Django 3 cheatsheet

Builtin model field Types

CharField(max_length=150)	Small Text
TextField(max_length=1000)	Large Text
BooleanField(default=True)	Flags
DateField(auto_now_add=True)	Dates
DateTimeField(auto_now_add=True)	Dates and Times
EmailField()	Email Addresses
URLField()	URLs
IntegerField()	Whole numbers
DecimalField()	Decimal numbers
SlugField()	URL Slugs
ImageField(upload_to='/path')	Binary Images
FileField(upload_to='/path')	Binary Files
OneToOneField('OtherModel')	1-1 relations
ForeignKey('OtherModel')	∞-1 relations
ManyToManyField('OtherModel')	∞-∞ relations

Built-in template tags

```
{% url 'some-url-name' arg1=v1 arg2=v2 %}
```

```
{% if people_in_room %}
    You have company!
{% else %}
    The room is empty.
{% endif %}
```

```
{% for person in people %}
    {{ person.name }}
{% empty %}
    No people here!.
{% endfor %}
```

```
{% extends "base_template.html" %}
```

```
{% include "other_template.html" %}
```

```
{% block block_name %}Conten...{% endblock %}
```

```
{% csrf_token %}
```

```
{% static 'images/hi.jpg' %} or
{% get_static_prefix %}/images/hi.jpg
```

Useful commands

Install Django:
```
pip install django
```
Create a project:
```
django-admin startproject name [dir]
```
Create an application:
```
django-admin startapp name [dir]
```
Create database migrations
```
django-admin makemigrations
```
Run database migrations
```
django-admin migrate
```
Start development server
```
django-admin runserver
```

Querying data

```
from myapp.models import Planet
```

Create a new object:
```
mars = Planet(name="Mars", slug="mars")
mars.save()
```

Get all objects in the table:
```
all_planets = Planet.objects.all()
```

Get a specific instance:
```
mars = Planet.objects.get(name="Mars")
```

Filtering data:
```
Planet.objects.filter(name="Mars")
Planet.objects.filter(galaxy__name="Milky Way")
Planet.objects.filter(size__lt=5000)
```

Update an object:
```
mars.description = "A place for Rover"
mars.save()
```

Built-in filters

{{ value|date:"D d M Y" }} {{ value|time:"H:i" }}
{{ optional|default:"nothing" }}
{{ list|first }} {{ list|last }} {{ list|length }}
{{ list|join:", " }}
{{ value|json_script:"hello-data" }}
{{ words|lower }} {{ words|upper }} {{ words|upper }}
{{ number|pluralize }}
{{ list|slice:":2" }}
{{ words|slugify }}
{{ date|timesince:comment_date }}
{{ url|urlencode }}

Useful links

Django homepage:
https://www.djangoproject.com

Deploying Django on Azure:
https://aka.ms/django-azure-quickstart

Django documentation:
https://docs.djangoproject.com/en/stable/

Microsoft