Terminology

MVC *Model-View-Controller* is the "keep stuff separate" philosophy to separate out the code in a complicated web apps into 3 different categories

ORM *Object Relational Mapper* - the library used by the model to make special classes (called *models*) that can be saved and retrieved from the database (that is to say, *persisted*). Works by generating SQL.

migration Auto-generated code that uses the ORM to get the database sync'ed up with the latest additions to a project's models.

applying migration Using a *migration* to get the DB up-to-date and ready for use.

MVT *Model-View-Template* are the three categories of code in a Django project

app A single Django-powered *project* can consist of multiple *apps*, where each app can have a full vertical "slice" of models, views, and templates.

Using Django forms

models.py

```
class NewPersonForm(models.Model):
    name = forms.CharField(max_length=64)
    email = forms.EmailField()
```

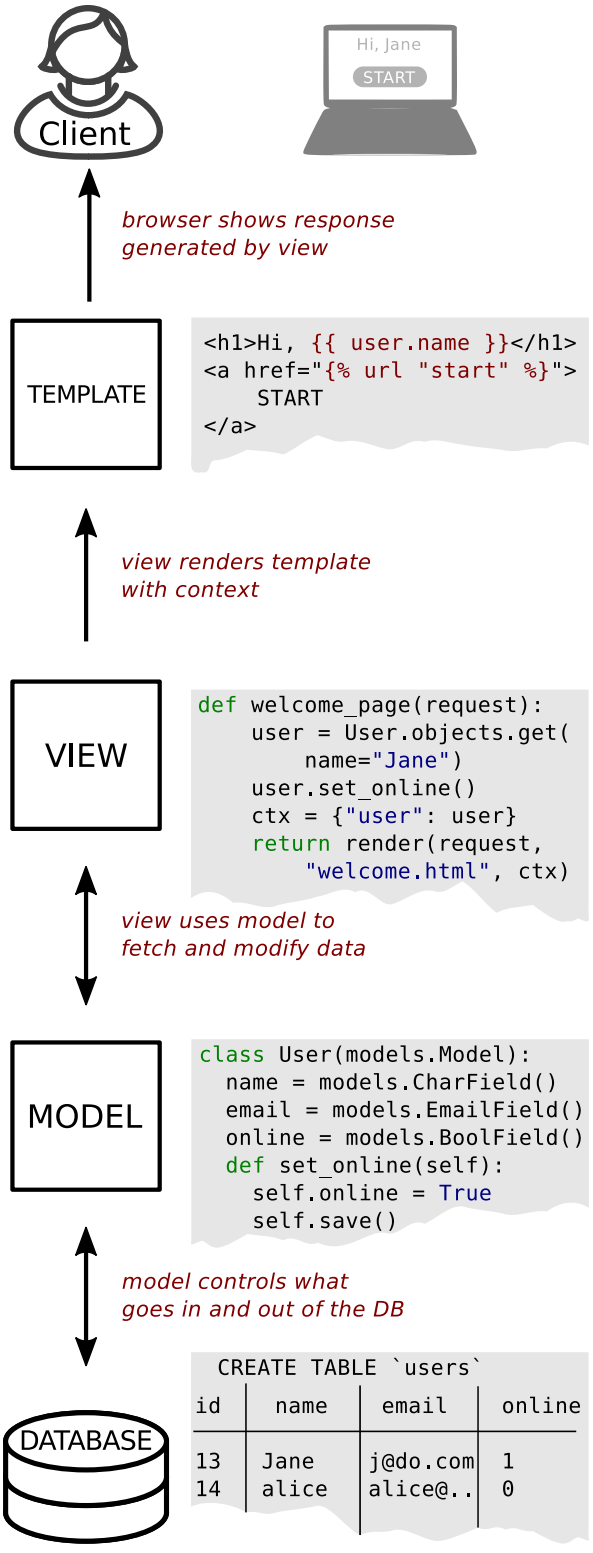
views.py

```
class NewPersonForm(forms.Form):
    name = forms.CharField(required=True)
    email = forms.EmailField()

# urls.py has: path("create/", views.person_create),
def person_create(request):
    if request.method == "GET":
        # Is initial GET: Create a blank form
        form = NewPersonForm()
    else:
        # Is POST: Create a form based on POST data
        form = NewPersonForm(request.POST)
        if form.is_valid():
            # If valid, create a new person & redirect
            person = Person()
            person.username = form.cleaned_data["name"]
            person.email = form.cleaned_data["email"]
            person.save()
            return redirect("/thanks/")
    ctx = {"form": form}
    return render(request, "create.html", ctx)
```

templates/create.html

```
<h1>Create new user</h1>
<form action="." method="post">
    {% csrf_token %}
    {{ form }}
    <button>Submit</button>
</form>
```



model is the gate-keeper to data stored in the *database*

view defines *business logic* of your web app

template is the appearance of your site in HTML