

Faculdade de Engenharia da Universidade do Porto

Software Engineering



MIEIC

ei12052@fe.up.pt - **Ana Ferreira** - 201205014
up201302828@fe.up.pt - **Gustavo Pinto** - 201302828
ei12030@fe.up.pt - **Jorge Teixeira** - 201205117
ei12041@fe.up.pt - **Sofia Reis** - 201200742

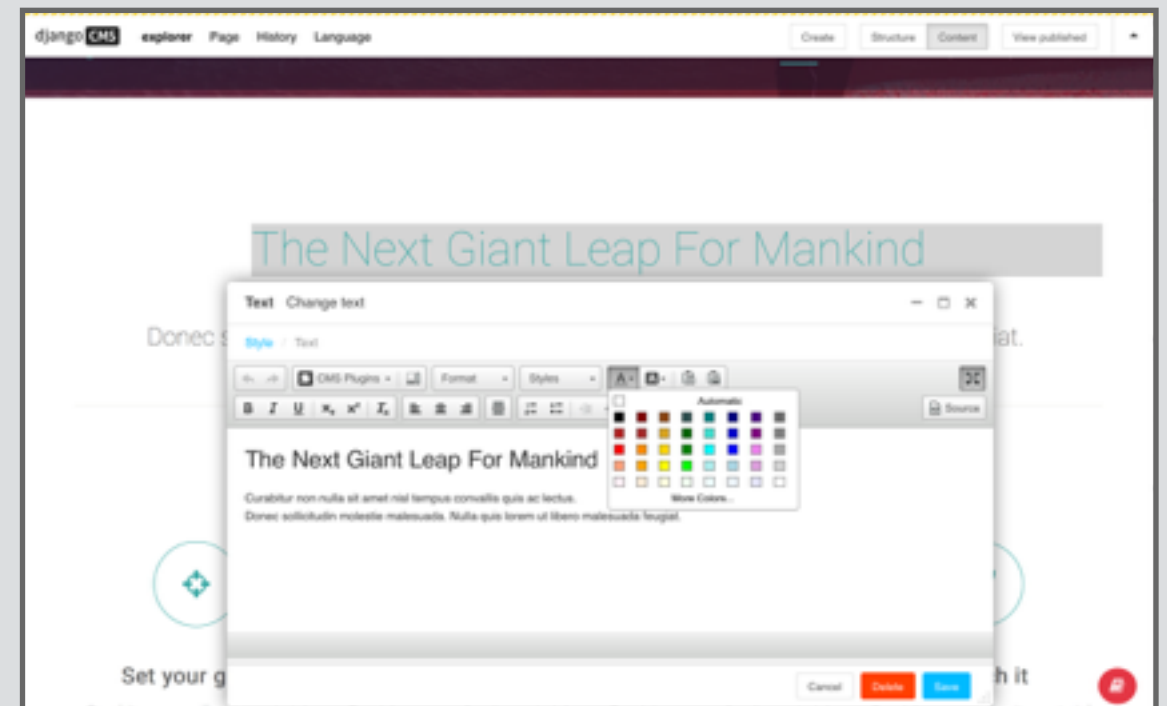
Ano Letivo 2015/2016

DJANGO-CMS

It's an open-source framework that allows to developers **create** and **manage** **front-end** websites, providing fast access to the content interface.



Python



DIVIO uses **Agile/SCRUM** for managing the development of the product between DIVIO workers. But the wider development community, in other words, the majority of contributors on GitHub are "led by our [DIVIO's] example" as stated by DIVIO developers when contacted.

12,751 + 1,400
COMMITTS **FORKS**

84 3,873
RELEASES **STARS**













Requirements Elicitation

Raising issues and efficiently construct its report

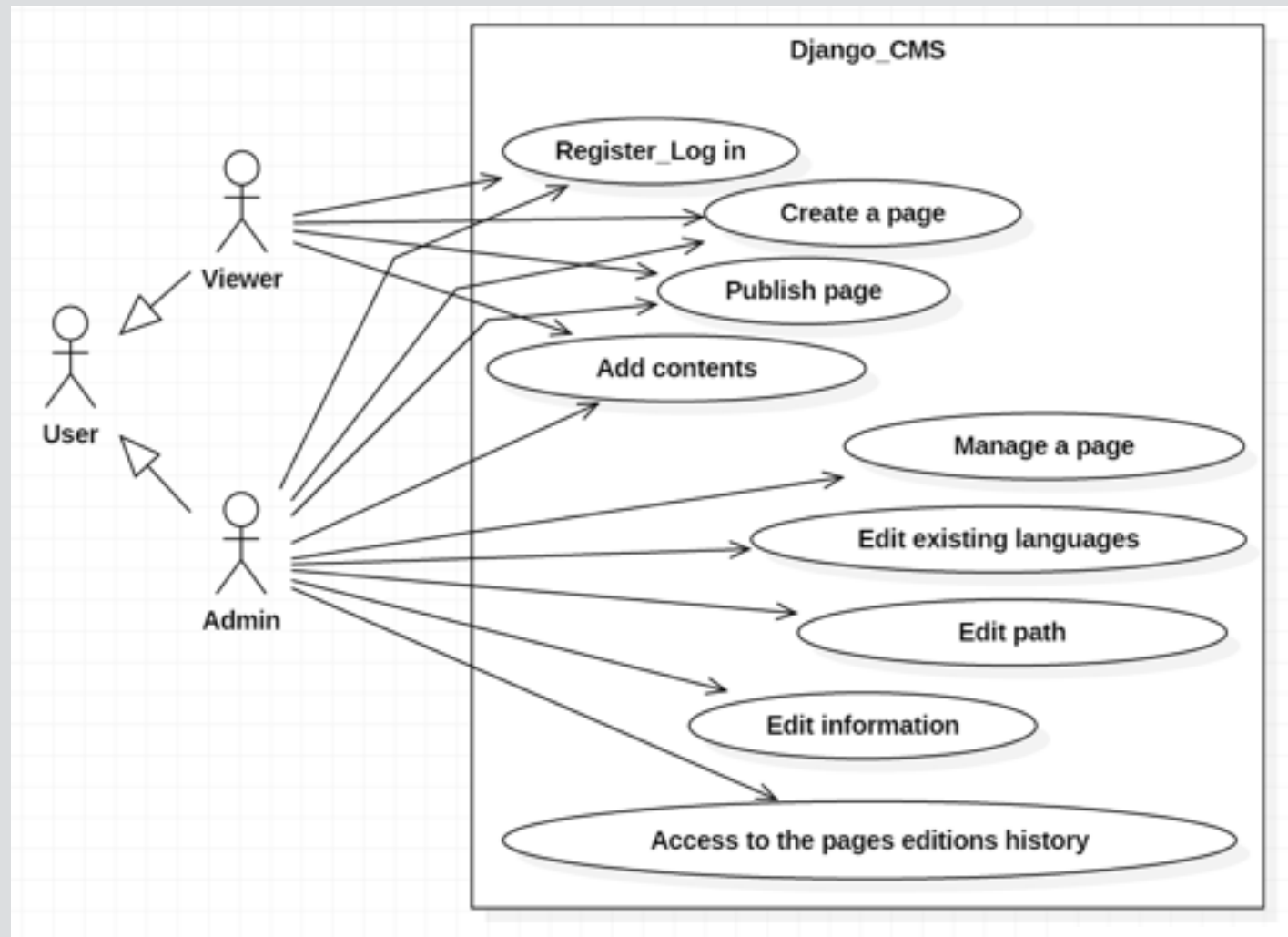
1. Fork Django-CMS on github and send a pull request when you feel your code is good enough for inclusion.
2. To efficiently construct an issue report, you should have the code, some unit-tests to prove that works and explicit and detailed documentation.

Getting your issue accepted

1. Be patient and see if you are asked for more information before it's accepted.
2. The issue can be rejected as non-issue, it's not actually a problem; or, won't fix, addressing your issue is beyond the scope of the project.

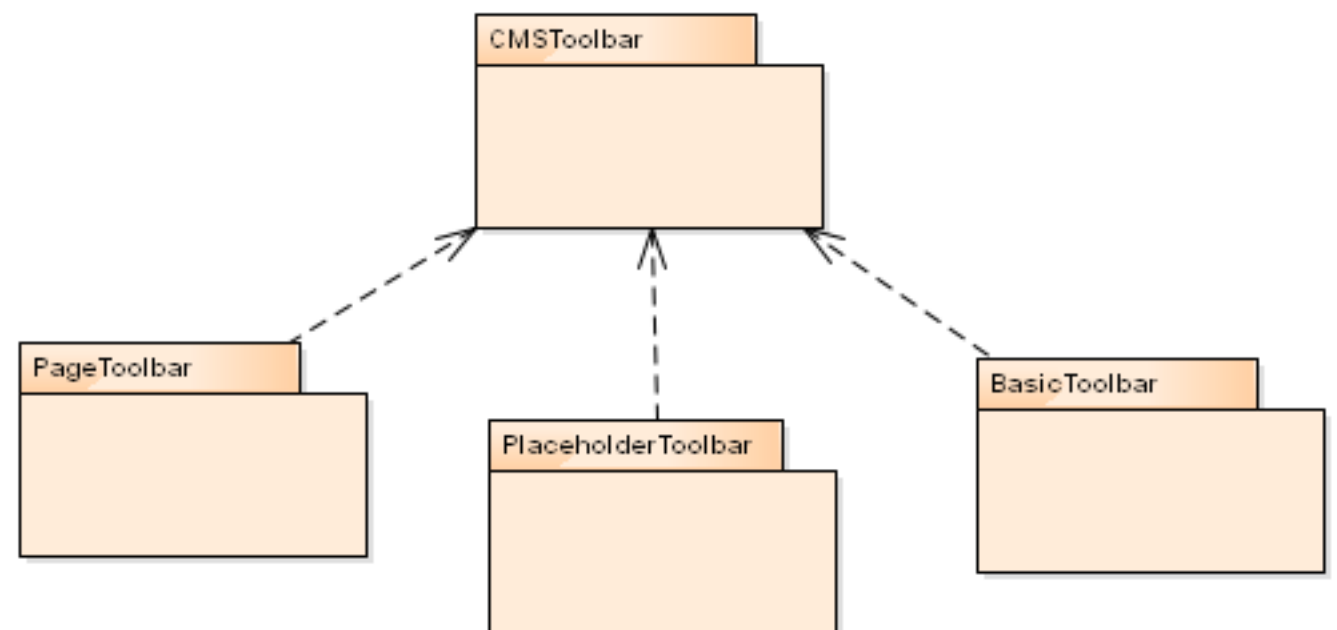
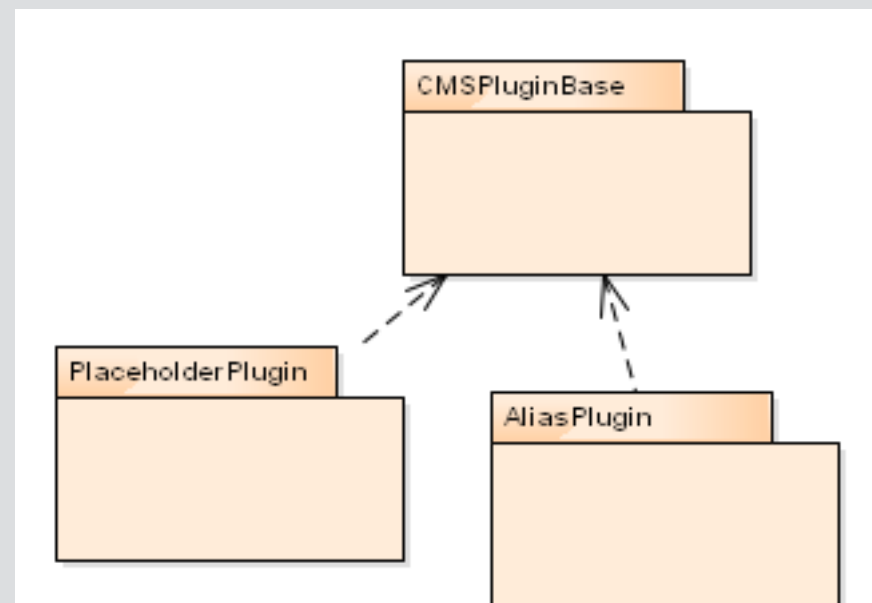
	Tests for copy_relations, see #4143 ❌ needs more info status: ready for review	 3
#4466 opened 23 days ago by philippze		
	Raise 404 instead of returning it ✅ backport status: ready to be merged	  9
#4452 opened 27 days ago by vstoykov  3.0.16		
	django-cms 2.3.4 fixed googlemaps plugin ✅ status: ready for review	 2
#4433 opened on Sep 9 by justine123		
	Add icon to toolbar_plugin_struct ✅ component: frontend status: ready for review	 2
#4428 opened on Sep 8 by ollb		
	add page slug to navigation node ✅ needs design decision	 3
#4404 opened on Aug 30 by AlexProfi		

Software Architecture



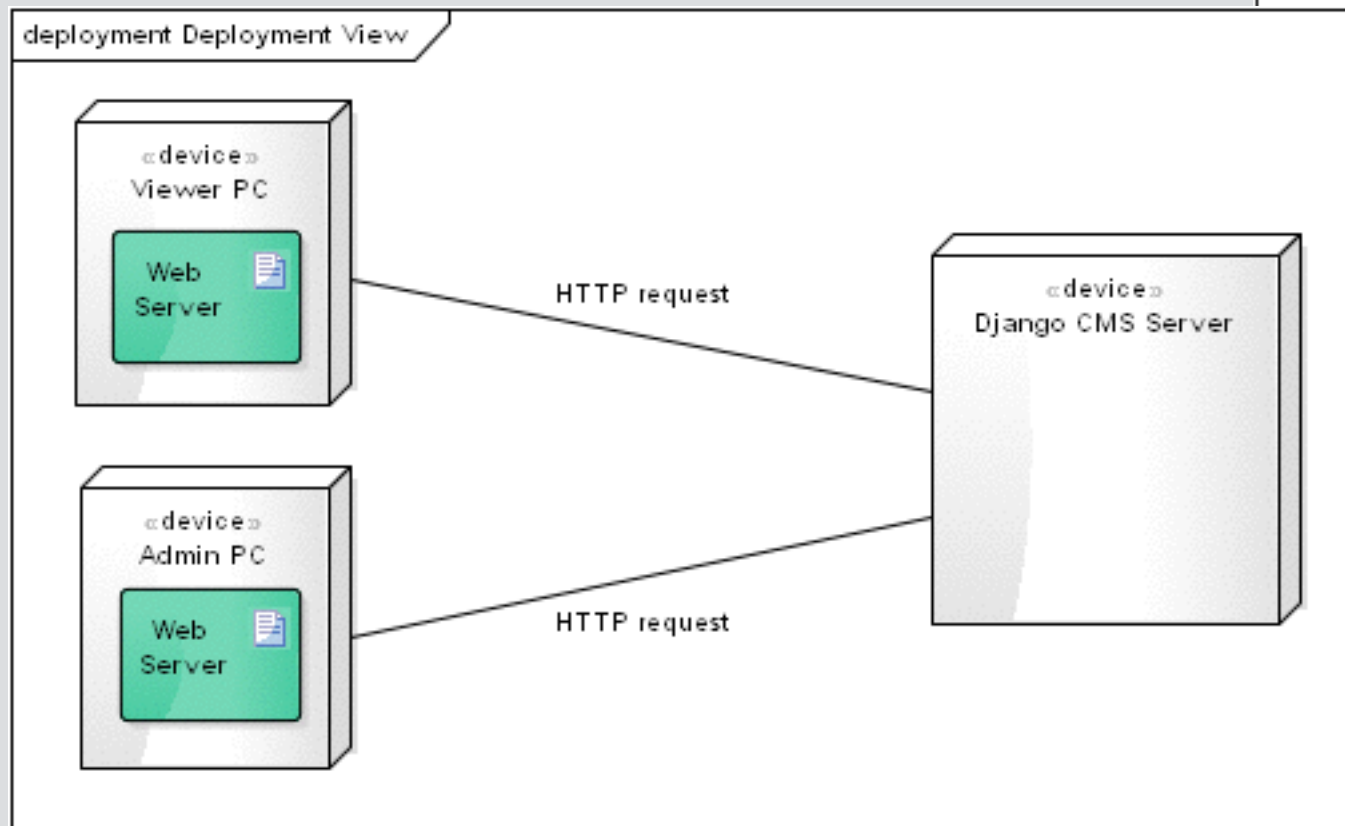
Use Case View

Logic View

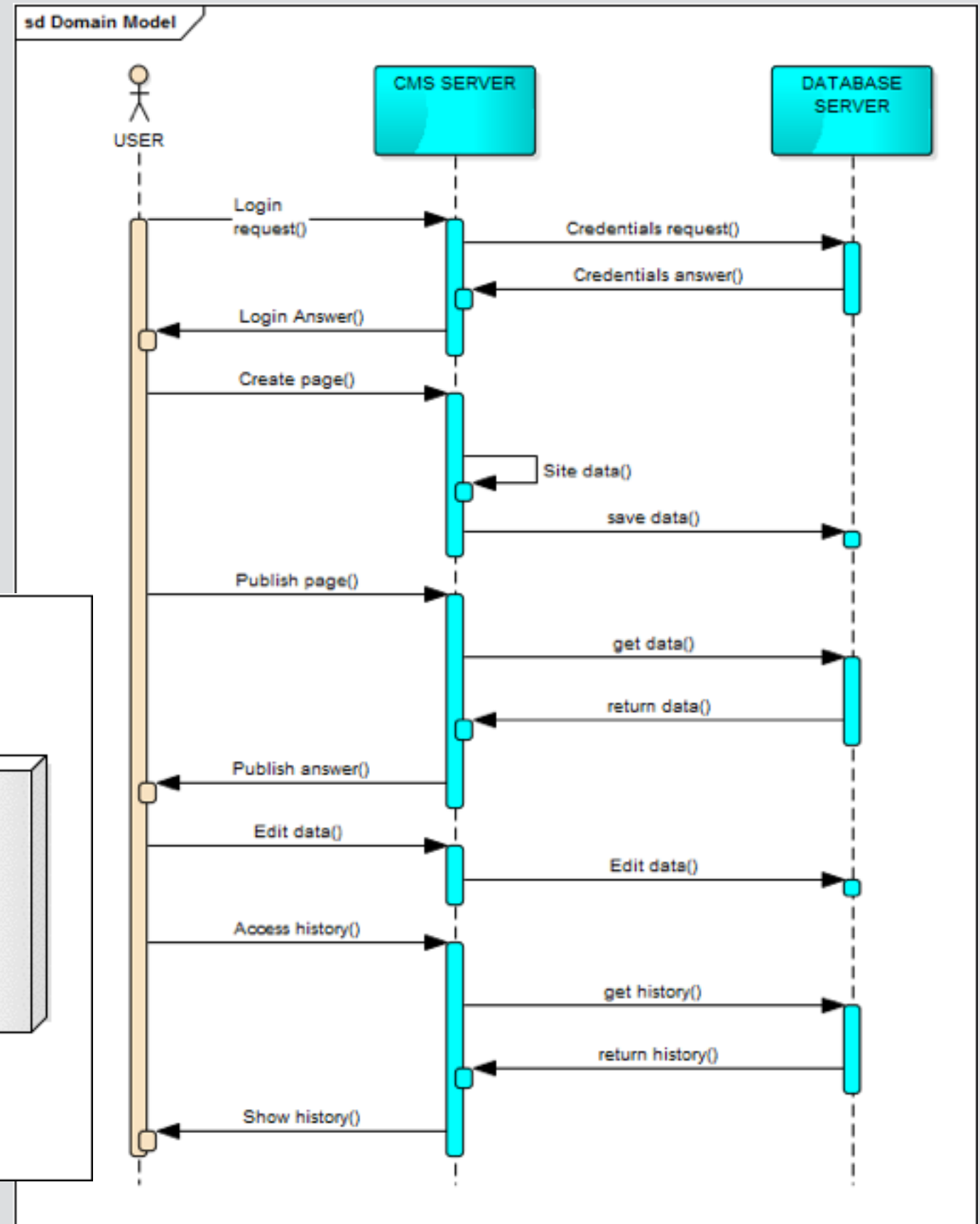


4+1 Model:

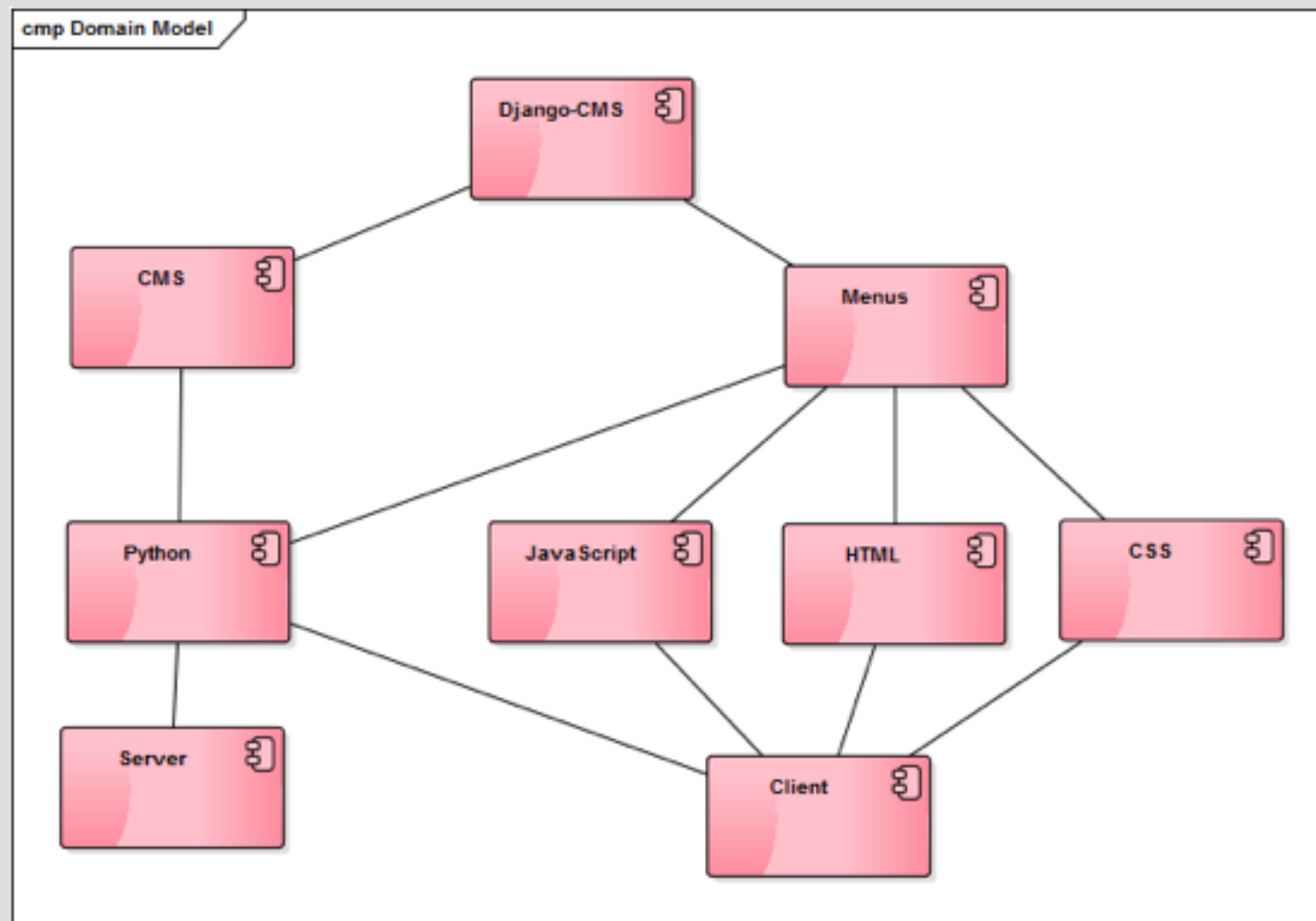
- Logical View;
- Implementation view;
- Process view;
- Deployment view;
- Use case view (+1);



Deployment View



Process View



Implementation View

Architectural Pattern - Is Django CMS and MVC Framework?

The answer is both **yes** and **no**.

Django CMS call this the Model-Template-View (MTV) architecture. There is separation of concerns between the database interfacing classes (Model), request-processing classes (View), and a templating language for the final presentation (Template).

Model = Django-CMS model

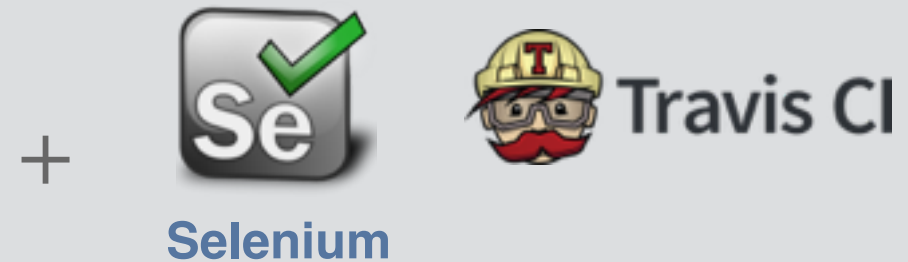
Controller = Framework

View = Django-CMS template

Verification and Validation

What tools Django-CMS uses to test?

- Coverage, Coveralls, Unittest-xml-reporting and Pyflakes(Python Packages)
- Django-Debug-toolbar
- Django-better-test



Software Testability

How to improve Django-CMS software testability?

Test Statistics

844
TESTS → 331.36
SECONDS → 28%
COVERAGE

Django-CMS, despite of being very restrict about tests, has just 28% of coverage, which is really low.

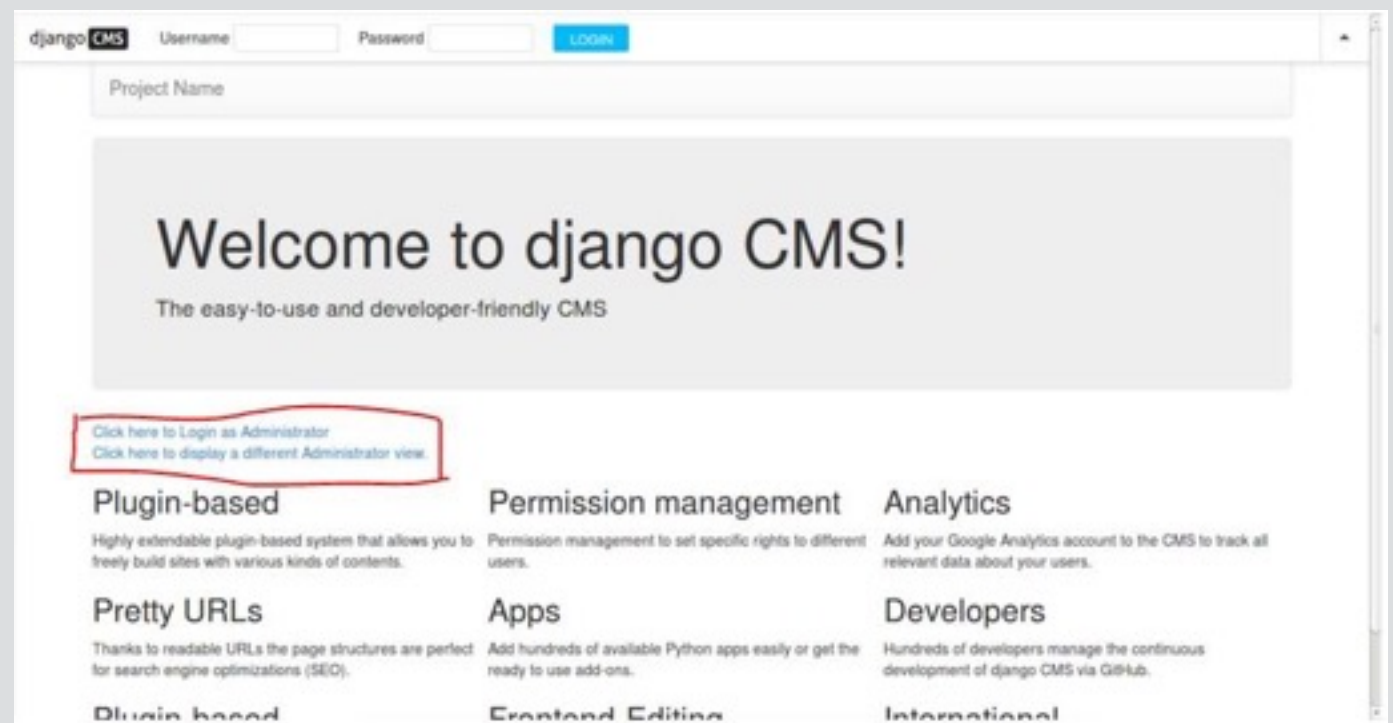
Software Evolution

- Example on what to add to code for an anchor to be created to be displayed above.
- Highlighted with red color are the new two anchor additions.

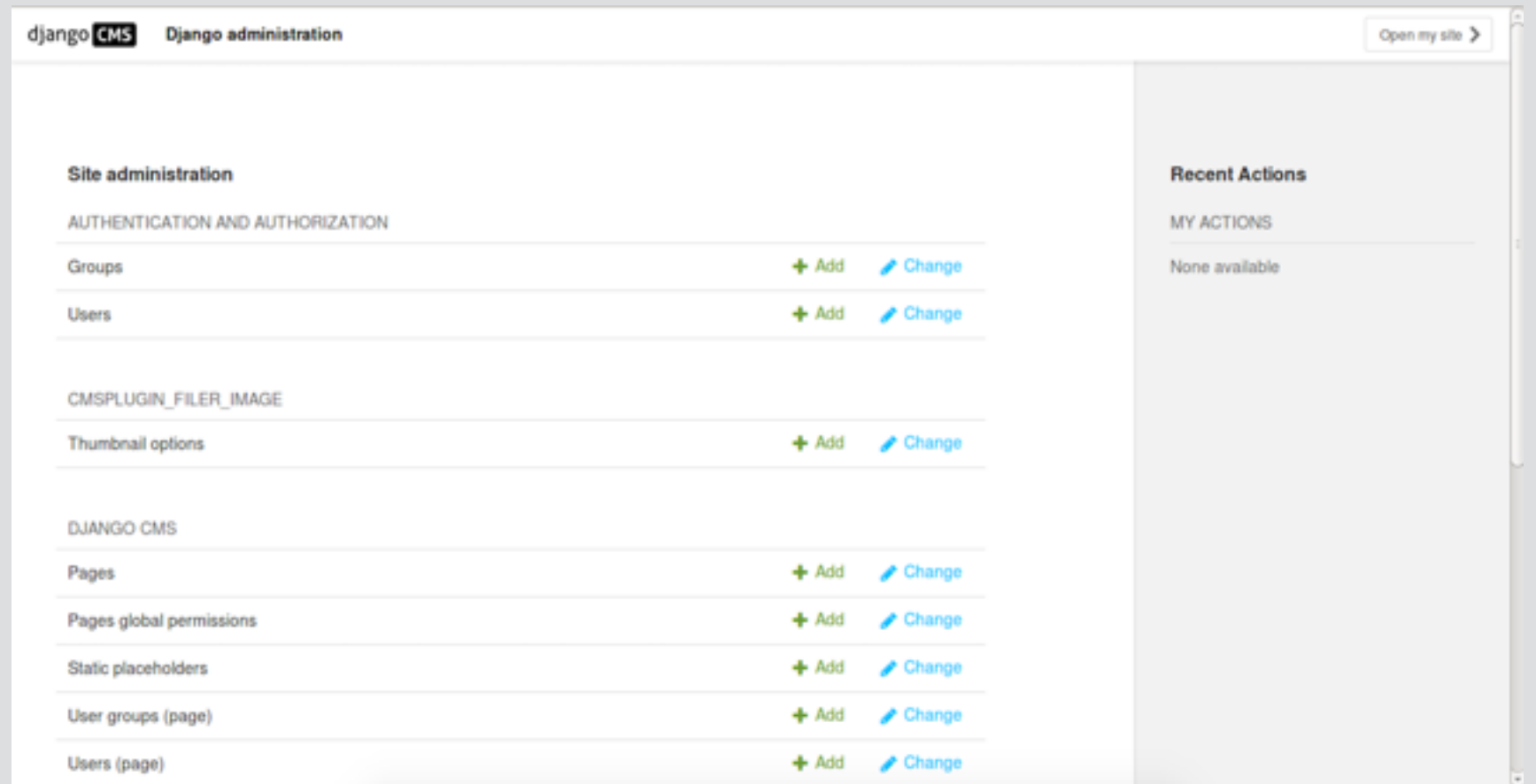
We focused on:

- Adding something useful and practical, thus related with interface.
- Simple to implement given the complexity of the code and language given.

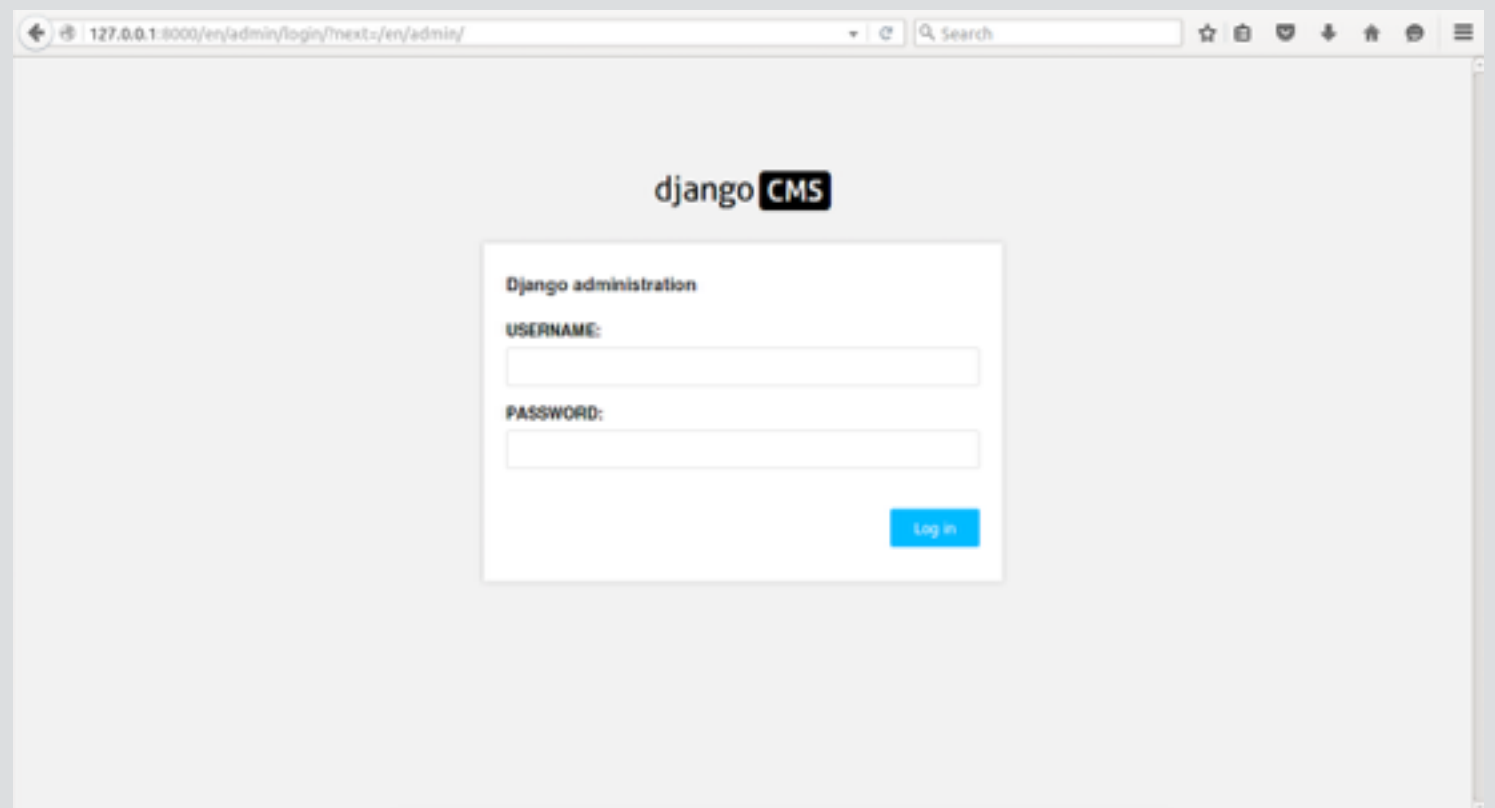
```
{% with "?edit" as teste %}  
<a href = " {{ teste }}"> Click here to Login as Administrator</a>  
{% endwith %}
```



Alternative view displayed to the right.



Trying to access alternate view when not logged in as Administrator to the right.



Want to Know More About DJANGO-CMS?



github.com/SofiaReis/django-cms



ESOF-docs

OR

ASK US NOW