

indico



# Developing a plugin

## Walkthrough

Natalia Juszka, CERN, October. 2017

What do we need ?



Indico instance



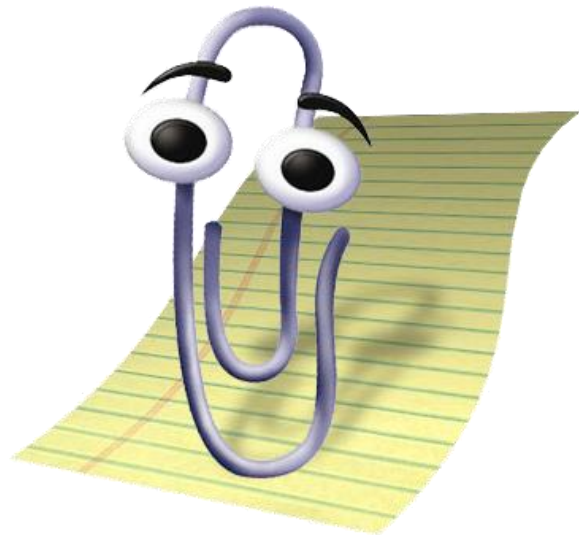
# Flask PluginEngine

[github.com/indico/flask-pluginengine](https://github.com/indico/flask-pluginengine)

[flask-pluginengine.readthedocs.io](https://flask-pluginengine.readthedocs.io)



# Clippy.js



[github.com/smore-inc/clippy.js](https://github.com/smore-inc/clippy.js)



# Plugin methods in Indico

`Indico/indico/core/plugins/__init__.py`

Clippy plugin: step by step



# Clippy.js

Let's put clippy library files in `static/css`  
and `static/js`



# File structure



```
| -clippy
  | -MANIFEST.in
  | -setup.py
  | -indico_clippy
    | -plugin.py
    | -__init__.py
    | -templates
      | -clippy_mail.html
      | -hide_clippy.html
  | -static
    | -css
      | -clippy.css
  | -js
    | -clippy.js
    | -indico_clippy.js
```

# setup.py



```
from __future__ import unicode_literals

from setuptools import setup, find_packages

setup(
    name='indico_clippy',
    version='0.0.1',
    packages=find_packages(),
    platforms='any',
    install_requires=[
        'indico>=1.9.11.dev17'
    ],
    entry_points={
        'indico.plugins': {'clippy = indico_clippy.plugin:ClippyPlugin'}
    }
)
```


# MANIFEST.in



```
graft indico_clippy/static  
graft indico_clippy/templates
```

```
global-exclude *.pyc __pycache__ .keep
```

# indico\_clippy.js



```
clippy.load('Clippy', function(agent){  
  agent.show();  
  agent.speak("Hello ! My name is Clippy! I will help you  
mange your events.");  
  agent.animate();  
  window.indicoClippy = agent;  
});
```

# plugin.py

```
from flask_pluginengine import render_plugin_template
from indico.core.notifications import make_email, send_email
from indico.core.plugins import IndicoPlugin, IndicoPluginBlueprint
from indico.modules.events.management.views import WPEventManagement
from indico.core import signals
from indico.web.flask.templating import get_template_module
```

```
class ClippyPlugin(IndicoPlugin):
    """Clippy plugin
```

```

    Clippy assistant plugin
    """
```

```

    def init(self):
        super(ClippyPlugin, self).init()
        self.inject_css('clippy_css', WPEventManagement)
        self.inject_js('clippy_js', WPEventManagement)
```

```

    def get_blueprints(self):
        return IndicoPluginBlueprint(self.name, __name__)
```

```

    def register_assets(self):
        self.register_css_bundle('clippy_css', 'css/clippy.css')
        self.register_js_bundle('clippy_js', 'js/clippy.js', 'js/indico_clippy.js')
```




```
pip install -e .
```

# Signals




# plugin.py

A decorative graphic on the left side of the slide consisting of two concentric circles. The outer circle is a bright blue, and the inner circle is a darker blue. They are partially cut off by the left edge of the frame.

```
def init(self):
    ...
    self.connect(signals.event.updated, self._event_changed)

def _event_changed(self, event, changes, **kwargs):
    if 'title' not in changes:
        return
    old_title = changes['title'][0]
    new_title = changes['title'][1]
    template = get_template_module('clippy:clippy_mail.html', old_title=old_title,
new_title=new_title)
    email = make_email(to_list=event.all_manager_emails,
from_address='clippy@example.pl',
                    template=template, html=True)
    send_email(email)
```

# Clippy\_mail.html



```
{% extends 'emails/base.html' %}

{% block subject %}Event title updated{% endblock %}

{% block header_recipient %}Dear event manager{% endblock %}

{% block body -%}
  <div>The event title has been changed from {{ old_title }} to {{ new_title
}}.</div>
  <div>Your Clippy assistant</div>
{%- endblock %}
```

# Template hooks

# Template hook in Indico


<https://github.com/indico/indico/commit/d62fa203828151e3265e2a7ae504c78d95b9dde8>

# plugin.py

```
self.template_hook('additional-content',  
self._show_hide_clippy)
```

```
def _show_hide_clippy(self):  
    return render_plugin_template('hide_clippy.html')
```

# Hide\_clippy.html



```
<button class="i-button warning" id="hide">Hide clippy</button>
<button class="i-button accept" id="show">Show clippy</button>
<script>
  $("#hide").click(function() {
    window.indicoClippy.hide();
  });
  $("#show").click(function() {
    window.indicoClippy.show();
    window.indicoClippy.speak("I am back!!");
  });
</script>
```



# Clippy plugin

<https://github.com/meluru/clippy>

indico