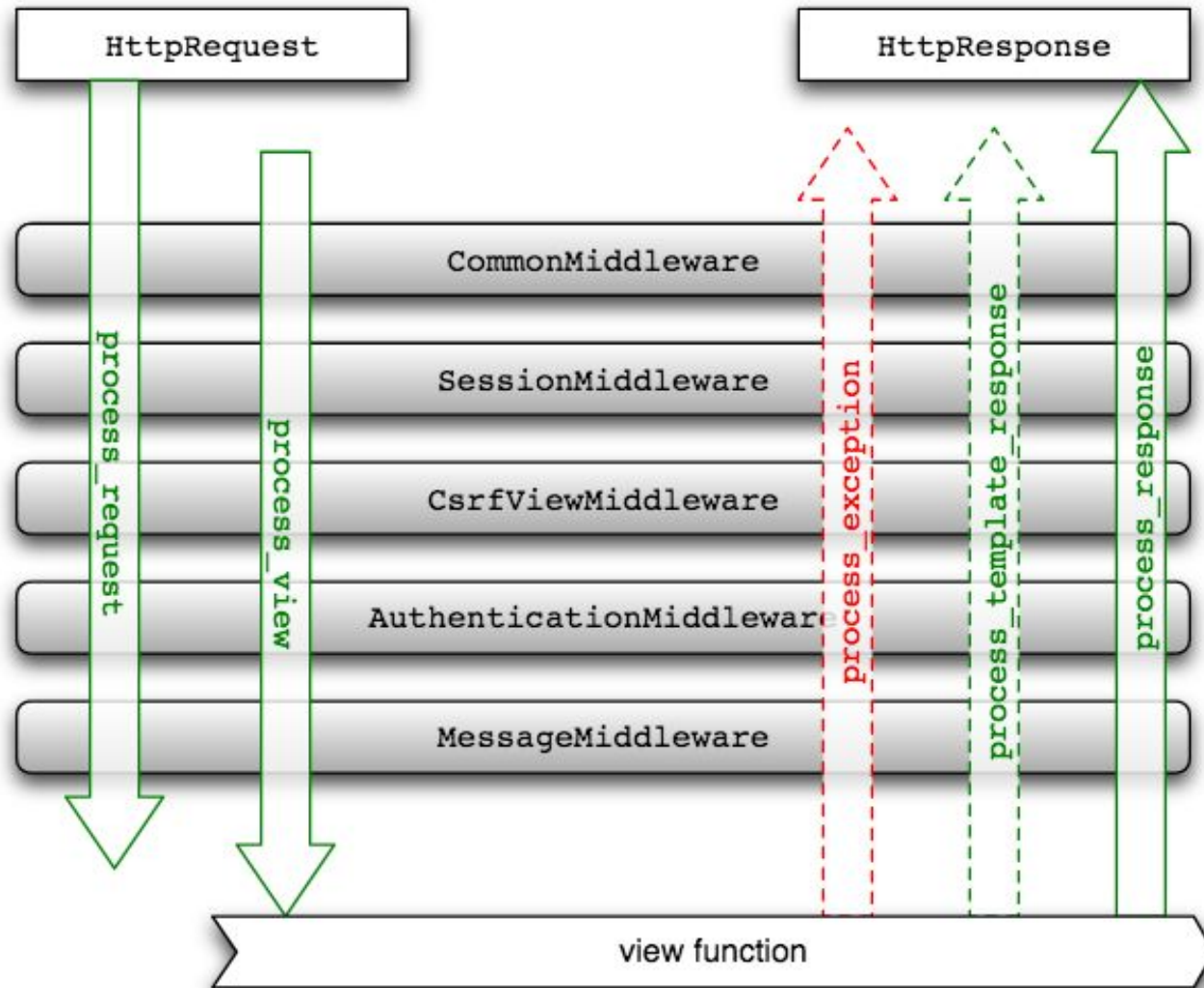
Request-Response cycle, Django Templates

AGENDA

- **Product mindset**
  https://www.3pillarglobal.com/how-we-do-it
- **Request / Response**
- **Django Templates**

Request Response Cycle

Request Response Cycle

Django Template Loader

- Template == HTML
- Different template languages
  - Django template
  - Jinja
  - Handlebars
  - Mustache
- Template loader returns a template matching a given name;
- Templates object are rendered with a context; This is the actual content of the http response

Django Template Loader

```python
TEMPLATES = [{
    'BACKEND': 'django.template.backends.django.DjangoTemplates',
    'DIRS': [], # extra dirs
    'APP_DIRS': True,
    'OPTIONS': { # ... some options here ...
    }

}]
```

- **Application specific templates are loaded automatically by Django from:**
  - **function views:**
    - **my_app/templates/my_app/index.html**
  - **class-based views:**
    - **my_app/templates/my_app/{model}_detail.html**

Context

- **A dictionary used when rendering the template**
- **Can pass variables to the template**
- **Combined from base dictionary with data from context processors**

Context Processor:

- **Used for variables that you want to be exposed on all templates like the request object**
- **Ex: request, user, messages**

Django Template language

- Minimum amount of logic;
- Template tags: {% *tag_name* %}
- Variables from context: {{ *variable[.method]* }}
- If variable is undefined in context, the result will be an empty string (doesn't raise an error)
- Filters: *first*, *join*, *safe*, *escape*, *truncatewords*
- You can build your own filters and template tags

Template tags

- **Flow control**
  - **{% if True %}{% else %}{% endif %}**
  - **{% for elem in *iterable* %}{% endfor %}**
- **Simple template tags**
  - **csrf_token, date, url, static, include, extends**

https://docs.djangoproject.com/en/1.11/ref/templates/builtins/

Workshop

- **Use mock data (no persistency)**
- **Create the poll app index page**
- **Create the poll detail view**
- **Styling using Bootstrap**

Quiz time :)

https://goo.gl/forms/7XFpdTeCvhDSWhu13

Thank you!