Topic: Bulk Email Tool 19: Integrating Rich Text Editor

Speaker: Udemy Instructor Rathan Kumar | Notebook: Django: Automating Common Tasks



The email's body should have a formatting toolbar just like the image below and we can use CKEDITOR with this. This is the same tool we used in our <u>Django</u> <u>Blog</u> and this <u>Digital Notebook</u> website.

Styles	- Normal	- B <i>I</i>	<u>U</u> S	< > œ ∈	2 🏴 🖾 🗄	▦ ▤ ▲ - ⊠ - @	Ω ω Source
body p							Q

1. See this <u>CKEditor documentation</u> for the details of installation and configuration.

Required

1. Install or add django-ckeditor to your python path.

pip install django-ckeditor

- 2. Add ckeditor to your INSTALLED_APPS setting.
- 3. Run the collectstatic management command: \$./manage.py collectstatic. This will copy static CKEditor required media resources into the directory given by the STATIC_ROOT setting. See <u>Django's</u> <u>documentation on managing static files</u> for more info.

Install CkEditor in your Django-bash terminal

\$ pip install django-ckeditor

2. Add CkEditor in the INSTALLED APPS in SETTINGS.PY



3. Run the COLLECTSTATIC COMMAND.

\$ python manage.py collectstatic

4. Now update the EMAIL model in EMAILS\MODELS.PY, that will require Rick Text Editor:

FROM:

I K₽	asgi.py		20
	elery.py	м	21 class Email(models.Model):
Ŕ	settings.py	M	22 email list = models ForeignKey(list on delete-models CASCADE)
nQ	🔹 urls.py	м	22 conditional models. For the actual compaid mossage contraction the successions
	🍨 views.py		25 automatics to for the accountermatic message sent to the sast thers
	🚭 wsgi.py		24 subject = models.charrield(max_length=100)
Ŀ⊗	> dataentry		<pre>25 body = models.TextField(max_length=500)</pre>
π	✓ emails		26 # directs all email attached files to this folder
A			27 attachment = models.FileField(upload to='email attachments/', b
	> migrations		28
	💩initpy		senc_ac = moders.bacerimerieru(adco_now_add=ride)
	🕏 admin.py		29
\mathbf{A}	🔹 apps.py		30 def(self):
	🅏 forms.py		31 vertex return self.subject
	🔹 models.py		
	💩 tasks.py		
	🔹 tests.py		
	🕏 urls.py	U	

TO:

⊲ _					A کر	utomatingCommonTasks		□ 0: -	
	EXPLORER			🕏 views.py U	🔹 tasks.py U	🔹 settings.py M	🕏 utils.py M	🕏 models.py U 🗙	♦ send- ▷
ብ		ONT em	ails > 🗇	models.py > 😫 Ema	il > 🔑 body				
Ŀ	✓ autocommonta			from django	.db import	models			
	>pycache > static		2 ·	from ckedit	or.fields i	mport RichTex	tField		
	🤹 init .pv								
20	asgi.py								
	celery.py			class List(models.Mode	1):			
	🅏 forms.py	м		····#·this	is the emai	llist			
	🕏 settings.py	м		email 1	ist - model	chanEield(m	av length-2	5)	
	💩 urls.py	м		T	ISC = model	s.charrieiu(m	ax_tengtn=2)	
	🅏 views.py								
	🕏 wsgi.py			defs	<pre>tr_(self):</pre>				
	> dataentry		10	ret	urn self.em	ail_list			
Д	✓ emails								
	>pycache		12						
<u>مند.</u>	7 migrations			class Subsc	riber(model	s.Model):			
-	admin pv			#.+his.	email addre	ss, can be nan			
	apps.pv		14			- F). 1.4	
	<pre>forms.py</pre>		12	emaii_i	ist = model:	s.Foreignkey(List, on_de	lete=models.	CASCADE)
	models.py		16	••••email_a	ddress = mo	dels.EmailFie	ld(max_leng	th=50)	
	💩 tasks.py								
	🗇 tests.py		18	····def·s	<pre>tr_(self):</pre>				
	💩 urls.py		19	ret	urn self.em	ail address			
	🅏 views.py		20			-			
	> media			alaas Emeil	(models Med	-1).			
	> Resources			CIASS EMAIL	(moders.mod	er).			
	> static			email_l	ist = model	s.ForeignKey(List, on_de	lete=models.	CASCADE)
	 dataentry 		24						
	✓ emails		25	subject	<u>= models C</u>	harEield(max_	length=100)		
	send-email.ht		26	body =	RichTextFie	ld()			
	alerts.html			····#·direc	ts all emai	l∙attached∙fi			
	base.html		28	attachm	ent = model	s.FileField(u	pload to='e	mail attachm	ents/'.h
	home.html	м	29	sent_at	models_D	ateTimeField(auto now ad	d-True)	
	🗢 login.html			sent_at	- moders.D		auco_now_au		

5. Since we have made some changes in our model, run the migration commands.

\$ python manage.py makemigrations

```
$ python manage.py migrate
```

6. Run your Django server and see your admin dashboard Email model to see the effect of CKEditor.

← → C ③ http://127.0.0.1:8000/admin/emails/email/13/change/											
Django admini	istration										
Home - Emails - Emails -	• Celery Test Again										
Start typing to filter		Change email									
AUTHENTICATION AND A		Celery Test Again									
Groups	+ Add										
Users	T Add	Email list:	Developers 🗸 🤌 + 👁								
DATAENTRY		Subject:	Celery Test Again								
Customers	+ Add	Parta I									
Employees	+ Add	body:	Styles - Format - B $I \cup$ S \Leftrightarrow \Rightarrow $\textcircled{ee} = \bigcirc$ \blacksquare \blacksquare \blacksquare \blacksquare $\blacktriangle \cdot \square \cdot$ $\textcircled{ee} \Omega$ \textcircled{o} Source								
Students	+ Add		Celery test Again								
		L									
EMAILS											
Emails	+ Add										
Lists	+ Add										
Subscribers	+ Add										
«											
UPLOADS											
Uploads	+ Add										
			A								
		Attachment:	Currently: email_attachments/email-3249062_640_vEpvXGH.png 🗌 Clear								
			Changes Choose File No file chosen								
		SAVE Save and a	add another Save and continue editing								

7. Now we want the CKEditor to load as well on our front-end HTML page. When we load the SEND-EMAIL page, this is now the after-result:

http://127.0.0.1:8000/emails/send-email/		
مريم Automate The Co	mmon Boring Stuffs with Django	Logged in as: commontask_admin Logout
	Compose a Bulk Emai	I
	Email list*	
		~
	Subject*	
	Body*	
	Attachment	
	Choose File No file chosen	
	_	
	Send	
	Copyright © 2024 Automate The Common Boring Stuffs	By <u>Rosilie Lim</u>

8. In the CKEditor, copy the JAVASCRIPTS LINKS and save this in BASE.HTML

<script type="text/javascript" src="{% static "ckeditor/ckeditor-init.js" %}"></script>

<script type="text/javascript" src="{% static "ckeditor/ckeditor.js" %}"></script>

Outside of django admin

When you are rendering a form outside the admin panel, you'll have to make sure all form media is present for the editor to work. One way to achieve this is like this:

```
<form>
    {{ myform.media }}
    {{ myform.as_p }}
    <input type="submit"/>
</form>
```

or you can load the media manually as it is done in the demo app:

```
{% load static %}
<script type="text/javascript" src="{% static "ckeditor/ckeditor-init<mark>.js</mark>" %}"></script>
<script type="text/javascript" src="{% static "ckeditor/ckeditor/ckeditor<mark>.js</mark>" %}"></script>
```

When you need to render RichTextField's HTML output in your templates safely, just use {{ content|safe }}, Django's safe filter



The CKEditor scripts are showing red-highlighted symbols or words. This is because of the double " " used in the line. So modify it as:

> media		18	
> Resources		19	
> static			
✓ templates		20	<pre><script src="{% static 'ckeditor/ckeditor-init.js' %}" type="text/javascript"></script></pre>
> dataentry			<pre><script src="{% static 'ckeditor/ckeditor/ckeditor.js' %}" type="text/javascript"></script></pre>
✓ emails			
send-email.ht			
alerts.html			
base.html	м	24	<body></body>

9. Now refresh our SEND-EMAIL page and the Rich Field Toolbar should show up:

Automate The Common Boring Stuffs with Djangs Logged in as: commontask_admin Logged Imail list* Imail list* Imail list* Imail list* Subject* Imail list* Imail list* Imail list* Imail list* Imail list* Imail list* Imail list*	\rightarrow	G	() http://127.0	.0.1:8000/emails/send	email/			९ 🕁	⊡ ₹	r 😂	New Chrome avai
Email list* Subject* Body* Styles Format B I U S © Q @ Source		P#	Automate The	e Common Boring	Stuffs with Dja		Logged in a	s: commonta:	sk_admin	Logout	
Email list* Subject* Body* Styles $ B I U S \Leftrightarrow \Rightarrow @ @ \square \square \equiv A \cdot \square \cdot $ $@ \Omega \square$ Source					Comp	oose a Bull	c Email				
Subject* Body* Styles - Format - B I U S ← → □ Ⅲ ≣ <u>A</u> - □ - ☺ Ω ⊡ Source				Email list*				~			
Body* Styles - Format - B I U S ← → ∞ ⇔ ℝ ⊨ Δ - Δ - ⊕ Ω ⊕ Source				Subject*	Subject*						
				Body* Styles -	Format - B	I <u>U</u> \$ < ,	ee eng ⊨ i ⊑ ⊞ : D Ω i D Source	≣ <u>A</u> · [۵ ·			
Attachment				Attachment					4		
Choose File No file chosen				Choose File	No file chosen						

10. The CKEditor has a default size window which can be resizeable but if you want a different height, we can configure it as:

By specifying a set named default you'll be applying its settings to all RichTextField and CKEditorWidget objects for which config_name has not been explicitly defined

```
CKEDITOR_CONFIGS = {
    'default': {
        'toolbar': 'full',
        'height': 300,
        'width': 300,
    },
}
```

So, go to SETTINGS.PY and add the above configuration block.

	∢				$\leftarrow \rightarrow$ (𝒫 AutomatingCommon	Tasks) 🗖 🗍 🗰
68		EXPLORER		ml 🗢	views.py U	🍨 tasks.py U	🔹 settings.py M 🗙	🗢 utils.py M	🌳 models.py U	🗘 base.html
	-		ONT	autocomr	nontasks_main	> 🍖 settings.py >				
	L C	✓ autocommonta		152						
		elery.py		153	EMAIL_H	lOST = confi	ig <mark>(</mark> 'EMAIL_HOS1	r')		
		e forms.py	м	154	EMAIL P	ORT = confi	ig('EMAIL PORT	ſ', cast=in	t)··#·conver	ts to inte
		settings.py	M	155	EMAIL H	IOST USER =	config('EMAIL	HOST USER	· `	
	K	wiows py	м	156		IOST PASSINO	PD = config(')	MATI HOST		
		wsgi py						-MATE_11031_	FASSWORD)	
	±⇒	> dataentry		157	EMAIL_U	ISE_ILS = II	rue			
		✓ emails		158	DEFAULT	_FROM_EMAIL	_ = 'Automate	with Djang	o <rnldevsol< td=""><td>utions@gma</td></rnldevsol<>	utions@gma
	63	> pycache		159	DEFAULT	_TO_EMAIL =	= 'rosy61625@g	gmail.com'		
		> migrations		160						
		ainitpy		161	# Crist	v · Form · COnt	Fiauration			
1		💩 admin.py		162	CRTSPV	TEMPLATE PA	ACK - 'hootstr	an5'		
	Д	💩 apps.py		162						
~		🅏 forms.py		101						
		🕏 models.py		164	#•CKEdı	tor Configu	uration block			
•		🍦 tasks.py		165	CKEDITC	R_CONFIGS =	= {			
		🍨 tests.py		166	· · · · ' de	fault': {				
		💩 urls.py		167		'toolbar'	·'full'.			
		💩 views.py		168		'height'	300			
		> env		160		nergite .	500,			
		> media		103	• {					
		> static		170	3					
		✓ templates		171						

Reload the page and you can see the complete tools with a height. Take note that we can resize the window using the bottom right corner.

C O http://127.0.0.1:8000/emails/send-email/

	Compose a Bulk Email	
Email list*		
		~
Subject*		
3ody*		
Source		
BIUS	$\mathbf{x}_{a} \mathbf{x}^{a} \mathbf{v}^{c} \mathbf{I}_{\mathbf{x}}$	
	[E 99 図 臣 宝 글 ☰ >¶ ¶< 話- ∞ ◎ ◎ ■	
		4
Attachment		\mathbf{t}
Choose File	No file chosen	

11. Showing a complete toolbar would be too much, so we simplify it by using the default and with reduced height.

Logged in as: c	commontask_admin Logout		IONT	autocom	montasks_main > 🔹 settings.py >		
		G → autocommonta.			# Email configura	ition	
					EMAIL_HOST = cont	-ig('EMAIL_HOSI')	
		💩 settinas.ov	м		EMAIL_PORT = cont	'ig('EMAIL_PORT', cas	st=int) ··#
Compose a Bulk Email		🏠 🔮 urls.py			EMAIL_HOST_USER =	<pre>config('EMAIL_HOST_</pre>	USER')
·		views.py			EMAIL_HOST_PASSWC	DRD = contig('EMAIL_F	HOST_PASSWO
Email list*		dataentry			EMAIL_USE_TLS = 1	rue	
	~				DEFAULT_FROM_EMAI	<pre>IL = 'Automate with [</pre>)jango <rn]< td=""></rn]<>
		> _pycache_			DEFAULT_TO_EMAIL	= 'rosy61625@gmail.c	com'
Subject*		> migrations					
		Leo ofinitpy					
Padul		Д e apps.py			CRISPY_TEMPLATE_F	PACK = 'bootstrap5'	
		forms.py					
Styles - Format - B I U S ← → ∞ ∞ ₱ □	<u>A</u> - <u>A</u> -	👉 🔮 models.py		164			
Ω Source Source		tasks.py			CKEDITOR_CONFIGS	= {	
		A tests.py			'default': {		
		views.py		167	'height':	200,	
					}		
		Resources		176			
		✓ static					
		> dataentry					
	A						
Attachmont		send-email.ht					
Attachment		o alerts.ntml	м				
Choose File No file chosen		home.html					
		login.html					
_		 register.html 					
Send		> uploads					
		env					

12. However, when we send the emails, we will be receiving it with HTML tags.

http://127.0.0.1:8000/emails/send-email/ Automate The Common Bo	oring Stutts with Django	Logged in as: commontask
	Compose a Bulk Email	
	Email list*	
	Developers	·
	Subject*	
	Test Today: 8/20	
	Body*	
	Styles $\cdot \text{Normal} \cdot \mathbf{B} \mathbf{I} \mathbf{U} \cdot \mathbf{S} \cdot \mathbf{A} \neq \mathbf{ee} = \mathbf{P} \mathbf{E} = \mathbf{A} \cdot \mathbf{D} \cdot \mathbf{O} \cdot \mathbf{O} \mathbf{O} \text{ Source}$	
	Again, testing here w <u>ith CKEditor</u>	
	9	6
	body p strong span	4
	Attachment	
	Choose File ai-generated-8628376_640.png	
	Send	

Checking our email:



13.Go to your SEND_EMAIL function in EMAILS\VIEWS.PY and press CTRL + click the link on the SEND_EMAIL_TASK to bring you to the function.

∢						$\leftarrow \rightarrow$		P Autom	atingCommonTasks	
	EXPLORER		Iogin.html	🔹 views.py	U 🗙 🔮 tasks.py U	🗢 settings.py M	🕏 utils.py M	🍨 models.py U	base.html M	send-email.
	∽ аџтом Ё‡ ひ ё		emails > 🗇 v	iews.py > 😚 send_	_email					
Ŀ	✓ autocommonta		12 d	ef send_em	<pre>mail(request):</pre>		_			
	🔹 forms.py		30							
	🅏 settings.py	м	31 ·							
20	💩 urls.py		32		subscribers	= Subscriber.	obiects.fil	ter(email li	st=email list	
	🔹 views.py				- # · GOOD · OPTTOI		email.			
	🗢 wsgi.py									
	> dataentry		25							
₿	> pycache		22							
	> migrations									
Ē	_initpy									
	🔹 admin.py		38 -		•#•OPTIMIZED•(OPTION: adds (
	🕏 apps.py				<pre>to_email_add</pre>	resses = [ema:	il.email_ad	dress for em	ail in subscr	'ibers]
	🔹 forms.py									
-	models.py		41 ·							
	tasks.py		42		if email_form	m.attachment:				
\mathbb{A}	🔮 urls pv		43		attachme	nt = email fo	rm.attachme	nt.path		
	🔹 views.py	U	44		else:					
	> env				attachme	nt - None				
					accachilici	ne = none				
	> static				-# Hanaover 1		aıı-senaing			
	✓ templates		48		send_email_ta	ask.delay(mai	I_subject,	message_body		
	> dataentry		49	· · · · · · · · [·		••••••••••to_•	email_addre	sses, attach	ment)	
	 send-email.ht. 									
	 alerts.html 									
	base.html									
	home.html									
	🔷 login.html		54							
	register.html				messages.suc	cess(request.	'Email sen	t successful	1v.')	
	> uploads				return redire	ect('send email	i1')			
	aitianore		57	not						
	Signightered Grading db.sqlite3		57 .	ret						
	manage.py		58 .	eise:						
	-			ema	111_torm = Ema:	ilform()				

In EMAILS\TASKS.PY, press CTROL + LEFT CLICK on our SEND_EMAIL_NOTIFICATION function to bring us to another function:

∢				$\leftarrow \rightarrow$			mmonTasks				
≡	EXPLORER			🕏 views.py U	🔹 tasks.py U 🗙	🍨 settings.py M	🕏 utils.py M	🍨 models.py U	🗘 base.html M	send-email.	
()))	 AUTOMATINGCOMM autocommonta celery.py forms.py settings.py urls.py 	M M M M	<pre>emails > ◆ tasks.py > ② send_email_task</pre>								
	 views.py wsgi.py dataentry emails pycache migrations initpy admin.py 		5 6 @aj 7 de 8 5 16	pp.task f send_email_ send_email_ return 'Ema	_task(mail_ _notificati ail sending	subject, mess on(mail_subje to_email_a task execute	sage_body, ect, messag addresses, ed successf	to_email_add e_body, attachment) ully.'	resses, atta	chment):	
	 apps.py forms.py models.py tasks.py tests.py urls.py 	U U U U U	11								

In DATAENTRY\UTILS.PY, we update our function to show that the email body is sent as HTML without the HTML tags.

	EXPLORER			🔮 views.py U	🔹 tasks.py U	🍨 settings.py M	🔹 utils.py M 🗙	🕏 models.py U	base.html M	send-email.html U			
an l		ONT	dataentry > 💠 ι	ıtils.py > 😚 send_ema	il_notification								
L.	✓ autocommonta		30 de	<pre>f check_csv_</pre>	error(file_	path, model_	name):						
	 celery.py forms py 	м	55	cs	v_neader =	reader.tieid	names						
	 settings.py 	м	56								age		
<u>90</u>	urls.py			if	<pre>csv_header</pre>	··!=·model_fi	elds:						
(Ke)	🔹 views.py				raise Dat	aError(
	🔹 wsgi.py				f'CS\	/ file does n	ot match wit	h the {mode	l_name} table	e fields')			
	\checkmark dataentry		60	except Exception as e:									
			61 ····raise.e										
L[]	> management			# if there									
	> migrations			- noturn ton	got model								
	_initpy			return tar	get_model								
	apps.pv												
	models.py												
<u></u>	tasks.py												
	🔹 tests.py												
	🔹 urls.py												
	🔹 utils.py		69 def send email notification(mail subject, message body, to email addresses, attachment=Non								one):		
	views.py 70 ····trv:												
	vernalis 71 + calls												
migrations 72 from email - cottinge DEE						ings DEEAULT							
	 init .pv 				EmoilMooor	angs.DLIAULI		hadu					
	🔹 apps.py					from_emai	1, το=το_ema	11_addresse	s)				
	🔮 forms.py												
	🔹 models.py		76	if att	achment is	not None:							
	🔮 tasks.py			ma	il.attach_f	ile(attachme	nt)						
	🔹 tests.py												
	 uns.py views.pv 												
	> env		80 记	mail.c	ontent subt	vpe = "html"							
			81										
			82	mails	end()··#-se								
	> static		02		ontion and								
v templates													

14. We have to reload our CELERY bash terminal code since we have made some changes in our Celery function. Press CTRL + C to stop it from running:



We encountered an error: CKEditor MODULE NOT FOUND Error, so we installed it as well:

\$ pip install django-ckeditor

🔷 utils.py	м						
🗢 views.py							
✓ emails							
> _pycache		PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS AZURE	+ ~ … ^ ×				
> migration							
🧶initpy		rile C: USERS KOSIIIeVAppuata(LOCalVPrOgrams VyChron VyChrons9/LID/ImportID/_Initpy , line 127, in import_module return bootstran.grd import(name[leve]]. natkage.leve]	🕞 redis Mic 🛆				
💩 admin.py		File " <frozen 1030,="" _gcd="" import<="" importlibbootstrapy",="" in="" line="" th=""><th>🗵 celery Mi 🛆</th></frozen>	🗵 celery Mi 🛆				
💩 apps.py		File " <frozen importlibbootstrap="">", line 1007, in _find_and_load</frozen>	🗉 ⊾ bash				
🔷 forms.py		ModuleNotSciunfError: No module named 'ckeditor'					
🔹 models.py		(env)					
👳 tasks.py		Rosilie@DELL MINGW64 C:/Users/Rosil e/AppData/Local/Programs/Microsoft VS Code (main)					
🗢 tests.py		\$ pip install django-ckeditor	• •				
🗢 urls.py		Using cached diamo ckeditor Using cached diamo ckeditor-6.7.1-pv3-none-anv.whl.metadata (32 kB)					
🕏 views.py		Requirement already satisfied: Django-3.2 in c:\users\rosilie\appdata\local\programs\python\python39\lib\site-packages (from django-ckeditor) (4.2.14)	•				
> env		Collecting django-js-asset>=2.0 (from django-ckeditor)	1				

15. Sending our email again,

① http://127.0.0.1:8000/emails/send-email/		
Automate The Common B	oring Stuffs with Django	Logged in as: commont
	Compose a Bulk Email	
	Email list*	
	Developers	•
	Subject*	
	Test: 8/20 # 2	
	Body*	
	Styles - Normal - B $I \ \underline{U}$ 5 $\bigstar \Rightarrow$ $\textcircled{ee} = \square$ \blacksquare \blacksquare $\underline{\blacksquare} =$ $\underline{A} \cdot \square$ - \bigcirc Ω \textcircled{o} Source	
	Hi There! Thanks to <u>CKEDITOR</u>	D
	body p	
	Attachment	
	Choose File No file chosen	
	Send	

In our email:



Copyright © Personal Digital Notebooks | By Rosilie | Date Printed: July 4, 2025, 8:17 a.m.