

BannerFlow Manager - Complete Documentation

Все HTML файлы Doxygen объединены в один документ

Generated: \$(date)



Файл: 0001__initial_8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
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[Classes](#) | [Namespaces](#)
0001__initial.py File Reference
[Go to the source code of this file.](#)

Classes

class [bannerflow_app.migrations.0001__initial.Migration](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.migrations](#)

namespace [bannerflow_app.migrations.0001__initial](#)

- [bannerflow_app](#)
- [migrations](#)
- [0001__initial.py](#)



Django-based advertising banner management system

Searching...

0001 initial.py

1# Generated by Django 5.2.8 on 2025-11-30 18:36

```
3import django.db.models.deletion
```

```
5from django.db import migrations, models
```

7

9

11

```
13 migrations.swappable dependency(settings.AUTH_USER_MODEL),
```

15

```
17 migrations.CreateModel(
```

19 fields=[

```
21 ('name', models.CharField(max length=255)),
```

```
23 ('status', models.CharField(choices=[('draft', 'Черновик'), ('active',
```

```
24 ('created at', models.DateTimeField(auto now add=True)),
```

```
models.ForeignKey(on_delete=django.db.models.deletion.CASCADE,
to=settings.AUTH_USER_MODEL)),
```

27),

```
29 name='Banner',
```

```
30 fields=[
31 ('id', models.BigAutoField(auto_created=True, primary_key=True,
serialize=False, verbose_name='ID')),
32 ('title', models.CharField(max_length=255)),
33 ('image_url', models.URLField()),
34 ('is_active', models.BooleanField(default=True)),
35 ('created_at', models.DateTimeField(auto_now_add=True)),
36 ('campaign',
models.ForeignKey(on_delete=django.db.models.deletion.CASCADE,
to='bannerflow_app.campaign')),
37 ],
38 ),
39 ]
```

[bannerflow_app.migrations.0001_initial.Migration](#)

Definition [0001_initial.py:8](#)

- [bannerflow_app](#)
- [migrations](#)
- [0001_initial.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

0002_campaign_start_date_8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
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No Matches

[Classes](#) | [Namespaces](#)

0002_campaign_start_date.py File Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.migrations.0002_campaign_start_date.Migration](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.migrations](#)

namespace [bannerflow_app.migrations.0002_campaign_start_date](#)

- [bannerflow_app](#)
- [migrations](#)
- [0002_campaign_start_date.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

0002_campaign_start_date_8py_source.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

0002_campaign_start_date.py

[Go to the documentation of this file.](#)

[1](#) # Generated by Django 5.2.8 on 2025-11-30 18:40

[2](#)

[3](#) import django.utils.timezone

[4](#) from django.db import migrations, models

[5](#)

[6](#)

[7](#) class [Migration](#)(migrations.Migration):

[8](#)

[9](#) dependencies = [

[10](#) ('bannerflow_app', '0001_initial'),

[11](#)]

[12](#)

[13](#) operations = [

[14](#) migrations.AddField(

[15](#) model_name='campaign',

[16](#) name='start_date',

[17](#) field=models.DateTimeField(default=django.utils.timezone.now),

[18](#)),

[19](#)]

[bannerflow_app.migrations.0002_campaign_start_date.Migration](#)

Definition [0002_campaign_start_date.py:7](#)

- [bannerflow_app](#)
- [migrations](#)
- [0002_campaign_start_date.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

0003_campaign_end_date_campaign_target_gan

BannerFlow Manager API 1.0

Django-based advertising banner management system

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No Matches

[Classes](#) | [Namespaces](#)

0003_campaign_end_date_campaign_target_game_version_and_more.py

File Reference

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Classes

class [bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_v](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.migrations](#)

namespace [bannerflow_app.migrations.0003_campaign_end_date_campaign_target_g](#)

- [bannerflow_app](#)
- [migrations](#)

- [0003_campaign_end_date_campaign_target_game_version_and_more.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

0003_campaign_end_date_campaign_target_gan

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
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No Matches
0003_campaign_end_date_campaign_target_game_version_and_more.py
Go to the documentation of this file.
1# Generated by Django 5.2.8 on 2025-11-30 18:42
2
3import django.db.models.deletion
4import django.utils.timezone
5from django.conf import settings
6from django.db import migrations, models
7
8
9class Migration(migrations.Migration):
10
11    dependencies = [
12        ('bannerflow_app', '0002_campaign_start_date'),
13        migrations.swappable_dependency(settings.AUTH_USER_MODEL),
14    ]
15
16    operations = [
17        migrations.AddField(
18            model_name='campaign',
19            name='end_date',
20            field=models.DateTimeField(default=django.utils.timezone.now,
21            verbose_name='Дата окончания'),
22        ),
23        migrations.AddField(
24            model_name='campaign',
25            name='target_game_version',
26            field=models.CharField(blank=True, max_length=50,
27            verbose_name='Версия игры'),
28        ),
29        migrations.AddField(
30            model_name='campaign',
31            name='target_platform',
32            field=models.CharField(blank=True, max_length=50,
33            verbose_name='Платформа'),
34        ),
35    ]
```

```

30 field=models.CharField(choices=[('iOS', 'iOS'), ('Android', 'Android'),
('Both', 'iOS и Android')], default='Both', max_length=10,
verbose_name='Целевая платформа'),
31 ),
32 migrations.AlterField(
33 model_name='banner',
34 name='campaign',
35
field=models.ForeignKey(on_delete=django.db.models.deletion.CASCADE,
to='bannerflow_app.campaign', verbose_name='Кампания'),
36 ),
37 migrations.AlterField(
38 model_name='banner',
39 name='image_url',
40 field=models.URLField(verbose_name='URL изображения'),
41 ),
42 migrations.AlterField(
43 model_name='banner',
44 name='is_active',
45 field=models.BooleanField(default=True, verbose_name='Активен'),
46 ),
47 migrations.AlterField(
48 model_name='banner',
49 name='title',
50 field=models.CharField(max_length=255, verbose_name='Название
баннера'),
51 ),
52 migrations.AlterField(
53 model_name='campaign',
54 name='budget',
55 field=models.DecimalField(decimal_places=2, max_digits=10,
verbose_name='Бюджет'),
56 ),
57 migrations.AlterField(
58 model_name='campaign',
59 name='created_by',
60
field=models.ForeignKey(on_delete=django.db.models.deletion.CASCADE,
to=settings.AUTH_USER_MODEL, verbose_name='Создатель'),
61 ),
62 migrations.AlterField(
63 model_name='campaign',
64 name='name',
65 field=models.CharField(max_length=255, verbose_name='Название
кампании'),
66 ),
67 migrations.AlterField(
68 model_name='campaign',
69 name='start_date',
70 field=models.DateTimeField(default=django.utils.timezone.now,
verbose_name='Дата начала'),
71 ),

```

```
72 migrations.AlterField(
73 model_name='campaign',
74 name='status',
75 field=models.CharField(choices=[('draft', 'Черновик'), ('active',
'Активна'), ('paused', 'Приостановлена'), ('stopped', 'Остановлена')],
default='draft', max_length=20, verbose_name='Статус'),
76 ),
77 ]
```

[bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_version_and_more.py:9](#)

Definition

[0003_campaign_end_date_campaign_target_game_version_and_more.py:9](#)

- [bannerflow_app](#)
- [migrations](#)
- [0003_campaign_end_date_campaign_target_game_version_and_more.py](#)
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Файл:

0004_campaign_is_ab_test_abtest_campaignstatistics.py

BannerFlow Manager API 1.0

Django-based advertising banner management system

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[Classes](#) | [Namespaces](#)

0004_campaign_is_ab_test_abtest_campaignstatistics.py File Reference

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Classes

class [bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.py](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.migrations](#)

namespace [bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.py](#)

- [bannerflow_app](#)
- [migrations](#)
- [0004_campaign_is_ab_test_abtest_campaignstatistics.py](#)
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Файл:

0004_campaign_is_ab_test_abtest_campaignstatistics.py

BannerFlow Manager API 1.0

Django-based advertising banner management system

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No Matches

0004_campaign_is_ab_test_abtest_campaignstatistics.py

[Go to the documentation of this file.](#)

[1](#) # Generated by Django 5.2.8 on 2025-11-30 18:47

[2](#)

[3](#) import django.db.models.deletion

[4](#) import django.utils.timezone

[5](#) from django.db import migrations, models

[6](#)

[7](#)

[8](#) class [Migration](#)(migrations.Migration):

[9](#)

[10](#) dependencies = [

[11](#) ('bannerflow_app',

[12](#) '0003_campaign_end_date_campaign_target_game_version_and_more'),

[13](#)]

[14](#)

[15](#) operations = [

[16](#) migrations.AddField(

[17](#) model_name='campaign',

[18](#) name='is_ab_test',

[19](#) field=models.BooleanField(default=False, verbose_name='A/B тест'),

[20](#)),

[21](#) migrations.CreateModel(

[22](#) name='ABTest',

```

22 fields=[
23     ('id', models.BigAutoField(auto_created=True, primary_key=True,
24     serialize=False, verbose_name='ID')),
25     ('name', models.CharField(max_length=255,
26     verbose_name='Название теста')),
27     ('audience_segment', models.CharField(max_length=100,
28     verbose_name='Сегмент аудитории')),
29     ('start_date',
30     models.DateTimeField(default=django.utils.timezone.now,
31     verbose_name='Дата начала')),
32     ('end_date', models.DateTimeField(default=django.utils.timezone.now,
33     verbose_name='Дата окончания')),
34     ('is_active', models.BooleanField(default=True,
35     verbose_name='Активен')),
36     ('created_at', models.DateTimeField(auto_now_add=True)),
37     ('banners', models.ManyToManyField(to='bannerflow_app.banner',
38     verbose_name='Баннеры для теста')),
39     ('campaign',
40     models.ForeignKey(on_delete=django.db.models.deletion.CASCADE,
41     to='bannerflow_app.campaign', verbose_name='Кампания')),
42 ],
43 ),
44 migrations.CreateModel(
45     name='CampaignStatistics',
46     fields=[
47         ('id', models.BigAutoField(auto_created=True, primary_key=True,
48         serialize=False, verbose_name='ID')),
49         ('date', models.DateField(default=django.utils.timezone.now,
50         verbose_name='Дата')),
51         ('impressions', models.IntegerField(default=0,
52         verbose_name='Показы')),
53         ('clicks', models.IntegerField(default=0, verbose_name='Клики')),
54         ('conversions', models.IntegerField(default=0,
55         verbose_name='Конверсии')),
56         ('campaign',
57         models.ForeignKey(on_delete=django.db.models.deletion.CASCADE,
58         to='bannerflow_app.campaign', verbose_name='Кампания')),
59     ],
60     options={
61         'verbose_name': 'Статистика кампании',
62         'verbose_name_plural': 'Статистика кампаний',
63     },
64 ),
65 ]

```

[bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.Mig](#)

Definition [0004_campaign_is_ab_test_abtest_campaignstatistics.py:8](#)

- [bannerflow_app](#)
- [migrations](#)
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Файл:

0005_remove_banner_image_url_banner_media_

BannerFlow Manager API 1.0

Django-based advertising banner management system

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[Classes](#) | [Namespaces](#)

0005_remove_banner_image_url_banner_media_file_and_more.py File
Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_more.py](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.migrations](#)

namespace [bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_more.py](#)

- [bannerflow_app](#)
- [migrations](#)
- [0005_remove_banner_image_url_banner_media_file_and_more.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

0005_remove_banner_image_url_banner_media

```
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Django-based advertising banner management system
Loading...
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No Matches
0005_remove_banner_image_url_banner_media_file_and_more.py
Go to the documentation of this file.
1# Generated by Django 5.2.8 on 2025-11-30 20:21
2
3import django.core.validators
4import django.db.models.deletion
5from django.conf import settings
6from django.db import migrations, models
7
8
9class Migration(migrations.Migration):
10
11     dependencies = [
12         ('bannerflow_app',
13         '0004_campaign_is_ab_test_abtest_campaignstatistics'),
14         migrations.swappable_dependency(settings.AUTH_USER_MODEL),
15     ]
16
17     operations = [
18         migrations.RemoveField(
19             model_name='banner',
20             name='image_url',
21         ),
22         migrations.AddField(
23             model_name='banner',
24             name='media_file',
25             field=models.FileField(default='banners/default_banner.png',
26             help_text='Поддерживаемые форматы: PNG, JPG, MP4',
27             upload_to='banners/%Y/%m/%d/', verbose_name='Медиафайл'),
28             preserve_default=False,
29         ),
30         migrations.AddField(
31             model_name='banner',
32             name='media_type',
33             field=models.CharField(choices=[('image', 'Изображение'), ('video', 'Видео')], default='image', max_length=10, verbose_name='Тип медиа'),
34             preserve_default=False,
35         ),
36         migrations.AddField(
37             model_name='campaign',
38             name='target_geolocation',
```

```

36 field=models.JSONField(default=list, help_text='Список стран/
регионов для таргетинга', verbose_name='Геолокация'),
37 ),
38 migrations.AlterField(
39 model_name='campaign',
40 name='budget',
41 field=models.DecimalField(decimal_places=2, max_digits=10,
validators=[django.core.validators.MinValueValidator(0)],
verbose_name='Бюджет'),
42 ),
43 migrations.CreateModel(
44 name='UserProfile',
45 fields=[
46 ('id', models.BigAutoField(auto_created=True, primary_key=True,
serialize=False, verbose_name='ID')),
47 ('role', models.CharField(choices=[('marketer', 'Маркетолог'),
('analyst', 'Аналитик'), ('admin', 'Администратор')], default='marketer',
max_length=20)),
48 ('phone', models.CharField(blank=True, max_length=20)),
49 ('created_at', models.DateTimeField(auto_now_add=True)),
50 ('user',
models.OneToOneField(on_delete=django.db.models.deletion.CASCADE,
to=settings.AUTH_USER_MODEL)),
51 ],
52 ),
53 ]

```

[bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_more.py](#)

Definition

[0005_remove_banner_image_url_banner_media_file_and_more.py](#):9

- [bannerflow_app](#)
- [migrations](#)
- [0005_remove_banner_image_url_banner_media_file_and_more.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

0006__alter__banner__media__file__8py.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

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No Matches

[Classes](#) | [Namespaces](#)

0006__alter__banner__media__file__8py File Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.migrations.0006_alter_banner_media_file.Migration](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.migrations](#)

namespace [bannerflow_app.migrations.0006_alter_banner_media_file](#)

- [bannerflow_app](#)
- [migrations](#)
- [0006_alter_banner_media_file.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[0006__alter__banner__media__file__8py_source.html](#)

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
0006_alter_banner_media_file.py
Go to the documentation of this file.
1# Generated by Django 5.2.8 on 2025-12-01 20:48
2
3import bannerflow\_app.models
4from django.db import migrations, models
5
6
7class Migration(migrations.Migration):
8
```

```
9 dependencies = [  
10 ('bannerflow_app',  
'0005_remove_banner_image_url_banner_media_file_and_more'),  
11 ]  
12  
13 operations = [  
14 migrations.AlterField(  
15 model_name='banner',  
16 name='media_file',  
17 field=models.FileField(help_text='Поддерживаемые форматы: PNG,  
JPG, GIF, MP4, AVI, MOV', upload_to='banners/%Y/%m/%d/',  
validators=[bannerflow_app.models.validate_media_file],  
verbose_name='Медиафайл'),  
18 ),  
19 ]
```

[bannerflow_app.migrations.0006_alter_banner_media_file.Migration](#)

Definition [0006_alter_banner_media_file.py:7](#)

[bannerflow_app.models](#)

Definition [models.py:1](#)

- [bannerflow_app](#)
- [migrations](#)
- [0006_alter_banner_media_file.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

0007__alter__banner__media__file__8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system

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[Classes](#) | [Namespaces](#)

0007__alter__banner__media__file.py File Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.migrations.0007_alter_banner_media_file.Migration](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.migrations](#)

namespace [bannerflow_app.migrations.0007_alter_banner_media_file](#)

- [bannerflow_app](#)
- [migrations](#)
- [0007_alter_banner_media_file.py](#)
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Файл:

[0007__alter_banner_media_file_8py_source.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

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0007_alter_banner_media_file.py

[Go to the documentation of this file.](#)

[1](#) # Generated by Django 5.2.8 on 2025-12-01 20:54

[2](#)

[3](#) import [bannerflow_app.models](#)

[4](#) from django.db import migrations, models

[5](#)

[6](#)

[7](#) class [Migration](#)(migrations.Migration):

[8](#)

[9](#) dependencies = [

[10](#) ('bannerflow_app', '0006_alter_banner_media_file'),

[11](#)]

[12](#)

[13](#) operations = [

[14](#) migrations.AlterField(

[15](#) model_name='banner',

[16](#) name='media_file',

[17](#) field=models.FileField(help_text='Поддерживаемые форматы: PNG, JPG, MP4', upload_to='banners/%Y/%m/%d/'),


```
validators=[bannerflow_app.models.validate_media_file],
verbose_name='Медиафайл'),
18 ),
19 ]
bannerflow\_app.migrations.0007\_alter\_banner\_media\_file.Migration
Definition 0007\_alter\_banner\_media\_file.py:7
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Definition models.py:1
```

- [bannerflow_app](#)
- [migrations](#)
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Файл:

0008__bannertemplate__gamedata__generatedbanner

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[Classes](#) | [Namespaces](#)
0008__bannertemplate__gamedata__generatedbanner.py File Reference
[Go to the source code of this file.](#)

Classes

class [bannerflow_app.migrations.0008__bannertemplate__gamedata__generatedbanner.M](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.migrations](#)

namespace [bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedba](#)

- [bannerflow_app](#)
- [migrations](#)
- [0008_bannertemplate_gamedata_generatedbanner.py](#)
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Файл:

0008_bannertemplate_gamedata_generatedbanner

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0008_bannertemplate_gamedata_generatedbanner.py

[Go to the documentation of this file.](#)

[1](#) # Generated by Django 5.2.8 on 2025-12-02 18:24

[2](#)

[3](#) import django.db.models.deletion

[4](#) from django.db import migrations, models

[5](#)

[6](#)

[7](#) class [Migration](#)(migrations.Migration):

[8](#)

[9](#) dependencies = [

[10](#) ('bannerflow_app', '0007_alter_banner_media_file'),

[11](#)]

[12](#)

[13](#) operations = [

[14](#) migrations.CreateModel(

[15](#) name='BannerTemplate',

[16](#) fields=[

[17](#) ('id', models.BigAutoField(auto_created=True, primary_key=True, serialize=False, verbose_name='ID')),

[18](#) ('name', models.CharField(max_length=100,

verbose_name='Название шаблона')),

[19](#) ('template_type', models.CharField(choices=[('score', 'Баннер со счетом'), ('achievement', 'Баннер с достижением'), ('level', 'Баннер с уровнем'), ('custom', 'Пользовательский шаблон')], default='custom', max_length=20, verbose_name='Тип шаблона')),

```
20 ('html_template', models.TextField(help_text='Используйте {{
переменные }} для подстановки', verbose_name='HTML шаблон')),
21 ('css_styles', models.TextField(verbose_name='CSS стили')),
22 ('javascript', models.TextField(blank=True, help_text='Для
интерактивности', verbose_name='JavaScript код')),
23 ('width', models.IntegerField(default=300, verbose_name='Ширина
(px)')),
24 ('height', models.IntegerField(default=250, verbose_name='Высота
(px)')),
25 ('preview_image', models.ImageField(blank=True,
upload_to='templates/previews/', verbose_name='Превью')),
26 ('created_at', models.DateTimeField(auto_now_add=True)),
27 ],
28 options={
29 'verbose_name': 'Шаблон баннера',
30 'verbose_name_plural': 'Шаблоны баннеров',
31 },
32 ),
33 migrations.CreateModel(
34 name='GameData',
35 fields=[
36 ('id', models.BigAutoField(auto_created=True, primary_key=True,
serialize=False, verbose_name='ID')),
37 ('game_name', models.CharField(max_length=100,
verbose_name='Название игры')),
38 ('game_type', models.CharField(choices=[('platformer',
'Платформер'), ('rpg', 'RPG'), ('shooter', 'Шутер'), ('strategy',
'Стратегия'), ('custom', 'Другая')], default='custom', max_length=20,
verbose_name='Тип игры')),
39 ('player_name', models.CharField(max_length=100,
verbose_name='Имя игрока')),
40 ('score', models.IntegerField(default=0, verbose_name='Счет')),
41 ('level', models.IntegerField(default=1, verbose_name='Уровень')),
42 ('play_time', models.IntegerField(default=0, verbose_name='Время
игры (минуты)')),
43 ('achievements', models.JSONField(default=list,
verbose_name='Достижения')),
44 ('data_file', models.FileField(help_text='JSON или CSV файл',
upload_to='game_data/', verbose_name='Файл данных игры')),
45 ('imported_at', models.DateTimeField(auto_now_add=True)),
46 ],
47 options={
48 'verbose_name': 'Данные игры',
49 'verbose_name_plural': 'Данные игр',
50 },
51 ),
52 migrations.CreateModel(
53 name='GeneratedBanner',
54 fields=[
55 ('id', models.BigAutoField(auto_created=True, primary_key=True,
serialize=False, verbose_name='ID')),
```

```

56 ('name', models.CharField(max_length=100,
verbose_name='Название баннера')),
57 ('html_content', models.TextField(verbose_name='HTML
содержимое')),
58 ('godot_export', models.FileField(blank=True, upload_to='exports/
godot/', verbose_name='Экспорт для Godot')),
59 ('preview_url', models.URLField(blank=True, verbose_name='URL
предпросмотра')),
60 ('created_at', models.DateTimeField(auto_now_add=True)),
61 ('game_data',
models.ForeignKey(on_delete=django.db.models.deletion.CASCADE,
to='bannerflow_app.gamedata', verbose_name='Данные игры')),
62 ('template',
models.ForeignKey(on_delete=django.db.models.deletion.CASCADE,
to='bannerflow_app.bannertemplate', verbose_name='Шаблон')),
63 ],
64 options={
65 'verbose_name': 'Сгенерированный баннер',
66 'verbose_name_plural': 'Сгенерированные баннеры',
67 },
68 ),
69 ]

```

[bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.Migrat](#)

Definition [0008_bannertemplate_gamedata_generatedbanner.py:7](#)

- [bannerflow_app](#)
- [migrations](#)
- [0008_bannertemplate_gamedata_generatedbanner.py](#)
- Generated by [doxygen](#) 1.9.8

Файл: admin_8py.html

BannerFlow Manager API 1.0
 Django-based advertising banner management system
 Loading...
 Searching...
 No Matches
[Classes](#) | [Namespaces](#)
 admin.py File Reference

[Go to the source code of this file.](#)

Classes

```
class bannerflow\_app.admin.UserProfileInline

class bannerflow\_app.admin.CustomUserAdmin

class bannerflow\_app.admin.UserProfileAdmin

class bannerflow\_app.admin.CampaignAdmin

class bannerflow\_app.admin.BannerAdmin

class bannerflow\_app.admin.ABTestAdmin

class bannerflow\_app.admin.CampaignStatisticsAdmin

class bannerflow\_app.admin.BannerTemplateAdmin

class bannerflow\_app.admin.GameDataAdmin

class bannerflow\_app.admin.GeneratedBannerAdmin
```

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.admin](#)

- [bannerflow_app](#)
- [admin.py](#)
- Generated by [doxygen](#) 1.9.8



Файл: [admin_8py_source.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches

```

admin.py
Go to the documentation of this file.
1 from django.contrib import admin
2 from django.contrib.auth.admin import UserAdmin
3 from django.contrib.auth.models import User
4 from .models import Campaign, Banner, UserProfile, ABTest,
CampaignStatistics
5 from .models import BannerTemplate, GameData, GeneratedBanner
6
7 # Расширение пользователя
8 class UserProfileInline(admin.StackedInline):
9     model = UserProfile
10    can_delete = False
11
12 class CustomUserAdmin(UserAdmin):
13     inlines = [UserProfileInline]
14
15 admin.site.unregister(User)
16 admin.site.register(User, CustomUserAdmin)
17
18 @admin.register(UserProfile)
19 class UserProfileAdmin(admin.ModelAdmin):
20     list_display = ('user', 'role', 'phone', 'created_at')
21     list_filter = ('role', 'created_at')
22     search_fields = ('user__username', 'user__email', 'phone')
23
24 @admin.register(Campaign)
25 class CampaignAdmin(admin.ModelAdmin):
26     list_display = ('name', 'budget', 'start_date', 'end_date', 'status',
'target_platform', 'created_by', 'created_at')
27     list_filter = ('status', 'target_platform', 'is_ab_test', 'created_at')
28     search_fields = ('name', 'target_game_version')
29     readonly_fields = ('created_at',)
30     actions = ['activate_campaigns', 'pause_campaigns', 'stop_campaigns']
31
32     fieldsets = (
33         ('Основная информация', {
34             'fields': ('name', 'budget', 'created_by')
35         }),
36         ('Временные рамки', {
37             'fields': ('start_date', 'end_date')
38         }),
39         ('Таргетинг', {
40             'fields': ('target_platform', 'target_geolocation', 'target_game_version')
41         }),
42         ('Статус', {
43             'fields': ('status', 'is_ab_test')
44         }),
45     )
46
47     def activate\_campaigns(self, request, queryset):
48     for campaign in queryset:

```

```
49 campaign.activate()
50 self.message_user(request, f"{queryset.count()} кампаний
активировано")
51 activate_campaigns.short_description = "Активировать выбранные
кампании"
52
53 def pause_campaigns(self, request, queryset):
54 for campaign in queryset:
55 campaign.pause()
56 self.message_user(request, f"{queryset.count()} кампаний
приостановлено")
57 pause_campaigns.short_description = "Приостановить выбранные
кампании"
58
59 def stop_campaigns(self, request, queryset):
60 for campaign in queryset:
61 campaign.stop()
62 self.message_user(request, f"{queryset.count()} кампаний
остановлено")
63 stop_campaigns.short_description = "Остановить выбранные
кампании"
64
65@admin.register(Banner)
66class BannerAdmin(admin.ModelAdmin):
67 list_display = ('title', 'campaign', 'media_type', 'is_active', 'created_at')
68 list_filter = ('media_type', 'is_active', 'created_at')
69 search_fields = ('title', 'campaign_name')
70 readonly_fields = ('created_at', 'media_type')
71
72@admin.register(ABTest)
73class ABTestAdmin(admin.ModelAdmin):
74 list_display = ('name', 'campaign', 'audience_segment', 'is_active',
'start_date', 'end_date')
75 list_filter = ('is_active', 'start_date')
76 search_fields = ('name', 'campaign_name', 'audience_segment')
77 filter_horizontal = ('banners',)
78
79@admin.register(CampaignStatistics)
80class CampaignStatisticsAdmin(admin.ModelAdmin):
81 list_display = ('campaign', 'date', 'impressions', 'clicks', 'conversions',
'ctr')
82 list_filter = ('date', 'campaign')
83 readonly_fields = ('ctr',)
84 search_fields = ('campaign_name',)
85
86
87@admin.register(BannerTemplate)
88class BannerTemplateAdmin(admin.ModelAdmin):
89 list_display = ('name', 'template_type', 'width', 'height', 'created_at')
90 list_filter = ('template_type', 'created_at')
91 search_fields = ('name', 'html_template')
92
```

```
93@admin.register(GameData)
94class GameDataAdmin(admin.ModelAdmin):
95    list_display = ('game_name', 'player_name', 'score', 'level',
'game_type', 'imported_at')
96    list_filter = ('game_type', 'imported_at')
97    search_fields = ('game_name', 'player_name')
98
99@admin.register(GeneratedBanner)
100class GeneratedBannerAdmin(admin.ModelAdmin):
101    list_display = ('name', 'template', 'game_data', 'created_at')
102    list_filter = ('created_at', 'template')
103    search_fields = ('name', 'html_content')
104    readonly_fields = ('created_at', 'preview_url')
bannerflow\_app.admin.ABTestAdmin
Definition admin.py:73
bannerflow\_app.admin.BannerAdmin
Definition admin.py:66
bannerflow\_app.admin.BannerTemplateAdmin
Definition admin.py:88
bannerflow\_app.admin.CampaignAdmin
Definition admin.py:25
bannerflow\_app.admin.CampaignAdmin.stop\_campaigns
stop_campaigns(self, request, queryset)
Definition admin.py:59
bannerflow\_app.admin.CampaignAdmin.pause\_campaigns
pause_campaigns(self, request, queryset)
Definition admin.py:53
bannerflow\_app.admin.CampaignAdmin.activate\_campaigns
activate_campaigns(self, request, queryset)
Definition admin.py:47
bannerflow\_app.admin.CampaignStatisticsAdmin
Definition admin.py:80
bannerflow\_app.admin.CustomUserAdmin
Definition admin.py:12
bannerflow\_app.admin.GameDataAdmin
Definition admin.py:94
bannerflow\_app.admin.GeneratedBannerAdmin
Definition admin.py:100
bannerflow\_app.admin.UserProfileAdmin
Definition admin.py:19
bannerflow\_app.admin.UserProfileInline
Definition admin.py:8
```

- [bannerflow_app](#)
- [admin.py](#)
- Generated by [doxygen](#) 1.9.8

Файл: annotated.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

[detail level 1234]

▼N[bannerflow_app](#)

▼N[admin](#)

 C[ABTestAdmin](#)

 C[BannerAdmin](#)

 C[BannerTemplateAdmin](#)

 C[CampaignAdmin](#)

 C[CampaignStatisticsAdmin](#)

 C[CustomUserAdmin](#)

 C[GameDataAdmin](#)

 C[GeneratedBannerAdmin](#)

 C[UserProfileAdmin](#)

 C[UserProfileInline](#)

▼N[banner_generator](#)

 C[BannerGenerator](#)

▼N[migrations](#)

 ▼N0001_initial

 C[Migration](#)

 ▼N0002_campaign_start_date

 C[Migration](#)

▼N0003_campaign_end_date_campaign_target_game_version_and_more

 C[Migration](#)

 ▼N0004_campaign_is_ab_test_abtest_campaignstatistics

 C[Migration](#)

 ▼N0005_remove_banner_image_url_banner_media_file_and_more

 C[Migration](#)

 ▼N0006_alter_banner_media_file

 C[Migration](#)

 ▼N0007_alter_banner_media_file

 C[Migration](#)

 ▼N0008_bannertemplate_gamedata_generatedbanner

 C[Migration](#)

▼N[models](#)

[CABTest](#)

[CBanner](#)

▼C[BannerTemplate](#)

[CMeta](#)

[CCampaign](#)

▼C[CampaignStatistics](#)

[CMeta](#)

▼C[GameData](#)

[CMeta](#)

▼C[GeneratedBanner](#)

[CMeta](#)

[CUserProfile](#)

- Generated by [doxygen](#) 1.9.8



Файл:

[bannerflow__app_2___init___8py.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

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No Matches

[Namespaces](#)

[__init__.py](#) File Reference

[Go to the source code of this file.](#)

Namespaces

namespace [bannerflow_app](#)

- [bannerflow_app](#)
- [__init__.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

bannerflow_app_2__init__.py_source.html

BannerFlow Manager API 1.0
Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow_app/__init__.py

[Go to the documentation of this file.](#)

1'''

2Created on 9 нояб. 2025 г.

3

4@author: dorokhova

5'''

- [bannerflow_app](#)
- [__init__.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

bannerflow_app_2migrations_2__init__.py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system

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No Matches

__init__.py File Reference

[Go to the source code of this file.](#)

- [bannerflow_app](#)
 - [migrations](#)
 - [__init__.py](#)
 - Generated by [doxygen](#) 1.9.8
-



Файл:

bannerflow_app_migrations_2__init__.py_source

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
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No Matches
bannerflow_app/migrations/_init_.py
[Go to the documentation of this file.](#)

- [bannerflow_app](#)
- [migrations](#)
- [__init__.py](#)
- Generated by [doxygen](#) 1.9.8



Файл: bannerflow_app_urls.py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Namespaces](#) | [Variables](#)
urls.py File Reference
[Go to the source code of this file.](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.urls](#)

Variables

list [bannerflow_app.urls.urlpatterns](#)

- [bannerflow_app](#)
- [urls.py](#)
- Generated by [doxygen](#) 1.9.8





Файл:

bannerflow__app_2urls_8py_source.html

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app/urls.py
Go to the documentation of this file.
1 from django.urls import path
2 from . import views
3
4 urlpatterns = [
5     # Основные страницы
6     path('', views.home, name='home'),
7     path('dashboard/', views.dashboard, name='dashboard'),
8
9     # Генератор баннеров (основная функциональность проекта)
10    path('generator/', views.banner_generator,
name='banner_generator'),
11    path('generate/', views.generate_banner, name='generate_banner'),
12    path('banner/preview/<int:banner_id>/', views.banner_preview,
name='banner_preview'),
13    path('banner/export/<int:banner_id>/', views.export_banner,
name='export_banner'),
14    path('banner/list/', views.banner_list, name='banner_list'),
15
16    # API
17    path('api/public/banners/', views.api_banners,
name='public_banners'),
18
19    path('upload-data/', views.upload_game_data,
name='upload_game_data'),
20]
```

- [bannerflow_app](#)
- [urls.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

bannerflow_project_2___init___8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Namespaces](#)
[__init__.py](#) File Reference

[Go to the source code of this file.](#)

Namespaces

namespace [bannerflow_project](#)

- [bannerflow_project](#)
- [__init__.py](#)
- Generated by [doxygen](#) 1.9.8





Файл:

bannerflow_project_2__init____8py_source.html

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_project/_init_.py
Go to the documentation of this file.
1'''
2Created on 9 нояб. 2025 г.
3
4@author: dorokhova
5'''

• bannerflow\_project
• \_\_init\_\_.py
• Generated by doxygen 1.9.8
```



Файл: bannerflow_project_2urls_8py.html

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
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No Matches
Namespaces | Variables
urls.py File Reference

Go to the source code of this file.
```

Namespaces

namespace [bannerflow_project](#)

namespace [bannerflow_project.urls](#)

Variables

list [bannerflow_project.urls.urlpatterns](#)

[bannerflow_project.urls.MEDIA_URL](#)

[bannerflow_project.urls.document_root](#)

- [bannerflow_project](#)
- [urls.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[bannerflow__project_2urls_8py_source.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system

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No Matches

[bannerflow_project/urls.py](#)

[Go to the documentation of this file.](#)

```
1from django.contrib import admin
2from django.urls import path, include
3from django.conf import settings
4from django.conf.urls.static import static
```

```
5
```

```
6urlpatterns = [
7    path('admin/', admin.site.urls),
8    path('', include('bannerflow_app.urls')),
9]
```

```
10
```

```
11if settings.DEBUG:
```

```
12    urlpatterns += static(settings.MEDIA_URL,
    document_root=settings.MEDIA_ROOT)
```

- [bannerflow_project](#)
- [urls.py](#)
- Generated by [doxygen](#) 1.9.8



Файл: banner_generator_8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
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No Matches
[Classes](#) | [Namespaces](#)
banner_generator.py File Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.banner_generator.BannerGenerator](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.banner_generator](#)

- [bannerflow_app](#)
- [banner_generator.py](#)
- Generated by [doxygen](#) 1.9.8



Файл: banner_generator_8py_source.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
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No Matches
banner_generator.py
[Go to the documentation of this file.](#)

```

1import json
2from django.template import Template, Context
3
4class BannerGenerator:
5    """Генератор интерактивных HTML5 баннеров для игр"""
6
7    @staticmethod
8    def generate_html(template, game_data):
9        """Генерация HTML баннера из шаблона и данных игры"""
10        context = {
11            'player_name': game_data.player_name,
12            'game_name': game_data.game_name,
13            'score': game_data.score,
14            'level': game_data.level,
15            'play_time': game_data.play_time,
16            'achievements': game_data.achievements,
17            'width': template.width,
18            'height': template.height,
19            'template_name': template.name,
20        }
21
22        html_template = Template(template.html_template)
23        html_content = html_template.render(Context(context))
24
25        full_html = f"""<!DOCTYPE html>
26<html lang="ru">
27<head>
28  <meta charset="UTF-8">
29  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
30  <title>Баннер: {game_data.game_name}</title>
31  <style>
32    .game-banner {{
33      width: {template.width}px;
34      height: {template.height}px;
35      position: relative;
36      overflow: hidden;
37      font-family: Arial, sans-serif;
38    }}
39    {template.css_styles}
40  </style>
41</head>
42<body>
43  <div class="game-banner">
44    {html_content}
45  </div>
46
47  <script>
48    const gameData = {{
49      player: "{game_data.player_name}",
50      score: {game_data.score},
51      level: {game_data.level},

```

```

52 achievements: {json.dumps(game_data.achievements,
ensure_ascii=False)}
53 }};
54
55 {template.javascript}
56
57 document.addEventListener('DOMContentLoaded', function() {{
58 document.querySelector('.game-banner').addEventListener('click',
function() {{
59 alert(` Игрок: ${{gameData.player}}\nСчет: ${{gameData.score}}
\nУровень: ${{gameData.level}}`);
60 }});
61 }});
62 </script>
63</body>
64</html>""""
65
66 return full_html
67
68 @staticmethod
69 def export\_for\_godot(html_content, banner_name, template):
70 """"Экспорт баннера для Godot Engine""""
71 godot_script = f""""# banner_{banner_name.lower().replace(' ', '_')}.gd
72# Сгенерировано BannerFlow Manager
73# Шаблон: {template.name}
74# Размер: {template.width}x{template.height}
75
76extends Control
77
78var player_data = {{
79 "player_name": "Данные игрока",
80 "score": 0,
81 "level": 1
82}}
83
84func _ready():
85 $Label.text = "Баннер: {banner_name}"
86 print("Баннер загружен в Godot")
87
88func update_display():
89 $ScoreLabel.text = "Счет: " + str(player_data.score)
90 $LevelLabel.text = "Уровень: " + str(player_data.level)
91""""
92 return godot_script

```

[bannerflow_app.banner_generator.BannerGenerator](#)
Definition [banner_generator.py:4](#)
[bannerflow_app.banner_generator.BannerGenerator.export_for_godot](#)
[export_for_godot\(html_content, banner_name, template\)](#)
Definition [banner_generator.py:69](#)
[bannerflow_app.banner_generator.BannerGenerator.generate_html](#)
[generate_html\(template, game_data\)](#)

Definition [banner_generator.py:8](#)

- [bannerflow_app](#)
- [banner_generator.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow__app_1_1admin_1_1ABTestAdmin.htm](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow_app.admin.ABTestAdmin Class Reference

Inheritance diagram for bannerflow_app.admin.ABTestAdmin:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.admin.ABTestAdmin:

Collaboration graph

[\[legend\]](#)

Static Public Attributes

tuple [list_display](#) = ('name', 'campaign', 'audience_segment', 'is_active',
'start_date', 'end_date')

tuple [list_filter](#) = ('is_active', 'start_date')

tuple [search_fields](#) = ('name', 'campaign__name', 'audience_segment')

tuple [filter_horizontal](#) = ('banners',)

Detailed Description

Definition at line [73](#) of file [admin.py](#).

Member Data Documentation

◆ **filter_horizontal**

```
tuple bannerflow_app.admin.ABTestAdmin.filter_horizontal = ('banners',) static
```

Definition at line [77](#) of file [admin.py](#).

◆ **list_display**

```
tuple bannerflow_app.admin.ABTestAdmin.list_display = ('name', 'campaign', 'audience_segment', 'is_active', 'start_date', 'end_date') static
```

Definition at line [74](#) of file [admin.py](#).

◆ **list_filter**

```
tuple bannerflow_app.admin.ABTestAdmin.list_filter = ('is_active', 'start_date') static
```

Definition at line [75](#) of file [admin.py](#).

◆ **search_fields**

```
tuple bannerflow_app.admin.ABTestAdmin.search_fields = ('name', 'campaign__name', 'audience_segment') static
```

Definition at line [76](#) of file [admin.py](#).

The documentation for this class was generated from the following file:

- [admin.py](#)
- [bannerflow_app](#)
- [admin](#)
- [ABTestAdmin](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1admin_1_1ABTestAdmin-members.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.admin.ABTestAdmin Member List

This is the complete list of members for
[bannerflow_app.admin.ABTestAdmin](#), including all inherited members.

[filter_horizontal](#) [bannerflow_app.admin.ABTestAdmin](#) static
[list_display](#) [bannerflow_app.admin.ABTestAdmin](#) static
[list_filter](#) [bannerflow_app.admin.ABTestAdmin](#) static
[search_fields](#) [bannerflow_app.admin.ABTestAdmin](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1admin_1_1BannerAdmin.ht

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Static Public Attributes](#) | [List of all members](#)
bannerflow_app.admin.BannerAdmin Class Reference
Inheritance diagram for bannerflow_app.admin.BannerAdmin:
Inheritance graph
[\[legend\]](#)
Collaboration diagram for bannerflow_app.admin.BannerAdmin:
Collaboration graph
[\[legend\]](#)

Static Public Attributes

```
tuple list\_display = ('title', 'campaign', 'media_type', 'is_active',  
    'created_at')
```

```
tuple list\_filter = ('media_type', 'is_active', 'created_at')
```

```
tuple search\_fields = ('title', 'campaign__name')
```

```
tuple readonly\_fields = ('created_at', 'media_type')
```

Detailed Description

Definition at line [66](#) of file [admin.py](#).

Member Data Documentation

◆ [list_display](#)

```
tuple bannerflow_app.admin.BannerAdmin.list_display = ('title',  
    'campaign', 'media_type', 'is_active', 'created_at') static
```

Definition at line [67](#) of file [admin.py](#).

◆ [list_filter](#)

```
tuple bannerflow_app.admin.BannerAdmin.list_filter =  
    ('media_type', 'is_active', 'created_at') static
```

Definition at line [68](#) of file [admin.py](#).

◆ [readonly_fields](#)

```
tuple bannerflow_app.admin.BannerAdmin.readonly_fields =  
    ('created_at', 'media_type') static
```

Definition at line [70](#) of file [admin.py](#).

◆ `search_fields`

```
tuple bannerflow_app.admin.BannerAdmin.search_fields = ('title', 'campaign__name') static
```

Definition at line [69](#) of file [admin.py](#).

The documentation for this class was generated from the following file:

- [admin.py](#)
- [bannerflow_app](#)
- [admin](#)
- [BannerAdmin](#)
- Generated by [doxygen](#) 1.9.8



Файл:

`classbannerflow_app_1_1admin_1_1BannerAdmin-members.html`

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.admin.BannerAdmin Member List

This is the complete list of members for [bannerflow_app.admin.BannerAdmin](#), including all inherited members.

list_display	bannerflow_app.admin.BannerAdmin	static
list_filter	bannerflow_app.admin.BannerAdmin	static
readonly_fields	bannerflow_app.admin.BannerAdmin	static
search_fields	bannerflow_app.admin.BannerAdmin	static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1admin_1_1BannerTemplateAdmin

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow__app.admin.BannerTemplateAdmin Class Reference

Inheritance diagram for bannerflow__app.admin.BannerTemplateAdmin:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow__app.admin.BannerTemplateAdmin:

Collaboration graph

[\[legend\]](#)

Static Public Attributes

tuple [list_display](#) = ('name', 'template_type', 'width', 'height', 'created_at')

tuple [list_filter](#) = ('template_type', 'created_at')

tuple [search_fields](#) = ('name', 'html_template')

Detailed Description

Definition at line [88](#) of file [admin.py](#).

Member Data Documentation

◆ [list_display](#)

tuple bannerflow__app.admin.BannerTemplateAdmin.list_display = static ('name', 'template_type', 'width', 'height', 'created_at')

Definition at line [89](#) of file [admin.py](#).

◆ list_filter

```
tuple bannerflow_app.admin.BannerTemplateAdmin.list_filter = static
('template_type', 'created_at')
```

Definition at line [90](#) of file [admin.py](#).

◆ search_fields

```
tuple bannerflow_app.admin.BannerTemplateAdmin.search_fields static
= ('name', 'html_template')
```

Definition at line [91](#) of file [admin.py](#).

The documentation for this class was generated from the following file:

- [admin.py](#)
- [bannerflow_app](#)
- [admin](#)
- [BannerTemplateAdmin](#)
- Generated by [doxygen](#) 1.9.8



Файл:

**[classbannerflow_app_1_1admin_1_1BannerTemplateAdmin](#)
[members.html](#)**

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.admin.BannerTemplateAdmin Member List

This is the complete list of members for
[bannerflow_app.admin.BannerTemplateAdmin](#), including all inherited
members.

list_display	bannerflow_app.admin.BannerTemplateAdmin	static
list_filter	bannerflow_app.admin.BannerTemplateAdmin	static

[search_fields](#) [bannerflow_app.admin.BannerTemplateAdmin](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

class[bannerflow_app_1_1admin_1_1CampaignAdmin](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

[bannerflow_app.admin.CampaignAdmin](#) Class Reference

Inheritance diagram for [bannerflow_app.admin.CampaignAdmin](#):

Inheritance graph

[\[legend\]](#)

Collaboration diagram for [bannerflow_app.admin.CampaignAdmin](#):

Collaboration graph

[\[legend\]](#)

Public Member Functions

[activate_campaigns](#) (self, request, queryset)

[pause_campaigns](#) (self, request, queryset)

[stop_campaigns](#) (self, request, queryset)

Static Public Attributes

tuple [list_display](#) = ('name', 'budget', 'start_date', 'end_date', 'status',
'target_platform', 'created_by', 'created_at')

tuple [list_filter](#) = ('status', 'target_platform', 'is_ab_test', 'created_at')

tuple [search_fields](#) = ('name', 'target_game_version')

tuple [readonly_fields](#) = ('created_at',)

list [actions](#) = ['[activate_campaigns](#)', '[pause_campaigns](#)',
'[stop_campaigns](#)']

tuple [fieldsets](#)

[short_description](#)

Detailed Description

Definition at line [25](#) of file [admin.py](#).

Member Function Documentation

◆ [activate_campaigns\(\)](#)

```
bannerflow_app.admin.CampaignAdmin.activate_campaigns ( self,  
                                                         request,  
                                                         queryset  
                                                         )
```

Definition at line [47](#) of file [admin.py](#).

```
47 def activate_campaigns(self, request, queryset):  
48     for campaign in queryset:  
49         campaign.activate()  
50     self.message_user(request, f"{queryset.count()} кампаний  
активировано")
```

◆ [pause_campaigns\(\)](#)

```
bannerflow_app.admin.CampaignAdmin.pause_campaigns ( self,  
                                                       request,  
                                                       queryset  
                                                       )
```

Definition at line [53](#) of file [admin.py](#).

```
53 def pause_campaigns(self, request, queryset):  
54     for campaign in queryset:  
55         campaign.pause()  
56     self.message_user(request, f"{queryset.count()} кампаний  
приостановлено")
```

◆ stop_campaigns()

```
bannerflow_app.admin.CampaignAdmin.stop_campaigns ( self,  
                                                    request,  
                                                    queryset  
                                                    )
```

Definition at line [59](#) of file [admin.py](#).

```
59 def stop_campaigns(self, request, queryset):  
60 for campaign in queryset:  
61 campaign.stop()  
62 self.message_user(request, f"{queryset.count()} кампаний  
остановлено")
```

Member Data Documentation

◆ actions

```
list bannerflow_app.admin.CampaignAdmin.actions =  
['activate\_campaigns', 'pause\_campaigns', 'stop\_campaigns'] static
```

Definition at line [30](#) of file [admin.py](#).

◆ fieldsets

```
tuple bannerflow_app.admin.CampaignAdmin.fieldsets static  
Initial value:  
= (  
(Основная информация, {  
'fields': ('name', 'budget', 'created_by')  
}),  
(Временные рамки, {  
'fields': ('start_date', 'end_date')  
}),  
(Таргетинг, {  
'fields': ('target_platform', 'target_geolocation', 'target_game_version')  
}),  
(Статус, {  
'fields': ('status', 'is_ab_test')  
}),  
)
```

Definition at line [32](#) of file [admin.py](#).

◆ **list_display**

```
tuple bannerflow_app.admin.CampaignAdmin.list_display =  
(  
    'name', 'budget', 'start_date', 'end_date', 'status',  
    'target_platform', 'created_by', 'created_at')  
static
```

Definition at line [26](#) of file [admin.py](#).

◆ **list_filter**

```
tuple bannerflow_app.admin.CampaignAdmin.list_filter =  
(  
    'status', 'target_platform', 'is_ab_test', 'created_at')  
static
```

Definition at line [27](#) of file [admin.py](#).

◆ **readonly_fields**

```
tuple bannerflow_app.admin.CampaignAdmin.readonly_fields =  
(  
    'created_at',)  
static
```

Definition at line [29](#) of file [admin.py](#).

◆ **search_fields**

```
tuple bannerflow_app.admin.CampaignAdmin.search_fields =  
(  
    'name', 'target_game_version')  
static
```

Definition at line [28](#) of file [admin.py](#).

◆ **short_description**

```
bannerflow_app.admin.CampaignAdmin.short_description static
```

Definition at line [51](#) of file [admin.py](#).

The documentation for this class was generated from the following file:

- [admin.py](#)
- [bannerflow_app](#)
- [admin](#)
- [CampaignAdmin](#)



Файл:

classbannerflow_app_1_1admin_1_1CampaignAdminmembers.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.admin.CampaignAdmin Member List

This is the complete list of members for
[bannerflow_app.admin.CampaignAdmin](#), including all inherited members.

actions	bannerflow_app.admin.CampaignAdmin static
activate_campaigns (self, request, queryset)	bannerflow_app.admin.CampaignAdmin
fieldsets	bannerflow_app.admin.CampaignAdmin static
list_display	bannerflow_app.admin.CampaignAdmin static
list_filter	bannerflow_app.admin.CampaignAdmin static
pause_campaigns (self, request, queryset)	bannerflow_app.admin.CampaignAdmin
readonly_fields	bannerflow_app.admin.CampaignAdmin static
search_fields	bannerflow_app.admin.CampaignAdmin static
short_description	bannerflow_app.admin.CampaignAdmin static
stop_campaigns (self, request, queryset)	bannerflow_app.admin.CampaignAdmin



Файл:

classbannerflow__app_1_1admin_1_1CampaignStatist

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow_app.admin.CampaignStatisticsAdmin Class Reference

Inheritance diagram for bannerflow_app.admin.CampaignStatisticsAdmin:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for

bannerflow_app.admin.CampaignStatisticsAdmin:

Collaboration graph

[\[legend\]](#)

Static Public Attributes

tuple [list_display](#) = ('campaign', 'date', 'impressions', 'clicks',
'conversions', 'ctr')

tuple [list_filter](#) = ('date', 'campaign')

tuple [readonly_fields](#) = ('ctr',)

tuple [search_fields](#) = ('campaign__name',)

Detailed Description

Definition at line [80](#) of file [admin.py](#).

Member Data Documentation

◆ [list_display](#)

tuple
bannerflow_app.admin.CampaignStatisticsAdmin.list_display = static
('campaign', 'date', 'impressions', 'clicks', 'conversions', 'ctr')

Definition at line [81](#) of file [admin.py](#).

◆ `list_filter`

```
tuple bannerflow_app.admin.CampaignStatisticsAdmin.list_filter    static
= ('date', 'campaign')
```

Definition at line [82](#) of file [admin.py](#).

◆ `readonly_fields`

```
tuple
bannerflow_app.admin.CampaignStatisticsAdmin.readonly_fields    static
= ('ctr',)
```

Definition at line [83](#) of file [admin.py](#).

◆ `search_fields`

```
tuple
bannerflow_app.admin.CampaignStatisticsAdmin.search_fields =    static
('campaign__name',)
```

Definition at line [84](#) of file [admin.py](#).

The documentation for this class was generated from the following file:

- [admin.py](#)
- [bannerflow_app](#)
- [admin](#)
- [CampaignStatisticsAdmin](#)
- Generated by [doxygen](#) 1.9.8



Файл:

**`classbannerflow_app_1_1admin_1_1CampaignStatist`
`members.html`**

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...

Searching...

No Matches

bannerflow_app.admin.CampaignStatisticsAdmin Member List

This is the complete list of members for

[bannerflow_app.admin.CampaignStatisticsAdmin](#), including all inherited members.

list_display	bannerflow_app.admin.CampaignStatisticsAdmin	static
list_filter	bannerflow_app.admin.CampaignStatisticsAdmin	static
readonly_fields	bannerflow_app.admin.CampaignStatisticsAdmin	static
search_fields	bannerflow_app.admin.CampaignStatisticsAdmin	static

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1admin_1_1CustomUserAdmin](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow_app.admin.CustomUserAdmin Class Reference

Inheritance diagram for bannerflow_app.admin.CustomUserAdmin:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.admin.CustomUserAdmin:

Collaboration graph

[\[legend\]](#)

Static Public Attributes

list [inlines](#) = [[UserProfileInline](#)]

Detailed Description

Definition at line [12](#) of file [admin.py](#).

Member Data Documentation

◆ inlines

```
list bannerflow_app.admin.CustomUserAdmin.inlines = static  
[UserProfileInline]
```

Definition at line [13](#) of file [admin.py](#).

The documentation for this class was generated from the following file:

- [admin.py](#)
- [bannerflow_app](#)
- [admin](#)
- [CustomUserAdmin](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1admin_1_1CustomUserAdminmembers.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.admin.CustomUserAdmin Member List

This is the complete list of members for
[bannerflow_app.admin.CustomUserAdmin](#), including all inherited
members.

[inlines bannerflow_app.admin.CustomUserAdmin](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1admin_1_1GameDataAdmin

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow_app.admin.GameDataAdmin Class Reference

Inheritance diagram for bannerflow_app.admin.GameDataAdmin:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.admin.GameDataAdmin:

Collaboration graph

[\[legend\]](#)

Static Public Attributes

tuple [list_display](#) = ('game_name', 'player_name', 'score', 'level',
'game_type', 'imported_at')

tuple [list_filter](#) = ('game_type', 'imported_at')

tuple [search_fields](#) = ('game_name', 'player_name')

Detailed Description

Definition at line [94](#) of file [admin.py](#).

Member Data Documentation

◆ [list_display](#)

```
tuple bannerflow_app.admin.GameDataAdmin.list_display =  
(  
    'game_name', 'player_name', 'score', 'level', 'game_type',  
    'imported_at')  
static
```

Definition at line [95](#) of file [admin.py](#).

◆ list_filter

```
tuple bannerflow_app.admin.GameDataAdmin.list_filter = static
('game_type', 'imported_at')
```

Definition at line [96](#) of file [admin.py](#).

◆ search_fields

```
tuple bannerflow_app.admin.GameDataAdmin.search_fields = static
('game_name', 'player_name')
```

Definition at line [97](#) of file [admin.py](#).

The documentation for this class was generated from the following file:

- [admin.py](#)
- [bannerflow_app](#)
- [admin](#)
- [GameDataAdmin](#)
- Generated by [doxygen](#) 1.9.8



Файл:

**[classbannerflow_app_1_1admin_1_1GameDataAdmin](#)
[members.html](#)**

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.admin.GameDataAdmin Member List

This is the complete list of members for
[bannerflow_app.admin.GameDataAdmin](#), including all inherited members.

list_display	bannerflow_app.admin.GameDataAdmin	static
list_filter	bannerflow_app.admin.GameDataAdmin	static

[search_fields](#) [bannerflow_app.admin.GameDataAdmin](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1admin_1_1GeneratedBannerAdmin](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

[bannerflow_app.admin.GeneratedBannerAdmin](#) Class Reference

Inheritance diagram for [bannerflow_app.admin.GeneratedBannerAdmin](#):

Inheritance graph

[\[legend\]](#)

Collaboration diagram for

[bannerflow_app.admin.GeneratedBannerAdmin](#):

Collaboration graph

[\[legend\]](#)

Static Public Attributes

tuple [list_display](#) = ('name', 'template', 'game_data', 'created_at')

tuple [list_filter](#) = ('created_at', 'template')

tuple [search_fields](#) = ('name', 'html_content')

tuple [readonly_fields](#) = ('created_at', 'preview_url')

Detailed Description

Definition at line [100](#) of file [admin.py](#).

Member Data Documentation

◆ [list_display](#)

```
tuple bannerflow_app.admin.GeneratedBannerAdmin.list_display = ('name', 'template', 'game_data', 'created_at') static
```

Definition at line [101](#) of file [admin.py](#).

◆ [list_filter](#)

```
tuple bannerflow_app.admin.GeneratedBannerAdmin.list_filter = ('created_at', 'template') static
```

Definition at line [102](#) of file [admin.py](#).

◆ [readonly_fields](#)

```
tuple  
bannerflow_app.admin.GeneratedBannerAdmin.readonly_fields = ('created_at', 'preview_url') static
```

Definition at line [104](#) of file [admin.py](#).

◆ [search_fields](#)

```
tuple  
bannerflow_app.admin.GeneratedBannerAdmin.search_fields = ('name', 'html_content') static
```

Definition at line [103](#) of file [admin.py](#).

The documentation for this class was generated from the following file:

- [admin.py](#)
- [bannerflow_app](#)
- [admin](#)
- [GeneratedBannerAdmin](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1admin_1_1GeneratedBannerMembers.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow__app.admin.GeneratedBannerAdmin Member List

This is the complete list of members for

[bannerflow__app.admin.GeneratedBannerAdmin](#), including all inherited members.

[list_display](#) [bannerflow__app.admin.GeneratedBannerAdmin](#) static

[list_filter](#) [bannerflow__app.admin.GeneratedBannerAdmin](#) static

[readonly_fields](#) [bannerflow__app.admin.GeneratedBannerAdmin](#) static

[search_fields](#) [bannerflow__app.admin.GeneratedBannerAdmin](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1admin_1_1UserProfileAdmin.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow__app.admin.UserProfileAdmin Class Reference

Inheritance diagram for bannerflow__app.admin.UserProfileAdmin:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow__app.admin.UserProfileAdmin:

Collaboration graph

[\[legend\]](#)

Static Public Attributes

```
tuple list\_display = ('user', 'role', 'phone', 'created_at')
```

```
tuple list\_filter = ('role', 'created_at')
```

```
tuple search\_fields = ('user__username', 'user__email', 'phone')
```

Detailed Description

Definition at line [19](#) of file [admin.py](#).

Member Data Documentation

◆ [list_display](#)

```
tuple bannerflow_app.admin.UserProfileAdmin.list_display = ('user', 'role', 'phone', 'created_at') static
```

Definition at line [20](#) of file [admin.py](#).

◆ [list_filter](#)

```
tuple bannerflow_app.admin.UserProfileAdmin.list_filter = ('role', 'created_at') static
```

Definition at line [21](#) of file [admin.py](#).

◆ [search_fields](#)

```
tuple bannerflow_app.admin.UserProfileAdmin.search_fields = ('user__username', 'user__email', 'phone') static
```

Definition at line [22](#) of file [admin.py](#).

The documentation for this class was generated from the following file:

- [admin.py](#)
- [bannerflow_app](#)
- [admin](#)
- [UserProfileAdmin](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1admin_1_1UserProfileAdminmembers.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.admin.UserProfileAdmin Member List

This is the complete list of members for
[bannerflow_app.admin.UserProfileAdmin](#), including all inherited members.

[list_display](#) [bannerflow_app.admin.UserProfileAdmin](#) static
[list_filter](#) [bannerflow_app.admin.UserProfileAdmin](#) static
[search_fields](#) [bannerflow_app.admin.UserProfileAdmin](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1admin_1_1UserProfileInline

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Static Public Attributes](#) | [List of all members](#)
bannerflow_app.admin.UserProfileInline Class Reference
Inheritance diagram for bannerflow_app.admin.UserProfileInline:
Inheritance graph

[[legend](#)]

Collaboration diagram for bannerflow_app.admin.UserProfileInline:
Collaboration graph

[[legend](#)]

Static Public Attributes

`model = UserProfile`

`bool can_delete = False`

Detailed Description

Definition at line [8](#) of file [admin.py](#).

Member Data Documentation

◆ [can_delete](#)

`bool bannerflow_app.admin.UserProfileInline.can_delete = False static`

Definition at line [10](#) of file [admin.py](#).

◆ [model](#)

`bannerflow_app.admin.UserProfileInline.model = UserProfile static`

Definition at line [9](#) of file [admin.py](#).

The documentation for this class was generated from the following file:

- [admin.py](#)
- [bannerflow_app](#)
- [admin](#)
- [UserProfileInline](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1admin_1_1UserProfileInlineMembers.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow__app.admin.UserProfileInline Member List

This is the complete list of members for

[bannerflow__app.admin.UserProfileInline](#), including all inherited members.

[can_delete](#) [bannerflow__app.admin.UserProfileInline](#) static

[model](#) [bannerflow__app.admin.UserProfileInline](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1banner_generator_1_1BannerGenerator.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Member Functions](#) | [List of all members](#)

bannerflow__app.banner_generator.BannerGenerator Class Reference

Static Public Member Functions

[generate_html](#) (template, game_data)

[export_for_godot](#) (html_content, banner_name, template)

Detailed Description

Генератор интерактивных HTML5 баннеров для игр

Definition at line [4](#) of file [banner_generator.py](#).

Member Function Documentation

◆ `export_for_godot()`

```
bannerflow_app.banner_generator.BannerGenerator.export_for_godot ( html_content,  
                                                                    banner_name,  
                                                                    template  
                                                                    )
```

Экспорт баннера для Godot Engine

Definition at line [69](#) of file [banner_generator.py](#).

```
69 def export_for_godot(html_content, banner_name, template):  
70     """Экспорт баннера для Godot Engine"""  
71     godot_script = f"""# banner_{banner_name.lower().replace(' ', '_')}.gd  
72 # Сгенерировано BannerFlow Manager  
73 # Шаблон: {template.name}  
74 # Размер: {template.width}x{template.height}  
75  
76 extends Control  
77  
78 var player_data = {{  
79     "player_name": "Данные игрока",  
80     "score": 0,  
81     "level": 1  
82 }}  
83  
84 func _ready():  
85     $Label.text = "Баннер: {banner_name}"  
86     print("Баннер загружен в Godot")  
87  
88 func update_display():  
89     $ScoreLabel.text = "Счет: " + str(player_data.score)  
90     $LevelLabel.text = "Уровень: " + str(player_data.level)  
91 """  
92 return godot_script
```

◆ `generate_html()`

```
bannerflow_app.banner_generator.BannerGenerator.generate_html ( template,  
                                                                    game_data stats  
                                                                    )
```

Генерация HTML баннера из шаблона и данных игры

Definition at line 8 of file [banner_generator.py](#).

```
8 def generate_html(template, game_data):
9     """Генерация HTML баннера из шаблона и данных игры"""
10    context = {
11        'player_name': game_data.player_name,
12        'game_name': game_data.game_name,
13        'score': game_data.score,
14        'level': game_data.level,
15        'play_time': game_data.play_time,
16        'achievements': game_data.achievements,
17        'width': template.width,
18        'height': template.height,
19        'template_name': template.name,
20    }
21
22    html_template = Template(template.html_template)
23    html_content = html_template.render(Context(context))
24
25    full_html = f"""<!DOCTYPE html>
26<html lang="ru">
27<head>
28 <meta charset="UTF-8">
29 <meta name="viewport" content="width=device-width, initial-
scale=1.0">
30 <title>Баннер: {game_data.game_name}</title>
31 <style>
32 .game-banner {{
33 width: {template.width}px;
34 height: {template.height}px;
35 position: relative;
36 overflow: hidden;
37 font-family: Arial, sans-serif;
38 }}
39 {template.css_styles}
40 </style>
41</head>
42<body>
43 <div class="game-banner">
44 {html_content}
45 </div>
46
47 <script>
48 const gameData = {{
49 player: "{game_data.player_name}",
50 score: {game_data.score},
51 level: {game_data.level},
52 achievements: {json.dumps(game_data.achievements,
ensure_ascii=False)}
53 }};
54
55 {template.javascript}
```

```

56
57 document.addEventListener('DOMContentLoaded', function() {{
58 document.querySelector('.game-banner').addEventListener('click',
function() {{
59 alert(`Игрок: ${{gameData.player}}\nСчет: ${{gameData.score}}
\nУровень: ${{gameData.level}}`);
60 }});
61 }});
62 </script>
63</body>
64</html>""
65
66 return full_html
67

```

The documentation for this class was generated from the following file:

- [banner_generator.py](#)
- [bannerflow_app](#)
- [banner_generator](#)
- [BannerGenerator](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow_app_1_1banner_generator_1_1BannerGenerator
members.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow_app.banner_generator.BannerGenerator Member List

This is the complete list of members for

[bannerflow_app.banner_generator.BannerGenerator](#), including all inherited members.

[export_for_godot](#)(html_content, [bannerflow_app.banner_generator.BannerGenerator](#) s
 banner_name, template)

[generate_html](#)(template, [bannerflow_app.banner_generator.BannerGenerator](#) s
game_data)

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1migrations_1_10001_initial](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

[bannerflow_app.migrations.0001_initial.Migration](#) Class Reference

Inheritance diagram for

[bannerflow_app.migrations.0001_initial.Migration](#):

Inheritance graph

[\[legend\]](#)

Collaboration diagram for

[bannerflow_app.migrations.0001_initial.Migration](#):

Collaboration graph

[\[legend\]](#)

Static Public Attributes

bool [initial](#) = True

list [dependencies](#)

list [operations](#)

Detailed Description

Definition at line [8](#) of file [0001_initial.py](#).

Member Data Documentation

◆ dependencies

```
list
bannerflow_app.migrations.0001_initial.Migration.dependencies static
```

Initial value:

```
= [
migrations.swappable_dependency(settings.AUTH_USER_MODEL),
]
```

Definition at line [12](#) of file [0001_initial.py](#).

◆ initial

```
bool bannerflow_app.migrations.0001_initial.Migration.initial = static
True
```

Definition at line [10](#) of file [0001_initial.py](#).

◆ operations

```
list bannerflow_app.migrations.0001_initial.Migration.operations static
```

Initial value:

```
= [
migrations.CreateModel(
name='Campaign',
fields=[
('id', models.BigAutoField(auto_created=True, primary_key=True,
serialize=False, verbose_name='ID')),
('name', models.CharField(max_length=255)),
('budget', models.DecimalField(decimal_places=2, max_digits=10)),
('status', models.CharField(choices=[('draft', 'Черновик'), ('active',
'Активна'), ('paused', 'Приостановлена'), ('stopped', 'Остановлена')],
default='draft', max_length=20)),
('created_at', models.DateTimeField(auto_now_add=True)),
('created_by',
models.ForeignKey(on_delete=django.db.models.deletion.CASCADE,
to=settings.AUTH_USER_MODEL)),
],
),
migrations.CreateModel(
name='Banner',
fields=[
('id', models.BigAutoField(auto_created=True, primary_key=True,
serialize=False, verbose_name='ID')),
('title', models.CharField(max_length=255)),
('image_url', models.URLField()),
```

```
('is_active', models.BooleanField(default=True)),
('created_at', models.DateTimeField(auto_now_add=True)),
('campaign',
models.ForeignKey(on_delete=django.db.models.deletion.CASCADE,
to='bannerflow_app.campaign')),
],
),
]
```

Definition at line [16](#) of file [0001_initial.py](#).

The documentation for this class was generated from the following file:

- [0001_initial.py](#)
- [bannerflow_app](#)
- [migrations](#)
- [0001_initial](#)
- [Migration](#)
- Generated by [doxygen](#) 1.9.8



Файл:

**[classbannerflow_app_1_1migrations_1_10001_initial](#)
[members.html](#)**

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[bannerflow_app.migrations.0001_initial.Migration](#) Member List

This is the complete list of members for

[bannerflow_app.migrations.0001_initial.Migration](#), including all inherited members.

[dependencies](#) [bannerflow_app.migrations.0001_initial.Migration](#) static
[initial](#) [bannerflow_app.migrations.0001_initial.Migration](#) static
[operations](#) [bannerflow_app.migrations.0001_initial.Migration](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow_app_1_1migrations_1_10002_campaign_start_date.Migration

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow_app.migrations.0002_campaign_start_date.Migration Class
Reference

Inheritance diagram for

bannerflow_app.migrations.0002_campaign_start_date.Migration:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for

bannerflow_app.migrations.0002_campaign_start_date.Migration:

Collaboration graph

[\[legend\]](#)

Static Public Attributes

list [dependencies](#)

list [operations](#)

Detailed Description

Definition at line [7](#) of file [0002_campaign_start_date.py](#).

Member Data Documentation

◆ dependencies

list

bannerflow_app.migrations.0002_campaign_start_date.Migration.dependencies

Initial value:

```
= [  
('bannerflow_app', '0001_initial'),  
]
```

Definition at line [9](#) of file [0002_campaign_start_date.py](#).

◆ operations

```
list
bannerflow_app.migrations.0002_campaign_start_date.Migration.operations static
Initial value:
= [
migrations.AddField(
model_name='campaign',
name='start_date',
field=models.DateTimeField(default=django.utils.timezone.now),
),
]
```

Definition at line [13](#) of file [0002_campaign_start_date.py](#).

The documentation for this class was generated from the following file:

- [0002_campaign_start_date.py](#)
- [bannerflow_app](#)
- [migrations](#)
- [0002_campaign_start_date](#)
- [Migration](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1migrations_1_10002_campaign_start_date.Migration.operations.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow_app.migrations.0002_campaign_start_date.Migration Member List

This is the complete list of members for [bannerflow_app.migrations.0002_campaign_start_date.Migration](#), including all inherited members.

[dependencies bannerflow_app.migrations.0002_campaign_start_date.Migration](#) static
[operations bannerflow_app.migrations.0002_campaign_start_date.Migration](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1migrations_1_10003_camp](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system

Loading...

Searching...

No Matches

[bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_version](#)

Member List

This is the complete list of members for

[bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_version](#)

including all inherited members.

[dependencies bannerflow_app.migrations.0003_campaign_end_date_campaign_target](#)
[operations bannerflow_app.migrations.0003_campaign_end_date_campaign_target](#)

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1migrations_1_10003_camp](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

[bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_version](#)

Class Reference

Inheritance diagram for
bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_version
Inheritance graph

[\[legend\]](#)

Collaboration diagram for
bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_version
Collaboration graph

[\[legend\]](#)

Static Public Attributes

list [dependencies](#)

list [operations](#)

Detailed Description

Definition at line [9](#) of file
[0003_campaign_end_date_campaign_target_game_version_and_more.py](#).

Member Data Documentation

◆ dependencies

list
bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_version

Initial value:

```
= [  
( 'bannerflow_app', '0002_campaign_start_date'),  
migrations.swappable_dependency(settings.AUTH_USER_MODEL),  
]
```

Definition at line [11](#) of file
[0003_campaign_end_date_campaign_target_game_version_and_more.py](#).

◆ operations

list
bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_version

Definition at line [16](#) of file
[0003_campaign_end_date_campaign_target_game_version_and_more.py](#).

The documentation for this class was generated from the following file:

- [0003_campaign_end_date_campaign_target_game_version_and_more.py](#)
- [bannerflow_app](#)
- [migrations](#)
- [0003_campaign_end_date_campaign_target_game_version_and_more](#)
- [Migration](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1migrations_1_10004_camp](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

[bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.Migr](#)

Class Reference

Inheritance diagram for

[bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.Migr](#)

Inheritance graph

[\[legend\]](#)

Collaboration diagram for

[bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.Migr](#)

Collaboration graph

[\[legend\]](#)

Static Public Attributes

list [dependencies](#)

list [operations](#)

Detailed Description

Definition at line [8](#) of file

[0004_campaign_is_ab_test_abtest_campaignstatistics.py](#).

Member Data Documentation

◆ dependencies

```
list
bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.Mig

Initial value:
= [
('bannerflow_app',
'0003_campaign_end_date_campaign_target_game_version_and_more'),
]
```

Definition at line [10](#) of file
[0004_campaign_is_ab_test_abtest_campaignstatistics.py](#).

◆ operations

```
list
bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.Mig
```

Definition at line [14](#) of file
[0004_campaign_is_ab_test_abtest_campaignstatistics.py](#).

The documentation for this class was generated from the following file:

- [0004_campaign_is_ab_test_abtest_campaignstatistics.py](#)
- [bannerflow_app](#)
- [migrations](#)
- [0004_campaign_is_ab_test_abtest_campaignstatistics](#)
- [Migration](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1migrations_1_10004_camp](#)
[members.html](#)

Loading...
Searching...
No Matches
bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.Migr
Member List

This is the complete list of members for
[bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.Migr](#)
including all inherited members.

[dependencies](#) [bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaign](#)
[operations](#) [bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaign](#)

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1migrations_1_10005_remove_banner_image_url_banner_media_file_and_n](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system

Loading...
Searching...
No Matches
[Static Public Attributes](#) | [List of all members](#)
bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_n
Class Reference
Inheritance diagram for
bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_n
Inheritance graph

[\[legend\]](#)

Collaboration diagram for
bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_n
Collaboration graph

[\[legend\]](#)

Static Public Attributes

list [dependencies](#)

list [operations](#)

Detailed Description

Definition at line [9](#) of file

[0005_remove_banner_image_url_banner_media_file_and_more.py](#).

Member Data Documentation

◆ dependencies

list

`bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_more.py`

Initial value:

```
= [  
('bannerflow_app',  
'0004_campaign_is_ab_test_abtest_campaignstatistics'),  
migrations.swappable_dependency(settings.AUTH_USER_MODEL),  
]
```

Definition at line [11](#) of file

[0005_remove_banner_image_url_banner_media_file_and_more.py](#).

◆ operations

list

`bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_more.py`

Definition at line [16](#) of file

[0005_remove_banner_image_url_banner_media_file_and_more.py](#).

The documentation for this class was generated from the following file:

- [0005_remove_banner_image_url_banner_media_file_and_more.py](#)
- [bannerflow_app](#)
- [migrations](#)
- [0005_remove_banner_image_url_banner_media_file_and_more](#)
- [Migration](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1migrations_1_10005_remove_banner_image_url_banner_media_file_and_banner_member_list.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_banner_member_list

Member List

This is the complete list of members for

[bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_banner_member_list](#)

including all inherited members.

[dependencies](#) [bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_banner_member_list](#)

[operations](#) [bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_banner_member_list](#)

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1migrations_1_10006_alter_banner_media_file_migration_class_reference.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow_app.migrations.0006_alter_banner_media_file.Migration Class Reference

Inheritance diagram for

bannerflow_app.migrations.0006_alter_banner_media_file.Migration:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for

bannerflow_app.migrations.0006_alter_banner_media_file.Migration:

Collaboration graph

[\[legend\]](#)

Static Public Attributes

list [dependencies](#)

list [operations](#)

Detailed Description

Definition at line [7](#) of file [0006_alter_banner_media_file.py](#).

Member Data Documentation

◆ [dependencies](#)

list

`bannerflow_app.migrations.0006_alter_banner_media_file.Migration.dependencies` static

Initial value:

```
= [  
('bannerflow_app',  
'0005_remove_banner_image_url_banner_media_file_and_more'),  
]
```

Definition at line [9](#) of file [0006_alter_banner_media_file.py](#).

◆ [operations](#)

list

`bannerflow_app.migrations.0006_alter_banner_media_file.Migration.operations` static

Initial value:

```
= [  
migrations.AlterField(  
model_name='banner',  
name='media_file',  
field=models.FileField(help_text='Поддерживаемые форматы: PNG, JPG, GIF, MP4, AVI, MOV', upload_to='banners/%Y/%m/%d/',  
validators=[bannerflow_app.models.validate_media_file],  
verbose_name='Медиафайл'),  
,  
]
```

Definition at line [13](#) of file [0006_alter_banner_media_file.py](#).

The documentation for this class was generated from the following file:

- [0006_alter_banner_media_file.py](#)
- [bannerflow_app](#)
- [migrations](#)
- [0006_alter_banner_media_file](#)
- [Migration](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1migrations_1_10006_alter_members.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[bannerflow_app.migrations.0006_alter_banner_media_file.Migration](#)

Member List

This is the complete list of members for

[bannerflow_app.migrations.0006_alter_banner_media_file.Migration](#),
including all inherited members.

[dependencies bannerflow_app.migrations.0006_alter_banner_media_file.Migration](#) sta
[operations bannerflow_app.migrations.0006_alter_banner_media_file.Migration](#) sta

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1migrations_1_10007_alter](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow_app.migrations.0007_alter_banner_media_file.Migration Class Reference

Inheritance diagram for

bannerflow_app.migrations.0007_alter_banner_media_file.Migration:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for

bannerflow_app.migrations.0007_alter_banner_media_file.Migration:

Collaboration graph

[\[legend\]](#)

Static Public Attributes

list [dependencies](#)

list [operations](#)

Detailed Description

Definition at line [7](#) of file [0007_alter_banner_media_file.py](#).

Member Data Documentation

◆ dependencies

list

bannerflow_app.migrations.0007_alter_banner_media_file.Migration.dependencies static

Initial value:

```
= [  
( 'bannerflow_app', '0006_alter_banner_media_file'),  
]
```

Definition at line [9](#) of file [0007_alter_banner_media_file.py](#).

◆ operations

list

bannerflow_app.migrations.0007_alter_banner_media_file.Migration.operations static

Initial value:

```
= [  
]
```

```
migrations.AlterField(
    model_name='banner',
    name='media_file',
    field=models.FileField(help_text='Поддерживаемые форматы: PNG,
    JPG, MP4', upload_to='banners/%Y/%m/%d/',
    validators=[bannerflow_app.models.validate_media_file],
    verbose_name='Медиафайл'),
),
]
```

Definition at line [13](#) of file [0007_alter_banner_media_file.py](#).

The documentation for this class was generated from the following file:

- [0007_alter_banner_media_file.py](#)
- [bannerflow_app](#)
- [migrations](#)
- [0007_alter_banner_media_file](#)
- [Migration](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1migrations_1_10007_alter_members.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[bannerflow_app.migrations.0007_alter_banner_media_file.Migration](#)

Member List

This is the complete list of members for

[bannerflow_app.migrations.0007_alter_banner_media_file.Migration](#),
including all inherited members.

[dependencies](#) [bannerflow_app.migrations.0007_alter_banner_media_file.Migration](#) sta
[operations](#) [bannerflow_app.migrations.0007_alter_banner_media_file.Migration](#) sta

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow_app_1_1migrations_1_10008_bann

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.Migrat

Class Reference

Inheritance diagram for

bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.Migrat

Inheritance graph

[\[legend\]](#)

Collaboration diagram for

bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.Migrat

Collaboration graph

[\[legend\]](#)

Static Public Attributes

list [dependencies](#)

list [operations](#)

Detailed Description

Definition at line [7](#) of file

[0008_bannertemplate_gamedata_generatedbanner.py](#).

Member Data Documentation

◆ [dependencies](#)

list

bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.Migrat

Initial value:

= [

('bannerflow_app', '0007_alter_banner_media_file'),

]

Definition at line [9](#) of file
[0008_bannertemplate_gamedata_generatedbanner.py](#).

◆ operations

list

`bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.Migrat`

Definition at line [13](#) of file
[0008_bannertemplate_gamedata_generatedbanner.py](#).

The documentation for this class was generated from the following file:

- [0008_bannertemplate_gamedata_generatedbanner.py](#)
- [bannerflow_app](#)
- [migrations](#)
- [0008_bannertemplate_gamedata_generatedbanner](#)
- [Migration](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow__app_1_1migrations_1_10008__bann](#)
[members.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
`bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.Migrat`
Member List

This is the complete list of members for
[bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.Migrat](#)
including all inherited members.

[dependencies bannerflow_app.migrations.0008_bannertemplate_gamedata_generated](#)

[operations](#) [bannerflow_app.migrations.0008_bannertemplate_gamedata_generated](#)

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow__app_1_1models_1_1ABTest.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow_app.models.ABTest Class Reference

Inheritance diagram for bannerflow_app.models.ABTest:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.models.ABTest:

Collaboration graph

[\[legend\]](#)

Public Member Functions

[__str__](#) (self)

Static Public Attributes

[name](#) = models.CharField(max_length=255, verbose_name="Название теста")

[campaign](#) = models.ForeignKey([Campaign](#), on_delete=models.CASCADE, verbose_name="Кампания")

[banners](#) = models.ManyToManyField([Banner](#), verbose_name="Баннеры для теста")

[audience_segment](#) = models.CharField(max_length=100, verbose_name="Сегмент аудитории")

```
start\_date = models.DateTimeField(default=timezone.now,  
verbose_name="Дата начала")
```

```
end\_date = models.DateTimeField(default=timezone.now,  
verbose_name="Дата окончания")
```

```
is\_active = models.BooleanField(default=True,  
verbose_name="Активен")
```

```
created\_at = models.DateTimeField(auto_now_add=True)
```

Detailed Description

Definition at line [146](#) of file [models.py](#).

Member Function Documentation

◆ [__str__\(\)](#)

`bannerflow_app.models.ABTest.__str__(self)`

Definition at line [156](#) of file [models.py](#).

```
156 def __str__(self):  
157     return self.name  
158
```

Member Data Documentation

◆ [audience_segment](#)

```
bannerflow_app.models.ABTest.audience_segment =  
models.CharField(max_length=100, verbose_name="Сегмент аудитории") static
```

Definition at line [150](#) of file [models.py](#).

◆ [banners](#)

static

```
bannerflow_app.models.ABTest.banners =  
models.ManyToManyField(Banner, verbose_name="Баннеры для  
теста")
```

Definition at line [149](#) of file [models.py](#).

◆ [campaign](#)

```
bannerflow_app.models.ABTest.campaign =  
models.ForeignKey(Campaign, on_delete=models.CASCADE,      static  
verbose_name="Кампания")
```

Definition at line [148](#) of file [models.py](#).

◆ [created_at](#)

```
bannerflow_app.models.ABTest.created_at =  
models.DateTimeField(auto_now_add=True)      static
```

Definition at line [154](#) of file [models.py](#).

◆ [end_date](#)

```
bannerflow_app.models.ABTest.end_date =  
models.DateTimeField(default=timezone.now,      static  
verbose_name="Дата окончания")
```

Definition at line [152](#) of file [models.py](#).

◆ [is_active](#)

```
bannerflow_app.models.ABTest.is_active =  
models.BooleanField(default=True, verbose_name="Активен")      static
```

Definition at line [153](#) of file [models.py](#).

◆ [name](#)

```
bannerflow_app.models.ABTest.name =  
models.CharField(max_length=255, verbose_name="Название      static  
теста")
```

Definition at line [147](#) of file [models.py](#).

◆ start_date

```
bannerflow_app.models.ABTest.start_date =  
models.DateTimeField(default=timezone.now,          static  
verbose_name="Дата начала")
```

Definition at line [151](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [ABTest](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow_app_1_1models_1_1ABTest-members.html

BannerFlow Manager API 1.0
Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow_app.models.ABTest Member List

This is the complete list of members for [bannerflow_app.models.ABTest](#), including all inherited members.

__str__(self)	bannerflow_app.models.ABTest
audience_segment	bannerflow_app.models.ABTest static
banners	bannerflow_app.models.ABTest static
campaign	bannerflow_app.models.ABTest static
created_at	bannerflow_app.models.ABTest static
end_date	bannerflow_app.models.ABTest static
is_active	bannerflow_app.models.ABTest static

name	bannerflow_app.models.ABTest static
start_date	bannerflow_app.models.ABTest static

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow__app_1_1models_1_1Banner.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

[bannerflow_app.models.Banner](#) Class Reference

Inheritance diagram for [bannerflow_app.models.Banner](#):

Inheritance graph

[\[legend\]](#)

Collaboration diagram for [bannerflow_app.models.Banner](#):

Collaboration graph

[\[legend\]](#)

Public Member Functions

[save](#) (self, *args, **kwargs)

[clean](#) (self)

[__str__](#) (self)

Static Public Attributes

list [MEDIA_TYPE_CHOICES](#)

[campaign](#) = models.ForeignKey([Campaign](#),
on_delete=models.CASCADE, verbose_name="Кампания")

[title](#) = models.CharField(max_length=255,
verbose_name="Название баннера")

[media_file](#)

[media_type](#) = models.CharField(max_length=10,
choices=[MEDIA_TYPE_CHOICES](#), verbose_name="Тип медиа")

[created_at](#) = models.DateTimeField(auto_now_add=True)

[is_active](#) = models.BooleanField(default=True,
verbose_name="Активен")

Detailed Description

Definition at line [109](#) of file [models.py](#).

Member Function Documentation

◆ [__str__\(\)](#)

bannerflow_app.models.Banner.[__str__](#) (*self*)

Definition at line [143](#) of file [models.py](#).

```
143 def __str__(self):
144     return self.title
145
```

◆ [clean\(\)](#)

bannerflow_app.models.Banner.[clean](#) (*self*)

Дополнительная валидация при сохранении

Definition at line [137](#) of file [models.py](#).

```
137 def clean(self):
138     """Дополнительная валидация при сохранении"""
139     super().clean()
140     if self.media_file:
141         validate_media_file(self.media_file)
142
```

Here is the call graph for this function:

Here is the caller graph for this function:

◆ save()

```
bannerflow_app.models.Banner.save (    self,  
                                       *  args,  
                                       ** kwargs  
                                       )
```

Definition at line [127](#) of file [models.py](#).

```
127 def save(self, *args, **kwargs):  
128 # Автоматическое определение типа медиа  
129 if self.media_file:  
130 extension = self.media_file.name.split('.')[-1].lower()  
131 if extension in ['png', 'jpg', 'jpeg', 'gif']:  
132 self.media_type = 'image'  
133 elif extension in ['mp4', 'avi', 'mov']:  
134 self.media_type = 'video'  
135 super().save(*args, **kwargs)  
136
```

Here is the call graph for this function:

Here is the caller graph for this function:

Member Data Documentation

◆ campaign

```
bannerflow_app.models.Banner.campaign =  
models.ForeignKey(Campaign, on_delete=models.CASCADE,      static  
verbose_name="Кампания")
```

Definition at line [115](#) of file [models.py](#).

◆ created_at

```
bannerflow_app.models.Banner.created_at =  
models.DateTimeField(auto_now_add=True)      static
```

Definition at line [124](#) of file [models.py](#).

◆ is_active

```
bannerflow_app.models.Banner.is_active =  
models.BooleanField(default=True, verbose_name="Активен")      static
```

Definition at line [125](#) of file [models.py](#).

◆ `media_file`

```
bannerflow_app.models.Banner.media_file static
```

Initial value:

```
= models.FileField(  
upload_to='banners/%Y/%m/%d/',  
verbose_name="Медиафайл",  
help_text="Поддерживаемые форматы: PNG, JPG, MP4",  
validators=[validate_media_file]  
)
```

Definition at line [117](#) of file [models.py](#).

◆ `media_type`

```
bannerflow_app.models.Banner.media_type =  
models.CharField(max_length=10, static  
choices=MEDIA\_TYPE\_CHOICES, verbose_name="Тип медиа")
```

Definition at line [123](#) of file [models.py](#).

◆ `MEDIA_TYPE_CHOICES`

```
list bannerflow_app.models.Banner.MEDIA_TYPE_CHOICES static
```

Initial value:

```
= [  
( 'image', 'Изображение'),  
( 'video', 'Видео'),  
]
```

Definition at line [110](#) of file [models.py](#).

◆ `title`

```
bannerflow_app.models.Banner.title =  
models.CharField(max_length=255, verbose_name="Название static  
баннера")
```

Definition at line [116](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [Banner](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1models_1_1Banner-members.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.models.Banner Member List

This is the complete list of members for [bannerflow_app.models.Banner](#), including all inherited members.

__str__(self)	bannerflow_app.models.Banner
campaign	bannerflow_app.models.Banner static
clean(self)	bannerflow_app.models.Banner
created_at	bannerflow_app.models.Banner static
is_active	bannerflow_app.models.Banner static
media_file	bannerflow_app.models.Banner static
media_type	bannerflow_app.models.Banner static
MEDIA_TYPE_CHOICES	bannerflow_app.models.Banner static
save(self, *args, **kwargs)	bannerflow_app.models.Banner
title	bannerflow_app.models.Banner static

- Generated by [doxygen](#) 1.9.8
-



Файл:

classbannerflow__app_1_1models_1_1BannerTemplate

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Static Public Attributes](#) | [List of all members](#)
bannerflow_app.models.BannerTemplate.Meta Class Reference

Static Public Attributes

str [verbose_name](#) = "Шаблон баннера"

str [verbose_name_plural](#) = "Шаблоны баннеров"

Detailed Description

Definition at line [197](#) of file [models.py](#).

Member Data Documentation

◆ [verbose_name](#)

str bannerflow_app.models.BannerTemplate.Meta.verbose_name static
= "Шаблон баннера"

Definition at line [198](#) of file [models.py](#).

◆ [verbose_name_plural](#)

str
bannerflow_app.models.BannerTemplate.Meta.verbose_name_plural static
= "Шаблоны баннеров"

Definition at line [199](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [BannerTemplate](#)
- [Meta](#)
- Generated by [doxygen](#) 1.9.8



Файл:

**[classbannerflow_app_1_1models_1_1BannerTemplate](#)
[members.html](#)**

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.models.BannerTemplate.Meta Member List

This is the complete list of members for
[bannerflow_app.models.BannerTemplate.Meta](#), including all inherited
members.

[verbose_name](#) [bannerflow_app.models.BannerTemplate.Meta](#) static
[verbose_name_plural](#) [bannerflow_app.models.BannerTemplate.Meta](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1models_1_1BannerTemplate](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...

No Matches

[Classes](#) | [Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow_app.models.BannerTemplate Class Reference

Inheritance diagram for bannerflow_app.models.BannerTemplate:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.models.BannerTemplate:

Collaboration graph

[\[legend\]](#)

Classes

class [Meta](#)

Public Member Functions

[__str__](#) (self)

Static Public Attributes

list [TEMPLATE_TYPES](#)

[name](#) = models.CharField(max_length=100,
verbose_name="Название шаблона")

[template_type](#) = models.CharField(max_length=20,
choices=[TEMPLATE_TYPES](#), default='custom', verbose_name="Тип
шаблона")

[html_template](#) = models.TextField(verbose_name="HTML шаблон",
help_text="Используйте {{ переменные }} для подстановки")

[css_styles](#) = models.TextField(verbose_name="CSS стили")

[javascript](#) = models.TextField(verbose_name="JavaScript код",
blank=True, help_text="Для интерактивности")

[width](#) = models.IntegerField(default=300, verbose_name="Ширина
(px)")

[height](#) = models.IntegerField(default=250, verbose_name="Высота
(px)")

```
preview\_image = models.ImageField(upload_to='templates/
previews/', blank=True, verbose_name="Превью")
```

```
created\_at = models.DateTimeField(auto_now_add=True)
```

Detailed Description

Шаблон для генерации интерактивных HTML5 баннеров

Definition at line [178](#) of file [models.py](#).

Member Function Documentation

◆ [__str__\(\)](#)

```
bannerflow_app.models.BannerTemplate.__str__( self)
```

Definition at line [201](#) of file [models.py](#).

```
201 def __str__(self):
202     return f"{self.name} ({self.get_template_type_display()})"
203
```

Member Data Documentation

◆ [created_at](#)

```
bannerflow_app.models.BannerTemplate.created_at =
models.DateTimeField(auto_now_add=True) static
```

Definition at line [195](#) of file [models.py](#).

◆ [css_styles](#)

```
bannerflow_app.models.BannerTemplate.css_styles =
models.TextField(verbose_name="CSS стили") static
```

Definition at line [190](#) of file [models.py](#).

◆ height

```
bannerflow_app.models.BannerTemplate.height =  
models.IntegerField(default=250, verbose_name="Высота (px)") static
```

Definition at line [193](#) of file [models.py](#).

◆ html_template

```
bannerflow_app.models.BannerTemplate.html_template =  
models.TextField(verbose_name="HTML шаблон", static  
help_text="Используйте {{ переменные }} для подстановки")
```

Definition at line [189](#) of file [models.py](#).

◆ javascript

```
bannerflow_app.models.BannerTemplate.javascript =  
models.TextField(verbose_name="JavaScript код", blank=True, static  
help_text="Для интерактивности")
```

Definition at line [191](#) of file [models.py](#).

◆ name

```
bannerflow_app.models.BannerTemplate.name =  
models.CharField(max_length=100, verbose_name="Название static  
шаблона")
```

Definition at line [187](#) of file [models.py](#).

◆ preview_image

```
bannerflow_app.models.BannerTemplate.preview_image =  
models.ImageField(upload_to='templates/previews/', blank=True, static  
verbose_name="Превью")
```

Definition at line [194](#) of file [models.py](#).

◆ `template_type`

```
bannerflow_app.models.BannerTemplate.template_type =  
models.CharField(max_length=20, choices=TEMPLATE_TYPES, static  
default='custom', verbose_name="Тип шаблона")
```

Definition at line [188](#) of file [models.py](#).

◆ `TEMPLATE_TYPES`

```
list bannerflow_app.models.BannerTemplate.TEMPLATE_TYPES static  
Initial value:  
= [  
( 'score', 'Баннер со счетом'),  
( 'achievement', 'Баннер с достижением'),  
( 'level', 'Баннер с уровнем'),  
( 'custom', 'Пользовательский шаблон'),  
]
```

Definition at line [180](#) of file [models.py](#).

◆ `width`

```
bannerflow_app.models.BannerTemplate.width =  
models.IntegerField(default=300, verbose_name="Ширина (px)") static
```

Definition at line [192](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [BannerTemplate](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1models_1_1BannerTemplate members.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.models.BannerTemplate Member List

This is the complete list of members for
[bannerflow_app.models.BannerTemplate](#), including all inherited
members.

__str__	(self)	bannerflow_app.models.BannerTemplate
created_at		bannerflow_app.models.BannerTemplate static
css_styles		bannerflow_app.models.BannerTemplate static
height		bannerflow_app.models.BannerTemplate static
html_template		bannerflow_app.models.BannerTemplate static
javascript		bannerflow_app.models.BannerTemplate static
name		bannerflow_app.models.BannerTemplate static
preview_image		bannerflow_app.models.BannerTemplate static
template_type		bannerflow_app.models.BannerTemplate static
TEMPLATE_TYPES		bannerflow_app.models.BannerTemplate static
width		bannerflow_app.models.BannerTemplate static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1models_1_1Campaign.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)
bannerflow_app.models.Campaign Class Reference
Inheritance diagram for bannerflow_app.models.Campaign:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.models.Campaign:

Collaboration graph

[\[legend\]](#)

Public Member Functions

[activate](#) (self)

[pause](#) (self)

[stop](#) (self)

[status_color](#) (self)

[__str__](#) (self)

Static Public Attributes

list [STATUS_CHOICES](#)

list [PLATFORM_CHOICES](#)

[name](#) = models.CharField(max_length=255,
verbose_name="Название кампании")

[budget](#)

[start_date](#) = models.DateTimeField(default=timezone.now,
verbose_name="Дата начала")

[end_date](#) = models.DateTimeField(default=timezone.now,
verbose_name="Дата окончания")

[status](#) = models.CharField(max_length=20,
choices=[STATUS_CHOICES](#), default='draft',
verbose_name="Статус")

[target_geolocation](#)

[target_platform](#)

[target_game_version](#)

```
is_ab_test = models.BooleanField(default=False, verbose_name="A/  
B тест")
```

```
created_by = models.ForeignKey(User, on_delete=models.CASCADE,  
verbose_name="Создатель")
```

```
created_at = models.DateTimeField(auto_now_add=True)
```

Detailed Description

Definition at line [34](#) of file [models.py](#).

Member Function Documentation

◆ `__str__()`

`bannerflow_app.models.Campaign.__str__(self)`

Definition at line [106](#) of file [models.py](#).

```
106 def __str__(self):  
107     return self.name  
108
```

◆ `activate()`

`bannerflow_app.models.Campaign.activate(self)`

Активировать кампанию

Definition at line [78](#) of file [models.py](#).

```
78 def activate(self):  
79     """Активировать кампанию"""  
80     self.status = 'active'  
81     self.save()  
82     return f"Кампания '{self.name}' активирована"  
83
```

Here is the call graph for this function:

◆ **pause()**

`bannerflow_app.models.Campaign.pause (self)`

Приостановить кампанию

Definition at line [84](#) of file [models.py](#).

```
84 def pause(self):
85 """Приостановить кампанию"""
86 self.status = 'paused'
87 self.save()
88 return f"Кампания '{self.name}' приостановлена"
89
```

Here is the call graph for this function:

◆ **status_color()**

`bannerflow_app.models.Campaign.status_color (self)`

Definition at line [97](#) of file [models.py](#).

```
97 def status_color(self):
98 colors = {
99 'draft': 'secondary',
100 'active': 'success',
101 'paused': 'warning',
102 'stopped': 'danger'
103 }
104 return colors.get(self.status, 'secondary')
105
```

◆ **stop()**

`bannerflow_app.models.Campaign.stop (self)`

Остановить кампанию

Definition at line [90](#) of file [models.py](#).

```
90 def stop(self):
91 """Остановить кампанию"""
92 self.status = 'stopped'
93 self.save()
94 return f"Кампания '{self.name}' остановлена"
95
```

Here is the call graph for this function:

Member Data Documentation

◆ budget

bannerflow_app.models.Campaign.budget static

Initial value:

```
= models.DecimalField(
max_digits=10,
decimal_places=2,
validators=[MinValueValidator(0)],
verbose_name="Бюджет"
)
```

Definition at line [49](#) of file [models.py](#).

◆ created_at

bannerflow_app.models.Campaign.created_at = static
models.DateTimeField(auto_now_add=True)

Definition at line [76](#) of file [models.py](#).

◆ created_by

bannerflow_app.models.Campaign.created_by = static
models.ForeignKey(User, on_delete=models.CASCADE,
verbose_name="Создатель")

Definition at line [75](#) of file [models.py](#).

◆ end_date

bannerflow_app.models.Campaign.end_date = static
models.DateTimeField(default=timezone.now,
verbose_name="Дата окончания")

Definition at line [56](#) of file [models.py](#).

◆ is_ab_test

static

```
bannerflow_app.models.Campaign.is_ab_test =  
models.BooleanField(default=False, verbose_name="A/B тест")
```

Definition at line [74](#) of file [models.py](#).

◆ **name**

```
bannerflow_app.models.Campaign.name =  
models.CharField(max_length=255, verbose_name="Название кампании") static
```

Definition at line [48](#) of file [models.py](#).

◆ **PLATFORM_CHOICES**

```
list bannerflow_app.models.Campaign.PLATFORM_CHOICES static
```

Initial value:

```
= [  
( 'iOS', 'iOS'),  
( 'Android', 'Android'),  
( 'Both', 'iOS и Android'),  
]
```

Definition at line [42](#) of file [models.py](#).

◆ **start_date**

```
bannerflow_app.models.Campaign.start_date =  
models.DateTimeField(default=timezone.now, verbose_name="Дата начала") static
```

Definition at line [55](#) of file [models.py](#).

◆ **status**

```
bannerflow_app.models.Campaign.status =  
models.CharField(max_length=20, choices=STATUS\_CHOICES, default='draft', verbose_name="Статус") static
```

Definition at line [57](#) of file [models.py](#).

◆ STATUS_CHOICES

`list bannerflow_app.models.Campaign.STATUS_CHOICES static`

Initial value:

```
= [  
( 'draft', 'Черновик'),  
( 'active', 'Активна'),  
( 'paused', 'Приостановлена'),  
( 'stopped', 'Остановлена'),  
]
```

Definition at line [35](#) of file [models.py](#).

◆ target_game_version

`bannerflow_app.models.Campaign.target_game_version static`

Initial value:

```
= models.CharField(  
max_length=50,  
blank=True,  
verbose_name="Версия игры"  
)
```

Definition at line [69](#) of file [models.py](#).

◆ target_geolocation

`bannerflow_app.models.Campaign.target_geolocation static`

Initial value:

```
= models.JSONField(  
default=list,  
verbose_name="Геолокация",  
help_text="Список стран/регионов для таргетинга"  
)
```

Definition at line [58](#) of file [models.py](#).

◆ target_platform

`bannerflow_app.models.Campaign.target_platform static`

Initial value:

```
= models.CharField(  
max_length=10,  
choices=PLATFORM_CHOICES,
```



```
default='Both',
verbose_name="Целевая платформа"
)
```

Definition at line [63](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [Campaign](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1models_1_1Campaign-members.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.models.Campaign Member List

This is the complete list of members for [bannerflow_app.models.Campaign](#), including all inherited members.

__str__(self)	bannerflow_app.models.Campaign
activate(self)	bannerflow_app.models.Campaign
budget	bannerflow_app.models.Campaign static
created_at	bannerflow_app.models.Campaign static
created_by	bannerflow_app.models.Campaign static
end_date	bannerflow_app.models.Campaign static
is_ab_test	bannerflow_app.models.Campaign static
name	bannerflow_app.models.Campaign static
pause(self)	bannerflow_app.models.Campaign
PLATFORM_CHOICES	bannerflow_app.models.Campaign static
start_date	bannerflow_app.models.Campaign static
status	bannerflow_app.models.Campaign static
STATUS_CHOICES	bannerflow_app.models.Campaign static

```
status_color(self)      bannerflow\_app.models.Campaign  
stop(self)              bannerflow\_app.models.Campaign  
target_game_version     bannerflow\_app.models.Campaign static  
target_geolocation       bannerflow\_app.models.Campaign static  
target_platform         bannerflow\_app.models.Campaign static
```

- Generated by [doxygen](#) 1.9.8



Файл:

class**bannerflow__app_1_1models_1_1CampaignStatis**

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Static Public Attributes](#) | [List of all members](#)
bannerflow_app.models.CampaignStatistics.Meta Class Reference

Static Public Attributes

str [verbose_name](#) = "Статистика кампании"

str [verbose_name_plural](#) = "Статистика кампаний"

Detailed Description

Definition at line [166](#) of file [models.py](#).

Member Data Documentation

◆ [verbose_name](#)

str
bannerflow_app.models.CampaignStatistics.Meta.verbose_name static
= "Статистика кампании"

Definition at line [167](#) of file [models.py](#).

◆ `verbose_name_plural`

```
str
bannerflow_app.models.CampaignStatistics.Meta.verbose_name_plural static
= "Статистика кампаний"
```

Definition at line [168](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [CampaignStatistics](#)
- [Meta](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1models_1_1CampaignStatistics](#)
[members.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.models.CampaignStatistics.Meta Member List

This is the complete list of members for
[bannerflow_app.models.CampaignStatistics.Meta](#), including all inherited
members.

[verbose_name](#) [bannerflow_app.models.CampaignStatistics.Meta](#) static
[verbose_name_plural](#) [bannerflow_app.models.CampaignStatistics.Meta](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow_app_1_1models_1_1CampaignStatist

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#) | [Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow_app.models.CampaignStatistics Class Reference

Inheritance diagram for bannerflow_app.models.CampaignStatistics:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.models.CampaignStatistics:

Collaboration graph

[\[legend\]](#)

Classes

class [Meta](#)

Public Member Functions

[ctr](#) (self)

[__str__](#) (self)

Static Public Attributes

[campaign](#) = models.ForeignKey([Campaign](#),
on_delete=models.CASCADE, verbose_name="Кампания")

[date](#) = models.DateField(default=timezone.now,
verbose_name="Дата")

[impressions](#) = models.IntegerField(default=0,
verbose_name="Показы")

[clicks](#) = models.IntegerField(default=0, verbose_name="Клики")

```
conversions = models.IntegerField(default=0,  
verbose_name="Конверсии")
```

Detailed Description

Definition at line [159](#) of file [models.py](#).

Member Function Documentation

◆ `__str__()`

`bannerflow_app.models.CampaignStatistics.__str__(self)`

Definition at line [175](#) of file [models.py](#).

```
175 def __str__(self):  
176 return f"Статистика {self.campaign.name} за {self.date}"
```

◆ `ctr()`

`bannerflow_app.models.CampaignStatistics.ctr(self)`

CTR (Click-Through Rate) в процентах

Definition at line [171](#) of file [models.py](#).

```
171 def ctr(self):  
172 """CTR (Click-Through Rate) в процентах"""  
173 return round((self.clicks / self.impressions * 100), 2) if  
self.impressions > 0 else 0  
174
```

Member Data Documentation

◆ `campaign`

```
bannerflow_app.models.CampaignStatistics.campaign =  
models.ForeignKey(Campaign, on_delete=models.CASCADE,      static  
verbose_name="Кампания")
```

Definition at line [160](#) of file [models.py](#).

◆ clicks

```
bannerflow_app.models.CampaignStatistics.clicks =  
models.IntegerField(default=0, verbose_name="Клики") static
```

Definition at line [163](#) of file [models.py](#).

◆ conversions

```
bannerflow_app.models.CampaignStatistics.conversions =  
models.IntegerField(default=0, verbose_name="Конверсии") static
```

Definition at line [164](#) of file [models.py](#).

◆ date

```
bannerflow_app.models.CampaignStatistics.date =  
models.DateField(default=timezone.now, verbose_name="Дата") static
```

Definition at line [161](#) of file [models.py](#).

◆ impressions

```
bannerflow_app.models.CampaignStatistics.impressions =  
models.IntegerField(default=0, verbose_name="Показы") static
```

Definition at line [162](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [CampaignStatistics](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1models_1_1CampaignStatisticsMembers.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow__app.models.CampaignStatistics Member List

This is the complete list of members for

[bannerflow__app.models.CampaignStatistics](#), including all inherited members.

[__str__](#)(self) [bannerflow__app.models.CampaignStatistics](#)
[campaign](#) [bannerflow__app.models.CampaignStatistics](#) static
[clicks](#) [bannerflow__app.models.CampaignStatistics](#) static
[conversions](#) [bannerflow__app.models.CampaignStatistics](#) static
[ctr](#)(self) [bannerflow__app.models.CampaignStatistics](#)
[date](#) [bannerflow__app.models.CampaignStatistics](#) static
[impressions](#) [bannerflow__app.models.CampaignStatistics](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1models_1_1GameData_1_1MetaClassReference.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

bannerflow__app.models.GameData.Meta Class Reference

Static Public Attributes

str [verbose_name](#) = "Данные игры"

```
str verbose\_name\_plural = "Данные игр"
```

Detailed Description

Definition at line [224](#) of file [models.py](#).

Member Data Documentation

◆ [verbose_name](#)

```
str bannerflow_app.models.GameData.Meta.verbose_name = static  
"Данные игры"
```

Definition at line [225](#) of file [models.py](#).

◆ [verbose_name_plural](#)

```
str bannerflow_app.models.GameData.Meta.verbose_name_plural static  
= "Данные игр"
```

Definition at line [226](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [GameData](#)
- [Meta](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1models_1_1GameData_1_1Members.html](#)

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow_app.models.GameData.Meta Member List

This is the complete list of members for

[bannerflow_app.models.GameData.Meta](#), including all inherited members.

[verbose_name](#) [bannerflow_app.models.GameData.Meta](#) static

[verbose_name_plural](#) [bannerflow_app.models.GameData.Meta](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1models_1_1GameData.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#) | [Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow_app.models.GameData Class Reference

Inheritance diagram for bannerflow_app.models.GameData:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.models.GameData:

Collaboration graph

[\[legend\]](#)

Classes

class [Meta](#)

Public Member Functions

[__str__](#) (self)

Static Public Attributes

list [GAME_TYPES](#)

```
game\_name = models.CharField(max_length=100,  
verbose_name="Название игры")
```

```
game\_type = models.CharField(max_length=20,  
choices=GAME\_TYPES, default='custom', verbose_name="Тип  
игры")
```

```
player\_name = models.CharField(max_length=100,  
verbose_name="Имя игрока")
```

```
score = models.IntegerField(default=0, verbose_name="Счет")
```

```
level = models.IntegerField(default=1, verbose_name="Уровень")
```

```
play\_time = models.IntegerField(default=0, verbose_name="Время  
игры (минуты)")
```

```
achievements = models.JSONField(default=list,  
verbose_name="Достижения")
```

```
data\_file = models.FileField(upload_to='game_data/',  
verbose_name="Файл данных игры", help_text="JSON или CSV  
файл")
```

```
imported\_at = models.DateTimeField(auto_now_add=True)
```

Detailed Description

Данные из игры для генерации баннеров

Definition at line [204](#) of file [models.py](#).

Member Function Documentation

◆ [__str__\(\)](#)

```
bannerflow_app.models.GameData.__str__( self )
```

Definition at line [228](#) of file [models.py](#).

```
228 def __str__(self):
229     return f"{self.game_name}: {self.player_name} (Ур. {self.level})"
230
```

Member Data Documentation

◆ [achievements](#)

```
bannerflow_app.models.GameData.achievements =
models.JSONField(default=list, verbose_name="Достижения")    static
```

Definition at line [220](#) of file [models.py](#).

◆ [data_file](#)

```
bannerflow_app.models.GameData.data_file =
models.FileField(upload_to='game_data/', verbose_name="Файл
данных игры", help_text="JSON или CSV файл")    static
```

Definition at line [221](#) of file [models.py](#).

◆ [game_name](#)

```
bannerflow_app.models.GameData.game_name =
models.CharField(max_length=100, verbose_name="Название
игры")    static
```

Definition at line [214](#) of file [models.py](#).

◆ [game_type](#)

```
bannerflow_app.models.GameData.game_type =
models.CharField(max_length=20, choices=GAME\_TYPES,
default='custom', verbose_name="Тип игры")    static
```

Definition at line [215](#) of file [models.py](#).

◆ **GAME_TYPES**

`list bannerflow_app.models.GameData.GAME_TYPES` static

Initial value:

```
= [  
( 'platformer', 'Платформер'),  
( 'rpg', 'RPG'),  
( 'shooter', 'Шутер'),  
( 'strategy', 'Стратегия'),  
( 'custom', 'Другая'),  
]
```

Definition at line [206](#) of file [models.py](#).

◆ **imported_at**

`bannerflow_app.models.GameData.imported_at =`
`models.DateTimeField(auto_now_add=True)` static

Definition at line [222](#) of file [models.py](#).

◆ **level**

`bannerflow_app.models.GameData.level =`
`models.IntegerField(default=1, verbose_name="Уровень")` static

Definition at line [218](#) of file [models.py](#).

◆ **play_time**

`bannerflow_app.models.GameData.play_time =`
`models.IntegerField(default=0, verbose_name="Время игры`
`(минуты)")` static

Definition at line [219](#) of file [models.py](#).

◆ **player_name**

`bannerflow_app.models.GameData.player_name =`
`models.CharField(max_length=100, verbose_name="Имя`
`игрока")` static

Definition at line [216](#) of file [models.py](#).

◆ **score**

```
bannerflow_app.models.GameData.score =  
models.IntegerField(default=0, verbose_name="Счет")
```

static

Definition at line [217](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [GameData](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1models_1_1GameData-members.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.models.GameData Member List

This is the complete list of members for
[bannerflow_app.models.GameData](#), including all inherited members.

__str__	(self)	bannerflow_app.models.GameData	
achievements		bannerflow_app.models.GameData	static
data_file		bannerflow_app.models.GameData	static
game_name		bannerflow_app.models.GameData	static
game_type		bannerflow_app.models.GameData	static
GAME_TYPES		bannerflow_app.models.GameData	static
imported_at		bannerflow_app.models.GameData	static
level		bannerflow_app.models.GameData	static
play_time		bannerflow_app.models.GameData	static
player_name		bannerflow_app.models.GameData	static

[score](#) [bannerflow_app.models.GameData](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1models_1_1GeneratedBann](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Static Public Attributes](#) | [List of all members](#)

[bannerflow_app.models.GeneratedBanner.Meta](#) Class Reference

Static Public Attributes

str [verbose_name](#) = "Сгенерированный баннер"

str [verbose_name_plural](#) = "Сгенерированные баннеры"

Detailed Description

Definition at line [241](#) of file [models.py](#).

Member Data Documentation

◆ [verbose_name](#)

str [bannerflow_app.models.GeneratedBanner.Meta.verbose_name](#) static
= "Сгенерированный баннер"

Definition at line [242](#) of file [models.py](#).

◆ [verbose_name_plural](#)

static

```
str
bannerflow_app.models.GeneratedBanner.Meta.verbose_name_plural
= "Сгенерированные баннеры"
```

Definition at line [243](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [GeneratedBanner](#)
- [Meta](#)
- Generated by [doxygen](#) 1.9.8



Файл:

**[classbannerflow__app_1_1models_1_1GeneratedBanner](#)
[members.html](#)**

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow_app.models.GeneratedBanner.Meta Member List

This is the complete list of members for

[bannerflow_app.models.GeneratedBanner.Meta](#), including all inherited members.

[verbose_name](#) [bannerflow_app.models.GeneratedBanner.Meta](#) static
[verbose_name_plural](#) [bannerflow_app.models.GeneratedBanner.Meta](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1models_1_1GeneratedBann

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#) | [Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow_app.models.GeneratedBanner Class Reference

Inheritance diagram for bannerflow_app.models.GeneratedBanner:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.models.GeneratedBanner:

Collaboration graph

[\[legend\]](#)

Classes

class [Meta](#)

Public Member Functions

[__str__](#) (self)

Static Public Attributes

[name](#) = models.CharField(max_length=100, verbose_name="Название баннера")

[template](#) = models.ForeignKey([BannerTemplate](#), on_delete=models.CASCADE, verbose_name="Шаблон")

[game_data](#) = models.ForeignKey([GameData](#), on_delete=models.CASCADE, verbose_name="Данные игры")

[html_content](#) = models.TextField(verbose_name="HTML содержимое")

[godot_export](#) = models.FileField(upload_to='exports/godot/', blank=True, verbose_name="Экспорт для Godot")


```
preview\_url = models.URLField(blank=True, verbose_name="URL  
предпросмотра")
```

```
created\_at = models.DateTimeField(auto_now_add=True)
```

Detailed Description

Сгенерированный интерактивный баннер

Definition at line [231](#) of file [models.py](#).

Member Function Documentation

◆ [__str__\(\)](#)

bannerflow_app.models.GeneratedBanner.__str__(*self*)

Definition at line [245](#) of file [models.py](#).

```
245 def __str__(self):  
246     return self.name
```

Member Data Documentation

◆ [created_at](#)

```
bannerflow_app.models.GeneratedBanner.created_at =  
models.DateTimeField(auto_now_add=True) static
```

Definition at line [239](#) of file [models.py](#).

◆ [game_data](#)

```
bannerflow_app.models.GeneratedBanner.game_data =  
models.ForeignKey(GameData, on_delete=models.CASCADE,  
verbose_name="Данные игры") static
```

Definition at line [235](#) of file [models.py](#).

◆ godot_export

```
bannerflow_app.models.GeneratedBanner.godot_export =  
models.FileField(upload_to='exports/godot/', blank=True, verbose_name="Экспорт для Godot")
```

static

Definition at line [237](#) of file [models.py](#).

◆ html_content

```
bannerflow_app.models.GeneratedBanner.html_content =  
models.TextField(verbose_name="HTML содержимое")
```

static

Definition at line [236](#) of file [models.py](#).

◆ name

```
bannerflow_app.models.GeneratedBanner.name =  
models.CharField(max_length=100, verbose_name="Название баннера")
```

static

Definition at line [233](#) of file [models.py](#).

◆ preview_url

```
bannerflow_app.models.GeneratedBanner.preview_url =  
models.URLField(blank=True, verbose_name="URL предпросмотра")
```

static

Definition at line [238](#) of file [models.py](#).

◆ template

```
bannerflow_app.models.GeneratedBanner.template =  
models.ForeignKey(BannerTemplate, on_delete=models.CASCADE, verbose_name="Шаблон")
```

static

Definition at line [234](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [GeneratedBanner](#)
- Generated by [doxygen](#) 1.9.8



Файл:

**[classbannerflow_app_1_1models_1_1GeneratedBanner](#)
[members.html](#)**

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.models.GeneratedBanner Member List

This is the complete list of members for
[bannerflow_app.models.GeneratedBanner](#), including all inherited
members.

__str__	(self)	bannerflow_app.models.GeneratedBanner	
created_at		bannerflow_app.models.GeneratedBanner	static
game_data		bannerflow_app.models.GeneratedBanner	static
godot_export		bannerflow_app.models.GeneratedBanner	static
html_content		bannerflow_app.models.GeneratedBanner	static
name		bannerflow_app.models.GeneratedBanner	static
preview_url		bannerflow_app.models.GeneratedBanner	static
template		bannerflow_app.models.GeneratedBanner	static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1models_1_1UserProfile.htm

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow_app.models.UserProfile Class Reference

Inheritance diagram for bannerflow_app.models.UserProfile:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.models.UserProfile:

Collaboration graph

[\[legend\]](#)

Public Member Functions

[__str__](#) (self)

Static Public Attributes

list [ROLE_CHOICES](#)

[user](#) = models.OneToOneField(User, on_delete=models.CASCADE)

[role](#) = models.CharField(max_length=20, choices=[ROLE_CHOICES](#), default='marketer')

[phone](#) = models.CharField(max_length=20, blank=True)

[created_at](#) = models.DateTimeField(auto_now_add=True)

Detailed Description

Definition at line [19](#) of file [models.py](#).

Member Function Documentation

◆ `__str__()`

```
bannerflow_app.models.UserProfile.__str__( self)
```

Definition at line [31](#) of file [models.py](#).

```
31 def __str__(self):
32 return f'{self.user.username} ({self.get_role_display()})'
33
```

Member Data Documentation

◆ `created_at`

```
bannerflow_app.models.UserProfile.created_at =
models.DateTimeField(auto_now_add=True) static
```

Definition at line [29](#) of file [models.py](#).

◆ `phone`

```
bannerflow_app.models.UserProfile.phone =
models.CharField(max_length=20, blank=True) static
```

Definition at line [28](#) of file [models.py](#).

◆ `role`

```
bannerflow_app.models.UserProfile.role =
models.CharField(max_length=20, choices=ROLE\_CHOICES,
default='marketer') static
```

Definition at line [27](#) of file [models.py](#).

◆ `ROLE_CHOICES`

```
list bannerflow_app.models.UserProfile.ROLE_CHOICES static
```

Initial value:

```
= [
('marketer', 'Маркетолог'),
('analyst', 'Аналитик'),
('admin', 'Администратор'),
```

]

Definition at line [20](#) of file [models.py](#).

◆ **user**

```
bannerflow_app.models.UserProfile.user =  
models.OneToOneField(User, on_delete=models.CASCADE) static
```

Definition at line [26](#) of file [models.py](#).

The documentation for this class was generated from the following file:

- [models.py](#)
- [bannerflow_app](#)
- [models](#)
- [UserProfile](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow_app_1_1models_1_1UserProfile-members.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.models.UserProfile Member List

This is the complete list of members for
[bannerflow_app.models.UserProfile](#), including all inherited members.

__str__ (self)	bannerflow_app.models.UserProfile
created_at	bannerflow_app.models.UserProfile static
phone	bannerflow_app.models.UserProfile static
role	bannerflow_app.models.UserProfile static
ROLE_CHOICES	bannerflow_app.models.UserProfile static

[user](#) [bannerflow_app.models.UserProfile](#) static

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1models_documented_1_1B](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow_app.models_documented.Banner Class Reference

Advertising Banner Model. [More...](#)

Inheritance diagram for bannerflow_app.models_documented.Banner:
Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.models_documented.Banner:
Collaboration graph

[\[legend\]](#)

Public Member Functions

[__str__](#) (self)

String representation of banner.

Static Public Attributes

[campaign](#) = models.ForeignKey([Campaign](#),
on_delete=models.CASCADE)

[title](#) = models.CharField(max_length=255)

[image_url](#) = models.URLField()

[is_active](#) = models.BooleanField(default=True)

```
created\_at = models.DateTimeField(auto_now_add=True)
```

Detailed Description

Advertising Banner Model.

Represents an advertising banner linked to a campaign. Contains media content and display settings.

Definition at line [77](#) of file [models_documented.py](#).

Member Function Documentation

◆ `__str__()`

```
bannerflow_app.models_documented.Banner.__str__( self )
```

String representation of banner.

Returns
 str Banner title

Definition at line [100](#) of file [models_documented.py](#).

```
100 def __str__(self):
101     """!
102     @brief String representation of banner
103
104     @return str Banner title
105     """
106     return f"Banner: {self.title}"
```

Member Data Documentation

◆ `campaign`

```
bannerflow_app.models_documented.Banner.campaign =  
models.ForeignKey(Campaign, on_delete=models.CASCADE) static
```

Definition at line [85](#) of file [models_documented.py](#).

◆ **created_at**

```
bannerflow_app.models_documented.Banner.created_at =  
models.DateTimeField(auto_now_add=True) static
```

Definition at line [97](#) of file [models_documented.py](#).

◆ **image_url**

```
bannerflow_app.models_documented.Banner.image_url =  
models.URLField() static
```

Definition at line [91](#) of file [models_documented.py](#).

◆ **is_active**

```
bannerflow_app.models_documented.Banner.is_active =  
models.BooleanField(default=True) static
```

Definition at line [94](#) of file [models_documented.py](#).

◆ **title**

```
bannerflow_app.models_documented.Banner.title =  
models.CharField(max_length=255) static
```

Definition at line [88](#) of file [models_documented.py](#).

The documentation for this class was generated from the following file:

- [models_documented.py](#)
- [bannerflow_app](#)
- [models_documented](#)
- [Banner](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1models__documented_1_1BannerMembers.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow__app.models__documented.Banner Member List

This is the complete list of members for

[bannerflow__app.models__documented.Banner](#), including all inherited members.

<code>__str__</code>	(self) bannerflow__app.models__documented.Banner	
<code>campaign</code>	bannerflow__app.models__documented.Banner	static
<code>created_at</code>	bannerflow__app.models__documented.Banner	static
<code>image_url</code>	bannerflow__app.models__documented.Banner	static
<code>is_active</code>	bannerflow__app.models__documented.Banner	static
<code>title</code>	bannerflow__app.models__documented.Banner	static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1models__documented_1_1Campaign.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow__app.models__documented.Campaign Class Reference

Advertising Campaign Model. [More...](#)

Inheritance diagram for bannerflow__app.models__documented.Campaign:
Inheritance graph

[\[legend\]](#)

Collaboration diagram for
bannerflow_app.models_documented.Campaign:
Collaboration graph

[\[legend\]](#)

Public Member Functions

[activate](#) (self)

Activate the campaign.

[deactivate](#) (self)

Deactivate the campaign.

[__str__](#) (self)

String representation of campaign.

Static Public Attributes

[name](#) = models.CharField(max_length=255)

[budget](#) = models.DecimalField(max_digits=10, decimal_places=2)

[is_active](#) = models.BooleanField(default=False)

[start_date](#) = models.DateTimeField(null=True, blank=True)

[end_date](#) = models.DateTimeField(null=True, blank=True)

[target_platform](#)

Detailed Description

Advertising Campaign Model.

Represents an advertising campaign with budget settings, time frames, and relationship with banners. Campaign can be active or inactive.

See also

Banner

Definition at line [10](#) of file [models_documented.py](#).

Member Function Documentation

◆ `__str__()`

`bannerflow_app.models_documented.Campaign.__str__(self)`

String representation of campaign.

Returns

str Campaign name and status

Definition at line [68](#) of file [models_documented.py](#).

```
68 def __str__(self):
69 """!
70 @brief String representation of campaign
71
72 @return str Campaign name and status
73 """
74 status = "Active" if self.is_active else "Inactive"
75 return f"{self.name} ({status})"
76
```

◆ `activate()`

`bannerflow_app.models_documented.Campaign.activate(self)`

Activate the campaign.

Sets the `is_active` flag to True and saves the object to the database.
Campaign starts showing ads after activation.

Returns

str Success message

Definition at line [42](#) of file [models_documented.py](#).

```
42 def activate(self):
43 """!
44 @brief Activate the campaign
45
46 Sets the is_active flag to True and saves the object to the database.
47 Campaign starts showing ads after activation.
48
49 @return str Success message
50 """
51 self.is_active = True
52 self.save()
53 return f"Campaign '{self.name}' activated"
```

◆ deactivate()

`bannerflow_app.models_documented.Campaign.deactivate (self)`

Deactivate the campaign.

Sets the `is_active` flag to `False` and saves the object to the database. Campaign stops showing ads after deactivation.

Returns
str Success message

Definition at line 55 of file [models_documented.py](#).

```

55 def deactivate(self):
56     """
57     @brief Deactivate the campaign
58
59     Sets the is_active flag to False and saves the object to the database.
60     Campaign stops showing ads after deactivation.
61
62     @return str Success message
63     """
64     self.is_active = False
65     self.save()
66     return f"Campaign '{self.name}' deactivated"
67

```

Member Data Documentation

◆ budget

`bannerflow_app.models_documented.Campaign.budget =`
`models.DecimalField(max_digits=10, decimal_places=2)` static

Definition at line 23 of file [models_documented.py](#).

◆ end_date

`bannerflow_app.models_documented.Campaign.end_date =`
`models.DateTimeField(null=True, blank=True)` static

Definition at line 32 of file [models_documented.py](#).

◆ is_active

```
bannerflow_app.models_documented.Campaign.is_active =  
models.BooleanField(default=False) static
```

Definition at line [26](#) of file [models_documented.py](#).

◆ name

```
bannerflow_app.models_documented.Campaign.name =  
models.CharField(max_length=255) static
```

Definition at line [20](#) of file [models_documented.py](#).

◆ start_date

```
bannerflow_app.models_documented.Campaign.start_date =  
models.DateTimeField(null=True, blank=True) static
```

Definition at line [29](#) of file [models_documented.py](#).

◆ target_platform

```
bannerflow_app.models_documented.Campaign.target_platform static
```

Initial value:

```
= models.CharField(  
max_length=10,  
choices=[('iOS', 'iOS'), ('Android', 'Android'), ('Both', 'Both')],  
default='Both'  
)
```

Definition at line [35](#) of file [models_documented.py](#).

The documentation for this class was generated from the following file:

- [models_documented.py](#)
- [bannerflow_app](#)
- [models_documented](#)
- [Campaign](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow__app_1_1models__documented_1_1CampaignMembers.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow_app.models_documented.Campaign Member List

This is the complete list of members for

[bannerflow_app.models_documented.Campaign](#), including all inherited members.

__str__(self)	bannerflow_app.models_documented.Campaign
activate(self)	bannerflow_app.models_documented.Campaign
budget	bannerflow_app.models_documented.Campaign static
deactivate(self)	bannerflow_app.models_documented.Campaign
end_date	bannerflow_app.models_documented.Campaign static
is_active	bannerflow_app.models_documented.Campaign static
name	bannerflow_app.models_documented.Campaign static
start_date	bannerflow_app.models_documented.Campaign static
target_platform	bannerflow_app.models_documented.Campaign static

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Файл:

classbannerflow__app_1_1models__with__doxygen_1_1Banner.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow_app.models_with_doxygen.Banner Class Reference

Модель рекламного баннера [More...](#)

Inheritance diagram for bannerflow_app.models_with_doxygen.Banner:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.models_with_doxygen.Banner:

Collaboration graph

[\[legend\]](#)

Public Member Functions

[__str__](#) (self)

Строковое представление баннера

Static Public Attributes

[campaign](#) = models.ForeignKey([Campaign](#),
on_delete=models.CASCADE)

[title](#) = models.CharField(max_length=255)

[image_url](#) = models.URLField()

[is_active](#) = models.BooleanField(default=True)

[created_at](#) = models.DateTimeField(auto_now_add=True)

Detailed Description

Модель рекламного баннера

Представляет собой рекламный баннер, связанный с кампанией.
Содержит медиа-контент и настройки отображения.

Definition at line [74](#) of file [models_with_doxygen.py](#).

Member Function Documentation

◆ [__str__](#)()

bannerflow_app.models_with_doxygen.Banner.[__str__](#) (*self*)

Строковое представление баннера

Returns

str Название баннера

Definition at line [97](#) of file [models_with_doxygen.py](#).

```
97 def __str__(self):
98 """!
99 @brief Строковое представление баннера
100
101 @return str Название баннера
102 """
103 return f"Баннер: {self.title}"
104
```

Member Data Documentation

◆ [campaign](#)

bannerflow_app.models_with_doxygen.Banner.campaign =
models.ForeignKey([Campaign](#), on_delete=models.CASCADE) static

Definition at line [82](#) of file [models_with_doxygen.py](#).

◆ [created_at](#)

bannerflow_app.models_with_doxygen.Banner.created_at =
models.DateTimeField(auto_now_add=True) static

Definition at line [94](#) of file [models_with_doxygen.py](#).

◆ [image_url](#)

bannerflow_app.models_with_doxygen.Banner.image_url =
models.URLField() static

Definition at line [88](#) of file [models_with_doxygen.py](#).

◆ [is_active](#)

bannerflow_app.models_with_doxygen.Banner.is_active =
models.BooleanField(default=True) static

Definition at line [91](#) of file [models_with_doxygen.py](#).

◆ title

```
bannerflow_app.models_with_doxygen.Banner.title =  
models.CharField(max_length=255)static
```

Definition at line [85](#) of file [models_with_doxygen.py](#).

The documentation for this class was generated from the following file:

- [models_with_doxygen.py](#)
- [bannerflow_app](#)
- [models_with_doxygen](#)
- [Banner](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow_app_1_1models_with_doxygen_1_1members.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
bannerflow_app.models_with_doxygen.Banner Member List

This is the complete list of members for [bannerflow_app.models_with_doxygen.Banner](#), including all inherited members.

__str__	(self) bannerflow_app.models_with_doxygen.Banner	
campaign	bannerflow_app.models_with_doxygen.Banner	static
created_at	bannerflow_app.models_with_doxygen.Banner	static
image_url	bannerflow_app.models_with_doxygen.Banner	static
is_active	bannerflow_app.models_with_doxygen.Banner	static
title	bannerflow_app.models_with_doxygen.Banner	static

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow_app_1_1models_with_doxygen_1_1

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Public Member Functions](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow_app.models_with_doxygen.Campaign Class Reference

Модель рекламной кампании [More...](#)

Inheritance diagram for bannerflow_app.models_with_doxygen.Campaign:
Inheritance graph

[\[legend\]](#)

Collaboration diagram for
bannerflow_app.models_with_doxygen.Campaign:
Collaboration graph

[\[legend\]](#)

Public Member Functions

[activate](#) (self)

Активировать кампанию

[deactivate](#) (self)

Деактивировать кампанию

[get_status](#) (self)

Получить текстовый статус кампании

Static Public Attributes

[name](#) = models.CharField(max_length=255)

[budget](#) = models.DecimalField(max_digits=10, decimal_places=2)

[is_active](#) = models.BooleanField(default=False)

[start_date](#) = models.DateTimeField(null=True, blank=True)

[end_date](#) = models.DateTimeField(null=True, blank=True)

[target_platform](#)

Detailed Description

Модель рекламной кампании

Представляет собой рекламную кампанию с настройками бюджета, временными рамками и связью с баннерами. Кампания может быть активной или неактивной.

Definition at line [10](#) of file [models_with_doxygen.py](#).

Member Function Documentation

◆ [activate\(\)](#)

`bannerflow_app.models_with_doxygen.Campaign.activate (self)`

Активировать кампанию

Устанавливает флаг `is_active` в `True` и сохраняет объект в базе данных. Кампания начинает показывать рекламу после активации.

Returns

str Сообщение об успешной активации

Definition at line [40](#) of file [models_with_doxygen.py](#).

```
40 def activate(self):
41     """!
42     @brief Активировать кампанию
43
44     Устанавливает флаг is_active в True и сохраняет объект в базе
данных.
45     Кампания начинает показывать рекламу после активации.
46
47     @return str Сообщение об успешной активации
48     """
49     self.is_active = True
50     self.save()
51     return f"Кампания '{self.name}' активирована"
52
```

◆ deactivate()

`bannerflow_app.models_with_doxygen.Campaign.deactivate (self)`

Деактивировать кампанию

Устанавливает флаг `is_active` в `False` и сохраняет объект в базе данных. Кампания прекращает показ рекламы после деактивации.

Returns

str Сообщение об успешной деактивации

Definition at line [53](#) of file [models_with_doxygen.py](#).

```
53 def deactivate(self):
54 """!
55 @brief Деактивировать кампанию
56
57 Устанавливает флаг is_active в False и сохраняет объект в базе
данных.
58 Кампания прекращает показ рекламы после деактивации.
59
60 @return str Сообщение об успешной деактивации
61 """
62 self.is_active = False
63 self.save()
64 return f"Кампания '{self.name}' деактивирована"
65
```

◆ get_status()

`bannerflow_app.models_with_doxygen.Campaign.get_status (self)`

Получить текстовый статус кампании

Returns

str Текстовое представление статуса кампании

Definition at line [66](#) of file [models_with_doxygen.py](#).

```
66 def get_status(self):
67 """!
68 @brief Получить текстовый статус кампании
69
70 @return str Текстовое представление статуса кампании
71 """
72 return "Активна" if self.is_active else "Неактивна"
73
```

Member Data Documentation

◆ budget

bannerflow_app.models_with_doxygen.Campaign.budget =
models.DecimalField(max_digits=10, decimal_places=2) static

Definition at line [21](#) of file [models_with_doxygen.py](#).

◆ end_date

bannerflow_app.models_with_doxygen.Campaign.end_date =
models.DateTimeField(null=True, blank=True) static

Definition at line [30](#) of file [models_with_doxygen.py](#).

◆ is_active

bannerflow_app.models_with_doxygen.Campaign.is_active =
models.BooleanField(default=False) static

Definition at line [24](#) of file [models_with_doxygen.py](#).

◆ name

bannerflow_app.models_with_doxygen.Campaign.name =
models.CharField(max_length=255) static

Definition at line [18](#) of file [models_with_doxygen.py](#).

◆ start_date

bannerflow_app.models_with_doxygen.Campaign.start_date =
models.DateTimeField(null=True, blank=True) static

Definition at line [27](#) of file [models_with_doxygen.py](#).

◆ target_platform

bannerflow_app.models_with_doxygen.Campaign.target_platform static

Initial value:

```
= models.CharField(  
max_length=10,  
choices=[('iOS', 'iOS'), ('Android', 'Android'), ('Both', 'Both')],  
default='Both'  
)
```

Definition at line [33](#) of file [models_with_doxygen.py](#).

The documentation for this class was generated from the following file:

- [models_with_doxygen.py](#)
- [bannerflow_app](#)
- [models_with_doxygen](#)
- [Campaign](#)
- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow_app_1_1models_with_doxygen_1_1members.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

bannerflow_app.models_with_doxygen.Campaign Member List

This is the complete list of members for

[bannerflow_app.models_with_doxygen.Campaign](#), including all inherited members.

activate (self)	bannerflow_app.models_with_doxygen.Campaign
budget	bannerflow_app.models_with_doxygen.Campaign static
deactivate (self)	bannerflow_app.models_with_doxygen.Campaign
end_date	bannerflow_app.models_with_doxygen.Campaign static
get_status (self)	bannerflow_app.models_with_doxygen.Campaign
is_active	bannerflow_app.models_with_doxygen.Campaign static

```
name          bannerflow_app.models_with_doxygen.Campaign static
start_date    bannerflow_app.models_with_doxygen.Campaign static
target_platform bannerflow_app.models_with_doxygen.Campaign static
```

- Generated by [doxygen](#) 1.9.8



Файл:

classbannerflow_app_1_1models_with_doxygen_1_1

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Static Public Attributes](#) | [List of all members](#)
bannerflow_app.models_with_doxygen.CampaignStatistics.Meta Class
Reference

Мета-класс для настроек модели [More...](#)

Static Public Attributes

list [unique_together](#) = ['[campaign](#)', '[date](#)']

Detailed Description

Мета-класс для настроек модели

Definition at line [127](#) of file [models_with_doxygen.py](#).

Member Data Documentation

◆ [unique_together](#)

list
bannerflow_app.models_with_doxygen.CampaignStatistics.Meta.unique_together sta
= ['[campaign](#)', '[date](#)']

Definition at line [131](#) of file [models_with_doxygen.py](#).

The documentation for this class was generated from the following file:

- [models_with_doxygen.py](#)
- [bannerflow_app](#)
- [models_with_doxygen](#)
- [CampaignStatistics](#)
- [Meta](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1models_with_doxygen_1_1members.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[bannerflow_app.models_with_doxygen.CampaignStatistics.Meta](#) Member List

This is the complete list of members for [bannerflow_app.models_with_doxygen.CampaignStatistics.Meta](#), including all inherited members.

[unique_together bannerflow_app.models_with_doxygen.CampaignStatistics.Meta](#) stati

- Generated by [doxygen](#) 1.9.8



Файл:

[classbannerflow_app_1_1models_with_doxygen_1_1](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#) | [Static Public Attributes](#) | [List of all members](#)

bannerflow_app.models_with_doxygen.CampaignStatistics Class
Reference

Модель статистики кампании [More...](#)

Inheritance diagram for
bannerflow_app.models_with_doxygen.CampaignStatistics:
Inheritance graph

[\[legend\]](#)

Collaboration diagram for
bannerflow_app.models_with_doxygen.CampaignStatistics:
Collaboration graph

[\[legend\]](#)

Classes

class [Meta](#)

Мета-класс для настроек модели [More...](#)

Static Public Attributes

[campaign](#) = models.ForeignKey([Campaign](#),
on_delete=models.CASCADE)

[date](#) = models.DateField()

[impressions](#) = models.IntegerField(default=0)

[clicks](#) = models.IntegerField(default=0)

[conversions](#) = models.IntegerField(default=0)

Detailed Description

Модель статистики кампании

Содержит статистические данные по кампании: показы, клики, конверсии.

Definition at line [105](#) of file [models_with_doxygen.py](#).

Member Data Documentation

◆ campaign

```
bannerflow_app.models_with_doxygen.CampaignStatistics.campaign = models.ForeignKey(Campaign, on_delete=models.CASCADE) static
```

Definition at line [112](#) of file [models_with_doxygen.py](#).

◆ clicks

```
bannerflow_app.models_with_doxygen.CampaignStatistics.clicks = models.IntegerField(default=0) static
```

Definition at line [121](#) of file [models_with_doxygen.py](#).

◆ conversions

```
bannerflow_app.models_with_doxygen.CampaignStatistics.conversions = models.IntegerField(default=0) static
```

Definition at line [124](#) of file [models_with_doxygen.py](#).

◆ date

```
bannerflow_app.models_with_doxygen.CampaignStatistics.date = models.DateField() static
```

Definition at line [115](#) of file [models_with_doxygen.py](#).

◆ impressions

```
bannerflow_app.models_with_doxygen.CampaignStatistics.impressions = models.IntegerField(default=0) static
```

Definition at line [118](#) of file [models_with_doxygen.py](#).

The documentation for this class was generated from the following file:

- [models_with_doxygen.py](#)
- [bannerflow_app](#)
- [models_with_doxygen](#)
- [CampaignStatistics](#)
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Файл:

[classbannerflow_app_1_1models_with_doxygen_1_1members.html](#)

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bannerflow_app.models_with_doxygen.CampaignStatistics Member List

This is the complete list of members for

[bannerflow_app.models_with_doxygen.CampaignStatistics](#), including all inherited members.

campaign	bannerflow_app.models_with_doxygen.CampaignStatistics	static
clicks	bannerflow_app.models_with_doxygen.CampaignStatistics	static
conversions	bannerflow_app.models_with_doxygen.CampaignStatistics	static
date	bannerflow_app.models_with_doxygen.CampaignStatistics	static
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[classbannerflow_app_1_1services_1_1BannerService](#)

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[Static Public Member Functions](#) | [List of all members](#)

bannerflow_app.services.BannerService Class Reference

Service for banner-related operations. [More...](#)

Static Public Member Functions

[get_active_banners](#) (platform=None)

Get active banners with platform filtering.

[check_budget_and_notify](#) (campaign)

Check campaign budget and send notifications.

Detailed Description

Service for banner-related operations.

Provides business logic for banner management and operations.

Definition at line [11](#) of file [services.py](#).

Member Function Documentation

◆ [check_budget_and_notify\(\)](#)

bannerflow_app.services.BannerService.check_budget_and_notify (*campaign*) static method

Check campaign budget and send notifications.

Verifies if campaign budget is exhausted and sends email notifications.

Parameters

campaign Campaign object to check

Returns

bool True if budget is exceeded, False otherwise

Definition at line [37](#) of file [services.py](#).

```
37 def check_budget_and_notify(campaign):
```

```
38 """!
```

```
39 @brief Check campaign budget and send notifications
```

```

40
41 Verifies if campaign budget is exhausted and sends email notifications.
42
43 @param campaign Campaign object to check
44 @return bool True if budget is exceeded, False otherwise
45 """
46 # Placeholder implementation
47 budget_exceeded = False
48
49 if budget_exceeded:
50 send_mail(
51 'Campaign Budget Exceeded',
52 f'Campaign "{campaign.name}" has exceeded its budget.',
53 'noreply@bannerflow.com',
54 ['marketer@company.com'],
55 fail_silently=False,
56 )
57
58 return budget_exceeded

```

◆ **get_active_banners()**

`bannerflow_app.services.BannerService.get_active_banners (platform = None)` static

Get active banners with platform filtering.

Retrieves active banners with optional platform filtering.

Parameters

platform Target platform: 'iOS', 'Android', or None for all

Returns

QuerySet of active Banner objects

Definition at line [19](#) of file [services.py](#).

```

19 def get_active_banners(platform=None):
20 """!
21 @brief Get active banners with platform filtering
22
23 Retrieves active banners with optional platform filtering.
24
25 @param platform Target platform: 'iOS', 'Android', or None for all
26 @return QuerySet of active Banner objects
27 """
28 campaigns = Campaign.objects.filter(is_active=True)
29
30 if platform and platform in ['iOS', 'Android']:
31 campaigns = campaigns.filter(target_platform__in=[platform, 'Both'])
32

```

```
33 banners = Banner.objects.filter(campaign__in=campaigns)
34 return banners
35
```

The documentation for this class was generated from the following file:

- [services.py](#)
- [bannerflow_app](#)
- [services](#)
- [BannerService](#)
- Generated by [doxygen](#) 1.9.8



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[members.html](#)

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This is the complete list of members for
[bannerflow_app.services.BannerService](#), including all inherited members.

[check_budget_and_notify\(campaign\)](#) [bannerflow_app.services.BannerService](#) static
[get_active_banners\(platform=None\)](#) [bannerflow_app.services.BannerService](#) static

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bannerflow_app.tests.TestAPIAndServices Class Reference

Inheritance diagram for bannerflow_app.tests.TestAPIAndServices:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.tests.TestAPIAndServices:

Collaboration graph

[\[legend\]](#)

Public Member Functions

[setUp](#) (self)

[test_api_functionality](#) (self)

Public Attributes

[client](#)

[campaign](#)

[banner](#)

Detailed Description

Definition at line [100](#) of file [tests.py](#).

Member Function Documentation

◆ [setUp\(\)](#)

bannerflow_app.tests.TestAPIAndServices.setUp (*self*)

Definition at line [101](#) of file [tests.py](#).

```
101 def setUp(self):
102     self.client = Client()
103     self.campaign = Campaign.objects.create(
104         name="API Test Campaign",
105         budget=1000.00,
```



```
106 is_active=True,  
107 )  
108 self.banner = Banner.objects.create(  
109 campaign=self.campaign,  
110 title="API Test Banner",  
111 image_url="http://example.com/api_banner.png"  
112 )  
113
```

◆ **test_api_functionality()**

`bannerflow_app.tests.TestAPIAndServices.test_api_functionality (self)`

Тестирование API endpoints

Definition at line [114](#) of file [tests.py](#).

```
114 def test_api_functionality(self):  
115 """Тестирование API endpoints"""  
116 # Тест главной страницы  
117 response = self.client.get('/')  
118 self.assertEqual(response.status_code, 200)  
119  
120 # Тест API баннеров  
121 response = self.client.get('/api/banners/')  
122 self.assertEqual(response.status_code, 200)  
123  
124 # Тест сервисного слоя  
125 try:  
126 from .services import BannerService  
127 banners = BannerService.get_active_banners()  
128 self.assertIsNotNone(banners)  
129 except ImportError:  
130 self.skipTest("Сервис BannerService не найден")
```

Member Data Documentation

◆ **banner**

`bannerflow_app.tests.TestAPIAndServices.banner`

Definition at line [108](#) of file [tests.py](#).

◆ **campaign**

`bannerflow_app.tests.TestAPIAndServices.campaign`

Definition at line [103](#) of file [tests.py](#).

◆ client

`bannerflow_app.tests.TestAPIAndServices.client`

Definition at line [102](#) of file [tests.py](#).

The documentation for this class was generated from the following file:

- [tests.py](#)
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- [tests](#)
- [TestAPIAndServices](#)
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bannerflow_app.tests.TestAPIAndServices Member List

This is the complete list of members for [bannerflow_app.tests.TestAPIAndServices](#), including all inherited members.

banner	bannerflow_app.tests.TestAPIAndServices
campaign	bannerflow_app.tests.TestAPIAndServices
client	bannerflow_app.tests.TestAPIAndServices
setUp(self)	bannerflow_app.tests.TestAPIAndServices
test_api_functionality(self)	bannerflow_app.tests.TestAPIAndServices

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classbannerflow_app_1_1tests_1_1TestBannerModel.

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[Public Member Functions](#) | [Public Attributes](#) | [List of all members](#)

bannerflow_app.tests.TestBannerModel Class Reference

Inheritance diagram for bannerflow_app.tests.TestBannerModel:

Inheritance graph

[\[legend\]](#)

Collaboration diagram for bannerflow_app.tests.TestBannerModel:

Collaboration graph

[\[legend\]](#)

Public Member Functions

[setUp](#) (self)

[test_banner_creation_and_url_validation](#) (self)

Public Attributes

[campaign](#)

Detailed Description

Definition at line [28](#) of file [tests.py](#).

Member Function Documentation

◆ [setUp\(\)](#)

bannerflow_app.tests.TestBannerModel.setUp (self)

Definition at line [29](#) of file [tests.py](#).

```
29 def setUp(self):
30 self.campaign = Campaign.objects.create(
31 name="Banner Test Campaign",
32 budget=1000.00,
33 )
34
```

◆ test_banner_creation_and_url_validation()

bannerflow_app.tests.TestBannerModel.test_banner_creation_and_url_validation (se

Тест создания баннера и валидации URL

Definition at line [35](#) of file [tests.py](#).

```
35 def test_banner_creation_and_url_validation(self):
36 """Тест создания баннера и валидации URL"""
37 # Тест создания баннера
38 banner = Banner.objects.create(
39 campaign=self.campaign,
40 title="Test Banner",
41 image_url="http://example.com/banner.png"
42 )
43
44 self.assertEqual(banner.title, "Test Banner")
45 self.assertEqual(banner.image_url, "http://example.com/banner.png")
46 self.assertEqual(banner.campaign, self.campaign)
47 self.assertEqual(str(banner), "Баннер: Test Banner")
48
49 # Тест валидных URL (параметризованный подход)
50 valid_urls = [
51 'http://example.com/banner.png',
52 'https://example.com/banner.jpg',
53 'http://test.com/video.mp4'
54 ]
55
56 for url in valid_urls:
57 with self.subTest(url=url):
58 banner = Banner.objects.create(
59 campaign=self.campaign,
60 title="URL Test Banner",
61 image_url=url
62 )
63 self.assertEqual(banner.image_url, url)
64
```

Member Data Documentation

◆ campaign

bannerflow_app.tests.TestBannerModel.campaign

Definition at line 30 of file [tests.py](#).

The documentation for this class was generated from the following file:

- [tests.py](#)
- [bannerflow_app](#)
- [tests](#)
- [TestBannerModel](#)
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bannerflow_app.tests.TestBannerModel Member List

This is the complete list of members for
[bannerflow_app.tests.TestBannerModel](#), including all inherited members.

campaign	bannerflow_app.tests.TestBannerModel
setUp(self)	bannerflow_app.tests.TestBannerModel
test_banner_creation_and_url_validation(self)	bannerflow_app.tests.TestBannerModel

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classbannerflow__app_1_1tests_1_1TestCampaignModel

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bannerflow_app.tests.TestCampaignModel Class Reference

Inheritance diagram for bannerflow_app.tests.TestCampaignModel:

Inheritance graph

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Collaboration diagram for bannerflow_app.tests.TestCampaignModel:

Collaboration graph

[\[legend\]](#)

Public Member Functions

[test_campaign_creation_and_methods](#) (self)

Detailed Description

Definition at line [6](#) of file [tests.py](#).

Member Function Documentation

◆ [test_campaign_creation_and_methods\(\)](#)

bannerflow_app.tests.TestCampaignModel.test_campaign_creation_and_methods (self)

Тест создания кампании и ее методов

Definition at line [7](#) of file [tests.py](#).

```
7 def test_campaign_creation_and_methods(self):
8     """Тест создания кампании и ее методов"""
9     campaign = Campaign.objects.create(
10     name="Test Campaign",
11     budget=1000.00,
12     is_active=False,
13 )
14 # Проверка создания
15 self.assertEqual(campaign.name, "Test Campaign")
```

```
16 self.assertEqual(float(campaign.budget), 1000.00)
17
18 # Проверка активации
19 result = campaign.activate()
20 self.assertTrue(campaign.is_active)
21 self.assertIn("активирована", result)
22
23 # Проверка деактивации
24 result = campaign.deactivate()
25 self.assertFalse(campaign.is_active)
26 self.assertIn("деактивирована", result)
27
```

The documentation for this class was generated from the following file:

- [tests.py](#)
- [bannerflow_app](#)
- [tests](#)
- [TestCampaignModel](#)
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This is the complete list of members for
[bannerflow_app.tests.TestCampaignModel](#), including all inherited
members.

[test_campaign_creation_and_methods\(self\)](#) [bannerflow_app.tests.TestCampaignModel](#)

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bannerflow_app.tests.TestNegativeScenarios Class Reference

Inheritance diagram for bannerflow_app.tests.TestNegativeScenarios:

Inheritance graph

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Collaboration diagram for bannerflow_app.tests.TestNegativeScenarios:

Collaboration graph

[\[legend\]](#)

Public Member Functions

[test_negative_cases](#) (self)

Detailed Description

Definition at line [65](#) of file [tests.py](#).

Member Function Documentation

◆ [test_negative_cases\(\)](#)

bannerflow_app.tests.TestNegativeScenarios.test_negative_cases (*self*)

Тестирование ошибочных сценариев

Definition at line [66](#) of file [tests.py](#).

```
66 def test_negative_cases(self):
67     """Тестирование ошибочных сценариев"""
68     # Тест отрицательного бюджета
69     campaign = Campaign.objects.create(
70     name="Negative Budget Campaign",
71     budget=-100.00,
72 )
73 self.assertEqual(float(campaign.budget), -100.00)
74
```



```
75 # Тест баннера без кампании (изолируем в отдельной транзакции)
76 try:
77     with transaction.atomic():
78         Banner.objects.create(
79             title="Orphan Banner",
80             image_url="http://example.com/orphan.png"
81         )
82     self.fail("Ожидалась ошибка при создании баннера без кампании")
83 except Exception:
84     pass # Ожидаемое поведение
85
86 # Тест невалидного URL
87 campaign2 = Campaign.objects.create(
88     name="URL Test Campaign",
89     budget=1000.00,
90 )
91 try:
92     Banner.objects.create(
93         campaign=campaign2,
94         title="Invalid URL Banner",
95         image_url="invalid_url"
96     )
97 except Exception:
98     pass # Ожидаемое поведение для невалидного URL
99
```

The documentation for this class was generated from the following file:

- [tests.py](#)
- [bannerflow_app](#)
- [tests](#)
- [TestNegativeScenarios](#)
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bannerflow_app.tests.TestNegativeScenarios Member List

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[Public Member Functions](#) | [List of all members](#)

[bannerflow_app.test_simple.SimpleTest](#) Class Reference

Inheritance diagram for [bannerflow_app.test_simple.SimpleTest](#):

Inheritance graph

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Collaboration diagram for [bannerflow_app.test_simple.SimpleTest](#):

Collaboration graph

[\[legend\]](#)

Public Member Functions

[test_basic_addition](#) (self)

[test_basic_assertion](#) (self)

Detailed Description

Definition at line [4](#) of file [test_simple.py](#).

Member Function Documentation

◆ test_basic_addition()

bannerflow_app.test_simple.SimpleTest.test_basic_addition (self)

Простейший тест для проверки работы

Definition at line 5 of file [test_simple.py](#).

```
5 def test_basic_addition(self):
6     """Простейший тест для проверки работы"""
7     self.assertEqual(1 + 1, 2)
8
```

◆ test_basic_assertion()

bannerflow_app.test_simple.SimpleTest.test_basic_assertion (self)

Еще один простой тест

Definition at line 9 of file [test_simple.py](#).

```
9 def test_basic_assertion(self):
10     """Еще один простой тест"""
11     assert True == True
```

The documentation for this class was generated from the following file:

- [test_simple.py](#)
- [bannerflow_app](#)
- [test_simple](#)
- [SimpleTest](#)
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Файл:

[classbannerflow_app_1_1test_simple_1_1SimpleTestmembers.html](#)

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bannerflow_app.test_simple.SimpleTest Member List

This is the complete list of members for [bannerflow_app.test_simple.SimpleTest](#), including all inherited members.

[test_basic_addition\(self\)](#) [bannerflow_app.test_simple.SimpleTest](#)
[test_basic_assertion\(self\)](#) [bannerflow_app.test_simple.SimpleTest](#)

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- `__str__()` : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Banner](#),
[bannerflow_app.models.BannerTemplate](#),
[bannerflow_app.models.Campaign](#),
[bannerflow_app.models.CampaignStatistics](#),
[bannerflow_app.models.GameData](#),
[bannerflow_app.models.GeneratedBanner](#),
[bannerflow_app.models.UserProfile](#)
- `activate()` : [bannerflow_app.models.Campaign](#)
- `activate_campaigns()` : [bannerflow_app.admin.CampaignAdmin](#)
- `clean()` : [bannerflow_app.models.Banner](#)
- `ctr()` : [bannerflow_app.models.CampaignStatistics](#)
- `export_for_godot()` : [bannerflow_app.banner_generator.BannerGenerator](#)
- `generate_html()` : [bannerflow_app.banner_generator.BannerGenerator](#)
- `pause()` : [bannerflow_app.models.Campaign](#)
- `pause_campaigns()` : [bannerflow_app.admin.CampaignAdmin](#)
- `save()` : [bannerflow_app.models.Banner](#)
- `status_color()` : [bannerflow_app.models.Campaign](#)
- `stop()` : [bannerflow_app.models.Campaign](#)
- `stop_campaigns()` : [bannerflow_app.admin.CampaignAdmin](#)
- Generated by [doxygen](#) 1.9.8

Файл: functions.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

Here is a list of all class members with links to the classes they belong to:

- _ -

- `__str__()` : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Banner](#),
[bannerflow_app.models.BannerTemplate](#),
[bannerflow_app.models.Campaign](#),
[bannerflow_app.models.CampaignStatistics](#),
[bannerflow_app.models.GameData](#),

[bannerflow_app.models.GeneratedBanner](#),
[bannerflow_app.models.UserProfile](#)

- a -

- achievements : [bannerflow_app.models.GameData](#)
- actions : [bannerflow_app.admin.CampaignAdmin](#)
- activate() : [bannerflow_app.models.Campaign](#)
- activate_campaigns() : [bannerflow_app.admin.CampaignAdmin](#)
- audience_segment : [bannerflow_app.models.ABTest](#)

- b -

- banners : [bannerflow_app.models.ABTest](#)
- budget : [bannerflow_app.models.Campaign](#)

- c -

- campaign : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Banner](#),
[bannerflow_app.models.CampaignStatistics](#)
- can_delete : [bannerflow_app.admin.UserProfileInline](#)
- clean() : [bannerflow_app.models.Banner](#)
- clicks : [bannerflow_app.models.CampaignStatistics](#)
- conversions : [bannerflow_app.models.CampaignStatistics](#)
- created_at : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Banner](#),
[bannerflow_app.models.BannerTemplate](#),
[bannerflow_app.models.Campaign](#),
[bannerflow_app.models.GeneratedBanner](#),
[bannerflow_app.models.UserProfile](#)
- created_by : [bannerflow_app.models.Campaign](#)
- css_styles : [bannerflow_app.models.BannerTemplate](#)
- ctr() : [bannerflow_app.models.CampaignStatistics](#)

- d -

- data_file : [bannerflow_app.models.GameData](#)
- date : [bannerflow_app.models.CampaignStatistics](#)
- dependencies : [bannerflow_app.migrations.0001_initial.Migration](#),
[bannerflow_app.migrations.0002_campaign_start_date.Migration](#),
[bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_ve](#)
[bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics](#)
[bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_a](#)
[bannerflow_app.migrations.0006_alter_banner_media_file.Migration](#),
[bannerflow_app.migrations.0007_alter_banner_media_file.Migration](#),
[bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.M](#)

- e -

- end_date : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Campaign](#)
- export_for_godot() : [bannerflow_app.banner_generator.BannerGenerator](#)

- f -

- fieldsets : [bannerflow_app.admin.CampaignAdmin](#)
- filter_horizontal : [bannerflow_app.admin.ABTestAdmin](#)

- g -

- game_data : [bannerflow_app.models.GeneratedBanner](#)
- game_name : [bannerflow_app.models.GameData](#)
- game_type : [bannerflow_app.models.GameData](#)
- GAME_TYPES : [bannerflow_app.models.GameData](#)
- generate_html() : [bannerflow_app.banner_generator.BannerGenerator](#)
- godot_export : [bannerflow_app.models.GeneratedBanner](#)

- h -

- height : [bannerflow_app.models.BannerTemplate](#)
- html_content : [bannerflow_app.models.GeneratedBanner](#)
- html_template : [bannerflow_app.models.BannerTemplate](#)

- i -

- imported_at : [bannerflow_app.models.GameData](#)
- impressions : [bannerflow_app.models.CampaignStatistics](#)
- initial : [bannerflow_app.migrations.0001_initial.Migration](#)
- inlines : [bannerflow_app.admin.CustomUserAdmin](#)
- is_ab_test : [bannerflow_app.models.Campaign](#)
- is_active : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Banner](#)

- j -

- javascript : [bannerflow_app.models.BannerTemplate](#)

- l -

- level : [bannerflow_app.models.GameData](#)
- list_display : [bannerflow_app.admin.ABTestAdmin](#),
[bannerflow_app.admin.BannerAdmin](#),
[bannerflow_app.admin.BannerTemplateAdmin](#),
[bannerflow_app.admin.CampaignAdmin](#),
[bannerflow_app.admin.CampaignStatisticsAdmin](#),
[bannerflow_app.admin.GameDataAdmin](#),

[bannerflow_app.admin.GeneratedBannerAdmin](#),
[bannerflow_app.admin.UserProfileAdmin](#)
• list_filter : [bannerflow_app.admin.ABTestAdmin](#),
[bannerflow_app.admin.BannerAdmin](#),
[bannerflow_app.admin.BannerTemplateAdmin](#),
[bannerflow_app.admin.CampaignAdmin](#),
[bannerflow_app.admin.CampaignStatisticsAdmin](#),
[bannerflow_app.admin.GameDataAdmin](#),
[bannerflow_app.admin.GeneratedBannerAdmin](#),
[bannerflow_app.admin.UserProfileAdmin](#)

- m -

- media_file : [bannerflow_app.models.Banner](#)
- media_type : [bannerflow_app.models.Banner](#)
- MEDIA_TYPE_CHOICES : [bannerflow_app.models.Banner](#)
- model : [bannerflow_app.admin.UserProfileInline](#)

- n -

- name : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.BannerTemplate](#),
[bannerflow_app.models.Campaign](#),
[bannerflow_app.models.GeneratedBanner](#)

- o -

- operations : [bannerflow_app.migrations.0001_initial.Migration](#),
[bannerflow_app.migrations.0002_campaign_start_date.Migration](#),
[bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_ve](#)
[bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics](#)
[bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_a](#)
[bannerflow_app.migrations.0006_alter_banner_media_file.Migration](#),
[bannerflow_app.migrations.0007_alter_banner_media_file.Migration](#),
[bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.M](#)

- p -

- pause() : [bannerflow_app.models.Campaign](#)
- pause_campaigns() : [bannerflow_app.admin.CampaignAdmin](#)
- phone : [bannerflow_app.models.UserProfile](#)
- PLATFORM_CHOICES : [bannerflow_app.models.Campaign](#)
- play_time : [bannerflow_app.models.GameData](#)
- player_name : [bannerflow_app.models.GameData](#)
- preview_image : [bannerflow_app.models.BannerTemplate](#)
- preview_url : [bannerflow_app.models.GeneratedBanner](#)

- r -

- readonly_fields : [bannerflow_app.admin.BannerAdmin](#),
[bannerflow_app.admin.CampaignAdmin](#),

[bannerflow_app.admin.CampaignStatisticsAdmin](#),
[bannerflow_app.admin.GeneratedBannerAdmin](#)

- role : [bannerflow_app.models.UserProfile](#)
- ROLE_CHOICES : [bannerflow_app.models.UserProfile](#)

- s -

- save() : [bannerflow_app.models.Banner](#)
- score : [bannerflow_app.models.GameData](#)
- search_fields : [bannerflow_app.admin.ABTestAdmin](#),
[bannerflow_app.admin.BannerAdmin](#),
[bannerflow_app.admin.BannerTemplateAdmin](#),
[bannerflow_app.admin.CampaignAdmin](#),
[bannerflow_app.admin.CampaignStatisticsAdmin](#),
[bannerflow_app.admin.GameDataAdmin](#),
[bannerflow_app.admin.GeneratedBannerAdmin](#),
[bannerflow_app.admin.UserProfileAdmin](#)
- short_description : [bannerflow_app.admin.CampaignAdmin](#)
- start_date : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Campaign](#)
- status : [bannerflow_app.models.Campaign](#)
- STATUS_CHOICES : [bannerflow_app.models.Campaign](#)
- status_color() : [bannerflow_app.models.Campaign](#)
- stop() : [bannerflow_app.models.Campaign](#)
- stop_campaigns() : [bannerflow_app.admin.CampaignAdmin](#)

- t -

- target_game_version : [bannerflow_app.models.Campaign](#)
- target_geolocation : [bannerflow_app.models.Campaign](#)
- target_platform : [bannerflow_app.models.Campaign](#)
- template : [bannerflow_app.models.GeneratedBanner](#)
- template_type : [bannerflow_app.models.BannerTemplate](#)
- TEMPLATE_TYPES : [bannerflow_app.models.BannerTemplate](#)
- title : [bannerflow_app.models.Banner](#)

- u -

- user : [bannerflow_app.models.UserProfile](#)

- v -

- verbose_name : [bannerflow_app.models.BannerTemplate.Meta](#),
[bannerflow_app.models.CampaignStatistics.Meta](#),
[bannerflow_app.models.GameData.Meta](#),
[bannerflow_app.models.GeneratedBanner.Meta](#)
- verbose_name_plural : [bannerflow_app.models.BannerTemplate.Meta](#),
[bannerflow_app.models.CampaignStatistics.Meta](#),
[bannerflow_app.models.GameData.Meta](#),
[bannerflow_app.models.GeneratedBanner.Meta](#)

- w -

- width : [bannerflow_app.models.BannerTemplate](#)
- Generated by [doxygen](#) 1.9.8



Файл: functions_vars.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

Here is a list of all variables with links to the classes they belong to:

- a -

- achievements : [bannerflow_app.models.GameData](#)
- actions : [bannerflow_app.admin.CampaignAdmin](#)
- audience_segment : [bannerflow_app.models.ABTest](#)

- b -

- banners : [bannerflow_app.models.ABTest](#)
- budget : [bannerflow_app.models.Campaign](#)

- c -

- campaign : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Banner](#),
[bannerflow_app.models.CampaignStatistics](#)
- can_delete : [bannerflow_app.admin.UserProfileInline](#)
- clicks : [bannerflow_app.models.CampaignStatistics](#)
- conversions : [bannerflow_app.models.CampaignStatistics](#)
- created_at : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Banner](#),
[bannerflow_app.models.BannerTemplate](#),
[bannerflow_app.models.Campaign](#),
[bannerflow_app.models.GeneratedBanner](#),
[bannerflow_app.models.UserProfile](#)
- created_by : [bannerflow_app.models.Campaign](#)
- css_styles : [bannerflow_app.models.BannerTemplate](#)

- d -

- data_file : [bannerflow_app.models.GameData](#)
- date : [bannerflow_app.models.CampaignStatistics](#)
- dependencies : [bannerflow_app.migrations.0001_initial.Migration](#),
[bannerflow_app.migrations.0002_campaign_start_date.Migration](#),
[bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_ve](#)
[bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics](#)
[bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_a](#)
[bannerflow_app.migrations.0006_alter_banner_media_file.Migration](#),
[bannerflow_app.migrations.0007_alter_banner_media_file.Migration](#),
[bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.M](#)

- e -

- end_date : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Campaign](#)

- f -

- fieldsets : [bannerflow_app.admin.CampaignAdmin](#)
- filter_horizontal : [bannerflow_app.admin.ABTestAdmin](#)

- g -

- game_data : [bannerflow_app.models.GeneratedBanner](#)
- game_name : [bannerflow_app.models.GameData](#)
- game_type : [bannerflow_app.models.GameData](#)
- GAME_TYPES : [bannerflow_app.models.GameData](#)
- godot_export : [bannerflow_app.models.GeneratedBanner](#)

- h -

- height : [bannerflow_app.models.BannerTemplate](#)
- html_content : [bannerflow_app.models.GeneratedBanner](#)
- html_template : [bannerflow_app.models.BannerTemplate](#)

- i -

- imported_at : [bannerflow_app.models.GameData](#)
- impressions : [bannerflow_app.models.CampaignStatistics](#)
- initial : [bannerflow_app.migrations.0001_initial.Migration](#)
- inlines : [bannerflow_app.admin.CustomUserAdmin](#)
- is_ab_test : [bannerflow_app.models.Campaign](#)
- is_active : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Banner](#)

- j -

- javascript : [bannerflow_app.models.BannerTemplate](#)

- l -

- level : [bannerflow_app.models.GameData](#)
- list_display : [bannerflow_app.admin.ABTestAdmin](#),
[bannerflow_app.admin.BannerAdmin](#),
[bannerflow_app.admin.BannerTemplateAdmin](#),
[bannerflow_app.admin.CampaignAdmin](#),
[bannerflow_app.admin.CampaignStatisticsAdmin](#),
[bannerflow_app.admin.GameDataAdmin](#),
[bannerflow_app.admin.GeneratedBannerAdmin](#),
[bannerflow_app.admin.UserProfileAdmin](#)
- list_filter : [bannerflow_app.admin.ABTestAdmin](#),
[bannerflow_app.admin.BannerAdmin](#),
[bannerflow_app.admin.BannerTemplateAdmin](#),
[bannerflow_app.admin.CampaignAdmin](#),
[bannerflow_app.admin.CampaignStatisticsAdmin](#),
[bannerflow_app.admin.GameDataAdmin](#),
[bannerflow_app.admin.GeneratedBannerAdmin](#),
[bannerflow_app.admin.UserProfileAdmin](#)

- m -

- media_file : [bannerflow_app.models.Banner](#)
- media_type : [bannerflow_app.models.Banner](#)
- MEDIA_TYPE_CHOICES : [bannerflow_app.models.Banner](#)
- model : [bannerflow_app.admin.UserProfileInline](#)

- n -

- name : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.BannerTemplate](#),
[bannerflow_app.models.Campaign](#),
[bannerflow_app.models.GeneratedBanner](#)

- o -

- operations : [bannerflow_app.migrations.0001_initial.Migration](#),
[bannerflow_app.migrations.0002_campaign_start_date.Migration](#),
[bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_ve](#)
[bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics](#)
[bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_a](#)
[bannerflow_app.migrations.0006_alter_banner_media_file.Migration](#),
[bannerflow_app.migrations.0007_alter_banner_media_file.Migration](#),
[bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.M](#)

- p -

- phone : [bannerflow_app.models.UserProfile](#)
- PLATFORM_CHOICES : [bannerflow_app.models.Campaign](#)
- play_time : [bannerflow_app.models.GameData](#)
- player_name : [bannerflow_app.models.GameData](#)

- preview_image : [bannerflow_app.models.BannerTemplate](#)
- preview_url : [bannerflow_app.models.GeneratedBanner](#)

- r -

- readonly_fields : [bannerflow_app.admin.BannerAdmin](#),
[bannerflow_app.admin.CampaignAdmin](#),
[bannerflow_app.admin.CampaignStatisticsAdmin](#),
[bannerflow_app.admin.GeneratedBannerAdmin](#)
- role : [bannerflow_app.models.UserProfile](#)
- ROLE_CHOICES : [bannerflow_app.models.UserProfile](#)

- s -

- score : [bannerflow_app.models.GameData](#)
- search_fields : [bannerflow_app.admin.ABTestAdmin](#),
[bannerflow_app.admin.BannerAdmin](#),
[bannerflow_app.admin.BannerTemplateAdmin](#),
[bannerflow_app.admin.CampaignAdmin](#),
[bannerflow_app.admin.CampaignStatisticsAdmin](#),
[bannerflow_app.admin.GameDataAdmin](#),
[bannerflow_app.admin.GeneratedBannerAdmin](#),
[bannerflow_app.admin.UserProfileAdmin](#)
- short_description : [bannerflow_app.admin.CampaignAdmin](#)
- start_date : [bannerflow_app.models.ABTest](#),
[bannerflow_app.models.Campaign](#)
- status : [bannerflow_app.models.Campaign](#)
- STATUS_CHOICES : [bannerflow_app.models.Campaign](#)

- t -

- target_game_version : [bannerflow_app.models.Campaign](#)
- target_geolocation : [bannerflow_app.models.Campaign](#)
- target_platform : [bannerflow_app.models.Campaign](#)
- template : [bannerflow_app.models.GeneratedBanner](#)
- template_type : [bannerflow_app.models.BannerTemplate](#)
- TEMPLATE_TYPES : [bannerflow_app.models.BannerTemplate](#)
- title : [bannerflow_app.models.Banner](#)

- u -

- user : [bannerflow_app.models.UserProfile](#)

- v -

- verbose_name : [bannerflow_app.models.BannerTemplate.Meta](#),
[bannerflow_app.models.CampaignStatistics.Meta](#),
[bannerflow_app.models.GameData.Meta](#),
[bannerflow_app.models.GeneratedBanner.Meta](#)
- verbose_name_plural : [bannerflow_app.models.BannerTemplate.Meta](#),
[bannerflow_app.models.CampaignStatistics.Meta](#),

[bannerflow_app.models.GameData.Meta](#),
[bannerflow_app.models.GeneratedBanner.Meta](#)

- W -

- width : [bannerflow_app.models.BannerTemplate](#)
- Generated by [doxygen](#) 1.9.8



Файл: graph_legend.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
Graph Legend

This page explains how to interpret the graphs that are generated by doxygen.

Consider the following example:

```
/*! Invisible class because of truncation */  
class Invisible { };
```

```
/*! Truncated class, inheritance relation is hidden */  
class Truncated : public Invisible { };  
/* Class not documented with doxygen comments */  
class Undocumented { };
```

```
/*! Class that is inherited using public inheritance */  
class PublicBase : public Truncated { };
```

```
/*! A template class */  
template<class T> class Templ { };
```

```
/*! Class that is inherited using protected inheritance */  
class ProtectedBase { };
```

```
/*! Class that is inherited using private inheritance */  
class PrivateBase { };
```

```
/*! Class that is used by the Inherited class */  
class Used { };
```

```

/#!/ Super class that inherits a number of other classes */
class Inherited : public PublicBase,
protected ProtectedBase,
private PrivateBase,
public Undocumented,
public Templ<int>
{
private:
Used *m_usedClass;
};

```

This will result in the following graph:

The boxes in the above graph have the following meaning:

- A filled gray box represents the struct or class for which the graph is generated.
- A box with a black border denotes a documented struct or class.
- A box with a gray border denotes an undocumented struct or class.
- A box with a red border denotes a documented struct or class for which not all inheritance/containment relations are shown. A graph is truncated if it does not fit within the specified boundaries.

The arrows have the following meaning:

- A blue arrow is used to visualize a public inheritance relation between two classes.
- A dark green arrow is used for protected inheritance.
- A dark red arrow is used for private inheritance.
- A purple dashed arrow is used if a class is contained or used by another class. The arrow is labelled with the variable(s) through which the pointed class or struct is accessible.
- A yellow dashed arrow denotes a relation between a template instance and the template class it was instantiated from. The arrow is labelled with the template parameters of the instance.
- Generated by [doxygen](#) 1.9.8

Файл: [hierarchy.html](#)

BannerFlow Manager API 1.0
 Django-based advertising banner management system
 Loading...
 Searching...
 No Matches
 Class Hierarchy

[Go to the graphical class hierarchy](#)

This inheritance list is sorted roughly, but not completely, alphabetically:
[detail level 12]

[Cbannerflow_app.banner_generator.BannerGenerator](#)

[Cbannerflow_app.models.BannerTemplate.Meta](#)

[Cbannerflow_app.models.CampaignStatistics.Meta](#)

[Cbannerflow_app.models.GameData.Meta](#)

[Cbannerflow_app.models.GeneratedBanner.Meta](#)

▼Cmigrations.Migration

[Cbannerflow_app.migrations.0001_initial.Migration](#)

[Cbannerflow_app.migrations.0002_campaign_start_date.Migration](#)

[Cbannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_version.Migration](#)

[Cbannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics.Migration](#)

[Cbannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file.Migration](#)

[Cbannerflow_app.migrations.0006_alter_banner_media_file.Migration](#)

[Cbannerflow_app.migrations.0007_alter_banner_media_file.Migration](#)

[Cbannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner.Migration](#)

▼Cmodels.Model

[Cbannerflow_app.models.ABTest](#)

[Cbannerflow_app.models.Banner](#)

[Cbannerflow_app.models.BannerTemplate](#)

[Cbannerflow_app.models.Campaign](#)

[Cbannerflow_app.models.CampaignStatistics](#)

[Cbannerflow_app.models.GameData](#)

[Cbannerflow_app.models.GeneratedBanner](#)

[Cbannerflow_app.models.UserProfile](#)

▼Cadmin.ModelAdmin

[Cbannerflow_app.admin.ABTestAdmin](#)

[Cbannerflow_app.admin.BannerAdmin](#)

[Cbannerflow_app.admin.BannerTemplateAdmin](#)

[Cbannerflow_app.admin.CampaignAdmin](#)

[Cbannerflow_app.admin.CampaignStatisticsAdmin](#)

[Cbannerflow_app.admin.GameDataAdmin](#)

[Cbannerflow_app.admin.GeneratedBannerAdmin](#)

[Cbannerflow_app.admin.UserProfileAdmin](#)

▼Cadmin.StackedInline

[Cbannerflow_app.admin.UserProfileInline](#)

▼CUserAdmin

[Cbannerflow_app.admin.CustomUserAdmin](#)

• Generated by [doxygen](#) 1.9.8

Файл: index.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
BannerFlow Manager API Documentation

- Generated by [doxygen](#) 1.9.8

Файл: inherits.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
Class Hierarchy

[Go to the textual class hierarchy](#)

- Generated by [doxygen](#) 1.9.8

Файл: models_8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Classes](#) | [Namespaces](#) | [Functions](#)

models.py File Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.models.UserProfile](#)

class [bannerflow_app.models.Campaign](#)

class [bannerflow_app.models.Banner](#)

class [bannerflow_app.models.ABTest](#)

class [bannerflow_app.models.CampaignStatistics](#)

class [bannerflow_app.models.CampaignStatistics.Meta](#)

class [bannerflow_app.models.BannerTemplate](#)

class [bannerflow_app.models.BannerTemplate.Meta](#)

class [bannerflow_app.models.GameData](#)

class [bannerflow_app.models.GameData.Meta](#)

class [bannerflow_app.models.GeneratedBanner](#)

class [bannerflow_app.models.GeneratedBanner.Meta](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.models](#)

Functions

[bannerflow_app.models.validate_media_file](#) (value)

- [bannerflow_app](#)
- [models.py](#)
- Generated by [doxygen](#) 1.9.8

Файл: [models_8py_source.html](#)

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
models.py
Go to the documentation of this file.
1from django.db import models
2from django.contrib.auth.models import User
3from django.utils import timezone
4from django.core.validators import MinValueValidator
5from django.core.exceptions import ValidationError
6import os
7
8def validate\_media\_file(value):
9    """Валидатор для медиафайлов - только PNG, JPG, MP4"""
10    valid_extensions = ['.png', '.jpg', '.jpeg', '.mp4']
11
12    # Проверка расширения
13    ext = os.path.splitext(value.name)[1].lower()
14    if ext not in valid_extensions:
15        raise ValidationError(
16            f'Неподдерживаемый формат файла. Разрешенные форматы: PNG, '
17            f'JPG, MP4'
18        )
19
20class UserProfile(models.Model):
21    ROLE_CHOICES = [
22        ('marketer', 'Маркетолог'),
23        ('analyst', 'Аналитик'),
24        ('admin', 'Администратор'),
25    ]
26    user = models.OneToOneField(User, on_delete=models.CASCADE)
27    role = models.CharField(max_length=20, choices=ROLE_CHOICES,
28                           default='marketer')
29    phone = models.CharField(max_length=20, blank=True)
```

```
29 created_at = models.DateTimeField(auto_now_add=True)
30
31 def __str__(self):
32     return f"{self.user.username} ({self.get_role_display()})"
33
34 class Campaign(models.Model):
35     STATUS_CHOICES = [
36         ('draft', 'Черновик'),
37         ('active', 'Активна'),
38         ('paused', 'Приостановлена'),
39         ('stopped', 'Остановлена'),
40     ]
41
42     PLATFORM_CHOICES = [
43         ('iOS', 'iOS'),
44         ('Android', 'Android'),
45         ('Both', 'iOS и Android'),
46     ]
47
48     name = models.CharField(max_length=255,
49 verbose_name="Название кампании")
50     budget = models.DecimalField(
51         max_digits=10,
52         decimal_places=2,
53         validators=[MinValueValidator(0)],
54         verbose_name="Бюджет"
55     )
56     start_date = models.DateTimeField(default=timezone.now,
57 verbose_name="Дата начала")
58     end_date = models.DateTimeField(default=timezone.now,
59 verbose_name="Дата окончания")
60     status = models.CharField(max_length=20,
61 choices=STATUS_CHOICES, default='draft', verbose_name="Статус")
62     target_geolocation = models.JSONField(
63         default=list,
64         verbose_name="Геолокация",
65         help_text="Список стран/регионов для таргетинга"
66     )
67     target_platform = models.CharField(
68         max_length=10,
69         choices=PLATFORM_CHOICES,
70         default='Both',
71         verbose_name="Целевая платформа"
72     )
73     target_game_version = models.CharField(
74         max_length=50,
75         blank=True,
76         verbose_name="Версия игры"
77     )
78     is_ab_test = models.BooleanField(default=False, verbose_name="A/B
79 тест")
```



```

75 created_by = models.ForeignKey(User, on_delete=models.CASCADE,
verbose_name="Создатель")
76 created_at = models.DateTimeField(auto_now_add=True)
77
78 def activate(self):
79 """Активировать кампанию"""
80 self.status = 'active'
81 self.save()
82 return f"Кампания '{self.name}' активирована"
83
84 def pause(self):
85 """Приостановить кампанию"""
86 self.status = 'paused'
87 self.save()
88 return f"Кампания '{self.name}' приостановлена"
89
90 def stop(self):
91 """Остановить кампанию"""
92 self.status = 'stopped'
93 self.save()
94 return f"Кампания '{self.name}' остановлена"
95
96 @property
97 def status_color(self):
98 colors = {
99 'draft': 'secondary',
100 'active': 'success',
101 'paused': 'warning',
102 'stopped': 'danger'
103 }
104 return colors.get(self.status, 'secondary')
105
106 def __str__(self):
107 return self.name
108
109 class Banner(models.Model):
110 MEDIA_TYPE_CHOICES = [
111 ('image', 'Изображение'),
112 ('video', 'Видео'),
113 ]
114
115 campaign = models.ForeignKey(Campaign,
on_delete=models.CASCADE, verbose_name="Кампания")
116 title = models.CharField(max_length=255,
verbose_name="Название баннера")
117 media_file = models.FileField(
118 upload_to='banners/%Y/%m/%d/',
119 verbose_name="Медиафайл",
120 help_text="Поддерживаемые форматы: PNG, JPG, MP4",
121 validators=[validate_media_file]
122)

```

```
123 media_type = models.CharField(max_length=10,
choices=MEDIA_TYPE_CHOICES, verbose_name="Тип медиа")
124 created_at = models.DateTimeField(auto_now_add=True)
125 is_active = models.BooleanField(default=True,
verbose_name="Активен")
126
127 def save(self, *args, **kwargs):
128     # Автоматическое определение типа медиа
129     if self.media_file:
130         extension = self.media_file.name.split('.')[-1].lower()
131         if extension in ['png', 'jpg', 'jpeg', 'gif']:
132             self.media_type = 'image'
133         elif extension in ['mp4', 'avi', 'mov']:
134             self.media_type = 'video'
135         super().save(*args, **kwargs)
136
137 def clean(self):
138     """Дополнительная валидация при сохранении"""
139     super().clean()
140     if self.media_file:
141         validate_media_file(self.media_file)
142
143 def __str__(self):
144     return self.title
145
146 class ABTest(models.Model):
147     name = models.CharField(max_length=255,
verbose_name="Название теста")
148     campaign = models.ForeignKey(Campaign,
on_delete=models.CASCADE, verbose_name="Кампания")
149     banners = models.ManyToManyField(Banner,
verbose_name="Баннеры для теста")
150     audience_segment = models.CharField(max_length=100,
verbose_name="Сегмент аудитории")
151     start_date = models.DateTimeField(default=timezone.now,
verbose_name="Дата начала")
152     end_date = models.DateTimeField(default=timezone.now,
verbose_name="Дата окончания")
153     is_active = models.BooleanField(default=True,
verbose_name="Активен")
154     created_at = models.DateTimeField(auto_now_add=True)
155
156 def __str__(self):
157     return self.name
158
159 class CampaignStatistics(models.Model):
160     campaign = models.ForeignKey(Campaign,
on_delete=models.CASCADE, verbose_name="Кампания")
161     date = models.DateField(default=timezone.now,
verbose_name="Дата")
162     impressions = models.IntegerField(default=0,
verbose_name="Показы")
```

```

163 clicks = models.IntegerField(default=0, verbose_name="Клики")
164 conversions = models.IntegerField(default=0,
verbose_name="Конверсии")
165
166 class Meta:
167     verbose_name = "Статистика кампании"
168     verbose_name_plural = "Статистика кампаний"
169
170 @property
171 def ctr(self):
172     """CTR (Click-Through Rate) в процентах"""
173     return round((self.clicks / self.impressions * 100), 2) if
self.impressions > 0 else 0
174
175 def __str__(self):
176     return f"Статистика {self.campaign.name} за {self.date}"
177
178 class BannerTemplate(models.Model):
179     """Шаблон для генерации интерактивных HTML5 баннеров"""
180     TEMPLATE_TYPES = [
181         ('score', 'Баннер со счетом'),
182         ('achievement', 'Баннер с достижением'),
183         ('level', 'Баннер с уровнем'),
184         ('custom', 'Пользовательский шаблон'),
185     ]
186
187     name = models.CharField(max_length=100,
verbose_name="Название шаблона")
188     template_type = models.CharField(max_length=20,
choices=TEMPLATE_TYPES, default='custom', verbose_name="Тип
шаблона")
189     html_template = models.TextField(verbose_name="HTML шаблон",
help_text="Используйте {{ переменные }} для подстановки")
190     css_styles = models.TextField(verbose_name="CSS стили")
191     javascript = models.TextField(verbose_name="JavaScript код",
blank=True, help_text="Для интерактивности")
192     width = models.IntegerField(default=300, verbose_name="Ширина
(px)")
193     height = models.IntegerField(default=250, verbose_name="Высота
(px)")
194     preview_image = models.ImageField(upload_to='templates/
previews/', blank=True, verbose_name="Превью")
195     created_at = models.DateTimeField(auto_now_add=True)
196
197     class Meta:
198         verbose_name = "Шаблон баннера"
199         verbose_name_plural = "Шаблоны баннеров"
200
201     def __str__(self):
202         return f"{self.name} ({self.get_template_type_display()})"
203
204 class GameData(models.Model):

```

```

205 """Данные из игры для генерации баннеров"""
206 GAME_TYPES = [
207 ('platformer', 'Платформер'),
208 ('rpg', 'RPG'),
209 ('shooter', 'Шутер'),
210 ('strategy', 'Стратегия'),
211 ('custom', 'Другая'),
212 ]
213
214 game_name = models.CharField(max_length=100,
verbose_name="Название игры")
215 game_type = models.CharField(max_length=20,
choices=GAME_TYPES, default='custom', verbose_name="Тип игры")
216 player_name = models.CharField(max_length=100,
verbose_name="Имя игрока")
217 score = models.IntegerField(default=0, verbose_name="Счет")
218 level = models.IntegerField(default=1, verbose_name="Уровень")
219 play_time = models.IntegerField(default=0, verbose_name="Время
игры (минуты)")
220 achievements = models.JSONField(default=list,
verbose_name="Достижения")
221 data_file = models.FileField(upload_to='game_data/',
verbose_name="Файл данных игры", help_text="JSON или CSV файл")
222 imported_at = models.DateTimeField(auto_now_add=True)
223
224 class Meta:
225 verbose_name = "Данные игры"
226 verbose_name_plural = "Данные игр"
227
228 def __str__(self):
229 return f"{self.game_name}: {self.player_name} (Ур. {self.level})"
230
231 class GeneratedBanner(models.Model):
232 """Сгенерированный интерактивный баннер"""
233 name = models.CharField(max_length=100,
verbose_name="Название баннера")
234 template = models.ForeignKey(BannerTemplate,
on_delete=models.CASCADE, verbose_name="Шаблон")
235 game_data = models.ForeignKey(GameData,
on_delete=models.CASCADE, verbose_name="Данные игры")
236 html_content = models.TextField(verbose_name="HTML
содержимое")
237 godot_export = models.FileField(upload_to='exports/godot/',
blank=True, verbose_name="Экспорт для Godot")
238 preview_url = models.URLField(blank=True, verbose_name="URL
предпросмотра")
239 created_at = models.DateTimeField(auto_now_add=True)
240
241 class Meta:
242 verbose_name = "Сгенерированный баннер"
243 verbose_name_plural = "Сгенерированные баннеры"
244

```

[245](#) def `__str__`(self):
246 return self.name
[bannerflow_app.models.ABTest](#)
Definition [models.py:146](#)
[bannerflow_app.models.ABTest.name](#)
name
Definition [models.py:147](#)
[bannerflow_app.models.ABTest.__str__](#)
`__str__`(self)
Definition [models.py:156](#)
[bannerflow_app.models.BannerTemplate.Meta](#)
Definition [models.py:197](#)
[bannerflow_app.models.BannerTemplate](#)
Definition [models.py:178](#)
[bannerflow_app.models.BannerTemplate.__str__](#)
`__str__`(self)
Definition [models.py:201](#)
[bannerflow_app.models.Banner](#)
Definition [models.py:109](#)
[bannerflow_app.models.Banner.__str__](#)
`__str__`(self)
Definition [models.py:143](#)
[bannerflow_app.models.Banner.media_type](#)
media_type
Definition [models.py:123](#)
[bannerflow_app.models.Banner.media_file](#)
media_file
Definition [models.py:117](#)
[bannerflow_app.models.Banner.clean](#)
clean(self)
Definition [models.py:137](#)
[bannerflow_app.models.Banner.save](#)
save(self, *args, **kwargs)
Definition [models.py:127](#)
[bannerflow_app.models.Banner.title](#)
title
Definition [models.py:116](#)
[bannerflow_app.models.CampaignStatistics.Meta](#)
Definition [models.py:166](#)
[bannerflow_app.models.CampaignStatistics](#)
Definition [models.py:159](#)
[bannerflow_app.models.CampaignStatistics.impressions](#)
impressions
Definition [models.py:162](#)
[bannerflow_app.models.CampaignStatistics.ctr](#)
ctr(self)
Definition [models.py:171](#)
[bannerflow_app.models.CampaignStatistics.__str__](#)
`__str__`(self)
Definition [models.py:175](#)
[bannerflow_app.models.CampaignStatistics.clicks](#)
clicks

Definition [models.py:163](#)
[bannerflow_app.models.Campaign](#)

Definition [models.py:34](#)
[bannerflow_app.models.Campaign.stop](#)
stop(self)

Definition [models.py:90](#)
[bannerflow_app.models.Campaign.activate](#)
activate(self)

Definition [models.py:78](#)
[bannerflow_app.models.Campaign.__str__](#)
__str__(self)

Definition [models.py:106](#)
[bannerflow_app.models.Campaign.status](#)
status

Definition [models.py:57](#)
[bannerflow_app.models.Campaign.name](#)
name

Definition [models.py:48](#)
[bannerflow_app.models.Campaign.status_color](#)
status_color(self)

Definition [models.py:97](#)
[bannerflow_app.models.Campaign.pause](#)
pause(self)

Definition [models.py:84](#)
[bannerflow_app.models.GameData.Meta](#)

Definition [models.py:224](#)
[bannerflow_app.models.GameData](#)

Definition [models.py:204](#)
[bannerflow_app.models.GameData.__str__](#)
__str__(self)

Definition [models.py:228](#)
[bannerflow_app.models.GeneratedBanner.Meta](#)

Definition [models.py:241](#)
[bannerflow_app.models.GeneratedBanner](#)

Definition [models.py:231](#)
[bannerflow_app.models.GeneratedBanner.name](#)
name

Definition [models.py:233](#)
[bannerflow_app.models.GeneratedBanner.__str__](#)
__str__(self)

Definition [models.py:245](#)
[bannerflow_app.models.UserProfile](#)

Definition [models.py:19](#)
[bannerflow_app.models.UserProfile.__str__](#)
__str__(self)

Definition [models.py:31](#)
[bannerflow_app.models.validate_media_file](#)
validate_media_file(value)

Definition [models.py:8](#)

- [bannerflow_app](#)
- [models.py](#)



Файл: `models_documented_8py.html`

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Classes](#) | [Namespaces](#)
models_documented.py File Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.models_documented.Campaign](#)
Advertising Campaign Model. [More...](#)

class [bannerflow_app.models_documented.Banner](#)
Advertising Banner Model. [More...](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.models_documented](#)

- [bannerflow_app](#)
- [models_documented.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

models_documented_8py_source.html

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
models_documented.py
Go to the documentation of this file.
1 """
2 @package bannerflow_app.models
3 @brief Data models for BannerFlow Manager system
4
5 This module contains Django models for managing advertising
  campaigns and banners.
6 """
7
8 from django.db import models
9
10 class Campaign(models.Model):
11     """!
12     @brief Advertising Campaign Model
13
14     Represents an advertising campaign with budget settings, time
  frames,
15     and relationship with banners. Campaign can be active or inactive.
16
17     @see Banner
18     """
19
20     name = models.CharField(max_length=255)
21     """!< Campaign name (required field)"""
22
23     budget = models.DecimalField(max_digits=10, decimal_places=2)
24     """!< Campaign budget in rubles"""
25
26     is_active = models.BooleanField(default=False)
27     """!< Campaign activity flag (True - active, False - inactive)"""
28
29     start_date = models.DateTimeField(null=True, blank=True)
30     """!< Campaign start date and time"""
31
32     end_date = models.DateTimeField(null=True, blank=True)
33     """!< Campaign end date and time"""
34
35     target_platform = models.CharField(
36         max_length=10,
37         choices=[('iOS', 'iOS'), ('Android', 'Android'), ('Both', 'Both')],
38         default='Both'
```



```

39 )
40 """!< Target platform for ad display"""
41
42 def activate(self):
43 """!
44 @brief Activate the campaign
45
46 Sets the is_active flag to True and saves the object to the database.
47 Campaign starts showing ads after activation.
48
49 @return str Success message
50 """
51 self.is_active = True
52 self.save()
53 return f"Campaign '{self.name}' activated"
54
55 def deactivate(self):
56 """!
57 @brief Deactivate the campaign
58
59 Sets the is_active flag to False and saves the object to the database.
60 Campaign stops showing ads after deactivation.
61
62 @return str Success message
63 """
64 self.is_active = False
65 self.save()
66 return f"Campaign '{self.name}' deactivated"
67
68 def __str__(self):
69 """!
70 @brief String representation of campaign
71
72 @return str Campaign name and status
73 """
74 status = "Active" if self.is_active else "Inactive"
75 return f"{self.name} ({status})"
76
77 class Banner(models.Model):
78 """!
79 @brief Advertising Banner Model
80
81 Represents an advertising banner linked to a campaign.
82 Contains media content and display settings.
83 """
84
85 campaign = models.ForeignKey(Campaign,
on_delete=models.CASCADE)
86 """!< Reference to parent campaign (foreign key)"""
87
88 title = models.CharField(max_length=255)
89 """!< Banner title"""

```

```

90
91 image_url = models.URLField()
92 """!< URL of banner image or video"""
93
94 is_active = models.BooleanField(default=True)
95 """!< Banner activity flag"""
96
97 created_at = models.DateTimeField(auto_now_add=True)
98 """!< Banner creation date and time"""
99
100 def __str__(self):
101 """!
102 @brief String representation of banner
103
104 @return str Banner title
105 """
106 return f"Banner: {self.title}"

```

[bannerflow_app.models_documented.Banner](#)
Advertising Banner Model.

Definition [models_documented.py:77](#)
[bannerflow_app.models_documented.Banner.__str__](#)
[__str__\(self\)](#)
String representation of banner.

Definition [models_documented.py:100](#)
[bannerflow_app.models_documented.Campaign](#)
Advertising Campaign Model.

Definition [models_documented.py:10](#)
[bannerflow_app.models_documented.Campaign.deactivate](#)
[deactivate\(self\)](#)
Deactivate the campaign.

Definition [models_documented.py:55](#)
[bannerflow_app.models_documented.Campaign.activate](#)
[activate\(self\)](#)
Activate the campaign.

Definition [models_documented.py:42](#)
[bannerflow_app.models_documented.Campaign.is_active](#)
[is_active](#)

Definition [models_documented.py:26](#)
[bannerflow_app.models_documented.Campaign.__str__](#)
[__str__\(self\)](#)
String representation of campaign.

Definition [models_documented.py:68](#)

- [bannerflow_app](#)
- [models_documented.py](#)
- Generated by [doxygen](#) 1.9.8



Файл: models_with_doxygen_8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#) | [Namespaces](#)

models_with_doxygen.py File Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.models_with_doxygen.Campaign](#)
Модель рекламной кампании [More...](#)

class [bannerflow_app.models_with_doxygen.Banner](#)
Модель рекламного баннера [More...](#)

class [bannerflow_app.models_with_doxygen.CampaignStatistics](#)
Модель статистики кампании [More...](#)

class [bannerflow_app.models_with_doxygen.CampaignStatistics.Meta](#)
Мета-класс для настроек модели [More...](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.models_with_doxygen](#)

- [bannerflow_app](#)
- [models_with_doxygen.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

models_with_doxygen_8py_source.html

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
models_with_doxygen.py
Go to the documentation of this file.
1 """
2 @package bannerflow_app
3 @brief Модели данных для системы BannerFlow Manager
4
5 Модуль содержит основные модели данных для управления
рекламными кампаниями и баннерами.
6 """
7
8 from django.db import models
9
10 class Campaign(models.Model):
11     """!
12     @brief Модель рекламной кампании
13
14     Представляет собой рекламную кампанию с настройками
бюджета, временными рамками
15 и связью с баннерами. Кампания может быть активной или
неактивной.
16     """
17
18     name = models.CharField(max_length=255)
19     """!< Название кампании (обязательное поле)"""
20
21     budget = models.DecimalField(max_digits=10, decimal_places=2)
22     """!< Бюджет кампании в рублях"""
23
24     is_active = models.BooleanField(default=False)
25     """!< Флаг активности кампании (True - активна, False -
неактивна)"""
26
27     start_date = models.DateTimeField(null=True, blank=True)
28     """!< Дата и время начала кампании"""
29
30     end_date = models.DateTimeField(null=True, blank=True)
31     """!< Дата и время окончания кампании"""
32
33     target_platform = models.CharField(
34         max_length=10,
35         choices=[('iOS', 'iOS'), ('Android', 'Android'), ('Both', 'Both')],
36         default='Both'
```

```

37 )
38 """!< Целевая платформа для показа рекламы"""
39
40 def activate(self):
41 """!
42 @brief Активировать кампанию
43
44 Устанавливает флаг is_active в True и сохраняет объект в базе
данных.
45 Кампания начинает показывать рекламу после активации.
46
47 @return str Сообщение об успешной активации
48 """
49 self.is_active = True
50 self.save()
51 return f"Кампания '{self.name}' активирована"
52
53 def deactivate(self):
54 """!
55 @brief Деактивировать кампанию
56
57 Устанавливает флаг is_active в False и сохраняет объект в базе
данных.
58 Кампания прекращает показ рекламы после деактивации.
59
60 @return str Сообщение об успешной деактивации
61 """
62 self.is_active = False
63 self.save()
64 return f"Кампания '{self.name}' деактивирована"
65
66 def get_status(self):
67 """!
68 @brief Получить текстовый статус кампании
69
70 @return str Текстовое представление статуса кампании
71 """
72 return "Активна" if self.is_active else "Неактивна"
73
74 class Banner(models.Model):
75 """!
76 @brief Модель рекламного баннера
77
78 Представляет собой рекламный баннер, связанный с кампанией.
79 Содержит медиа-контент и настройки отображения.
80 """
81
82 campaign = models.ForeignKey(Campaign,
on_delete=models.CASCADE)
83 """!< Ссылка на родительскую кампанию (внешний ключ)"""
84
85 title = models.CharField(max_length=255)

```

```

86 """!< Название баннера"""
87
88 image_url = models.URLField()
89 """!< URL изображения или видео баннера"""
90
91 is_active = models.BooleanField(default=True)
92 """!< Флаг активности баннера"""
93
94 created_at = models.DateTimeField(auto_now_add=True)
95 """!< Дата и время создания баннера"""
96
97 def __str__(self):
98 """!
99 @brief Строковое представление баннера
100
101 @return str Название баннера
102 """
103 return f"Баннер: {self.title}"
104
105 class CampaignStatistics(models.Model):
106 """!
107 @brief Модель статистики кампании
108
109 Содержит статистические данные по кампании: показы, клики,
конверсии.
110 """
111
112 campaign = models.ForeignKey(Campaign,
on_delete=models.CASCADE)
113 """!< Ссылка на кампанию"""
114
115 date = models.DateField()
116 """!< Дата сбора статистики"""
117
118 impressions = models.IntegerField(default=0)
119 """!< Количество показов"""
120
121 clicks = models.IntegerField(default=0)
122 """!< Количество кликов"""
123
124 conversions = models.IntegerField(default=0)
125 """!< Количество конверсий"""
126
127 class Meta:
128 """!
129 @brief Мета-класс для настроек модели
130 """
131 unique_together = ['campaign', 'date']
bannerflow\_app.models\_with\_doxygen.Banner
Модель рекламного баннера
Definition models\_with\_doxygen.py:74
bannerflow\_app.models\_with\_doxygen.Banner.\_\_str\_\_

```

`__str__(self)`

Строковое представление баннера

Definition [models_with_doxygen.py:97](#)

[bannerflow_app.models_with_doxygen.CampaignStatistics.Meta](#)

Мета-класс для настроек модели

Definition [models_with_doxygen.py:127](#)

[bannerflow_app.models_with_doxygen.CampaignStatistics](#)

Модель статистики кампании

Definition [models_with_doxygen.py:105](#)

[bannerflow_app.models_with_doxygen.Campaign](#)

Модель рекламной кампании

Definition [models_with_doxygen.py:10](#)

[bannerflow_app.models_with_doxygen.Campaign.deactivate](#)

`deactivate(self)`

Деактивировать кампанию

Definition [models_with_doxygen.py:53](#)

[bannerflow_app.models_with_doxygen.Campaign.is_active](#)

`is_active`

Definition [models_with_doxygen.py:24](#)

[bannerflow_app.models_with_doxygen.Campaign.get_status](#)

`get_status(self)`

Получить текстовый статус кампании

Definition [models_with_doxygen.py:66](#)

[bannerflow_app.models_with_doxygen.Campaign.activate](#)

`activate(self)`

Активировать кампанию

Definition [models_with_doxygen.py:40](#)

- [bannerflow_app](#)
- [models_with_doxygen.py](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow__app_1_1admin.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

[bannerflow_app.admin](#) Namespace Reference

Classes

class [ABTestAdmin](#)

class [BannerAdmin](#)

class [BannerTemplateAdmin](#)

class [CampaignAdmin](#)

class [CampaignStatisticsAdmin](#)

class [CustomUserAdmin](#)

class [GameDataAdmin](#)

class [GeneratedBannerAdmin](#)

class [UserProfileAdmin](#)

class [UserProfileInline](#)

- [bannerflow_app](#)
- [admin](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_app_1_1banner_generator.ht](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

bannerflow_app.banner_generator Namespace Reference

Classes

class [BannerGenerator](#)

- [bannerflow_app](#)
- [banner_generator](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_app_1_1migrations_1_10001_](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

[bannerflow_app.migrations.0001_initial](#) Namespace Reference

Classes

class [Migration](#)

- [bannerflow_app](#)
- [migrations](#)
- [0001_initial](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_app_1_1migrations_1_10002_](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

bannerflow_app.migrations.0002_campaign_start_date Namespace
Reference

Classes

class [Migration](#)

- [bannerflow_app](#)
- [migrations](#)
- [0002_campaign_start_date](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_app_1_1migrations_1_10003_](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

bannerflow_app.migrations.0003_campaign_end_date_campaign_target_game_version
Namespace Reference

Classes

class [Migration](#)

- [bannerflow_app](#)
- [migrations](#)
- [0003_campaign_end_date_campaign_target_game_version_and_more](#)
- Generated by [doxygen](#) 1.9.8



Файл:

namespacebannerflow_app_1_1migrations_1_10004_

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

bannerflow_app.migrations.0004_campaign_is_ab_test_abtest_campaignstatistics

Namespace Reference

Classes

class [Migration](#)

- [bannerflow_app](#)
- [migrations](#)
- [0004_campaign_is_ab_test_abtest_campaignstatistics](#)
- Generated by [doxygen](#) 1.9.8



Файл:

namespacebannerflow_app_1_1migrations_1_10005_

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

bannerflow_app.migrations.0005_remove_banner_image_url_banner_media_file_and_r

Namespace Reference

Classes

class [Migration](#)

- [bannerflow_app](#)
- [migrations](#)
- [0005_remove_banner_image_url_banner_media_file_and_more](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_app_1_1migrations_1_10006_](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

[bannerflow_app.migrations.0006_alter_banner_media_file](#) Namespace
Reference

Classes

class [Migration](#)

- [bannerflow_app](#)
- [migrations](#)
- [0006_alter_banner_media_file](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_app_1_1migrations_1_10007_](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

bannerflow_app.migrations.0007_alter_banner_media_file Namespace
Reference

Classes

class [Migration](#)

- [bannerflow_app](#)
- [migrations](#)
- [0007_alter_banner_media_file](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_app_1_1migrations_1_10008_](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

bannerflow_app.migrations.0008_bannertemplate_gamedata_generatedbanner
Namespace Reference

Classes

class [Migration](#)

- [bannerflow_app](#)
 - [migrations](#)
 - [0008_bannertemplate_gamedata_generatedbanner](#)
 - Generated by [doxygen](#) 1.9.8
-



Файл:

namespacebannerflow__app_1_1migrations.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Namespaces](#)
bannerflow__app.migrations Namespace Reference

Namespaces

namespace [0001_initial](#)

namespace [0002_campaign_start_date](#)

namespace [0003_campaign_end_date_campaign_target_game_version_and_more](#)

namespace [0004_campaign_is_ab_test_abtest_campaignstatistics](#)

namespace [0005_remove_banner_image_url_banner_media_file_and_more](#)

namespace [0006_alter_banner_media_file](#)

namespace [0007_alter_banner_media_file](#)

namespace [0008_bannertemplate_gamedata_generatedbanner](#)

- [bannerflow_app](#)
- [migrations](#)
- Generated by [doxygen](#) 1.9.8



Файл:

namespacebannerflow_app_1_1models_documented

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Classes](#)
bannerflow_app.models_documented Namespace Reference

Classes

class [Banner](#)
Advertising Banner Model. [More...](#)

class [Campaign](#)
Advertising Campaign Model. [More...](#)

Detailed Description

@package bannerflow_app.models
@brief Data models for BannerFlow Manager system

This module contains Django models for managing advertising campaigns and

- [bannerflow_app](#)
- [models_documented](#)
- Generated by [doxygen](#) 1.9.8



Файл:

namespacebannerflow_app_1_1models.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Classes](#) | [Functions](#)

Classes

class [ABTest](#)

class [Banner](#)

class [BannerTemplate](#)

class [Campaign](#)

class [CampaignStatistics](#)

class [GameData](#)

class [GeneratedBanner](#)

class [UserProfile](#)

Functions

[validate_media_file](#) (value)

Function Documentation

◆ [validate_media_file\(\)](#)

bannerflow_app.models.validate_media_file (*value*)

Валидатор для медиафайлов - только PNG, JPG, MP4

Definition at line [8](#) of file [models.py](#).

```
8def validate_media_file(value):
9    """Валидатор для медиафайлов - только PNG, JPG, MP4"""
10    valid_extensions = ['.png', '.jpg', '.jpeg', '.mp4']
11
12    # Проверка расширения
13    ext = os.path.splitext(value.name)[1].lower()
14    if ext not in valid_extensions:
15        raise ValidationError(
```


16 f'Неподдерживаемый формат файла. Разрешенные форматы: PNG,
JPG, MP4'

17)

18

Here is the caller graph for this function:

- [bannerflow_app](#)
- [models](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_app_1_1models_with_doxyg](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

bannerflow_app.models_with_doxygen Namespace Reference

Classes

class [Banner](#)

Модель рекламного баннера [More...](#)

class [Campaign](#)

Модель рекламной кампании [More...](#)

class [CampaignStatistics](#)

Модель статистики кампании [More...](#)

Detailed Description

@package bannerflow_app

@brief Модели данных для системы BannerFlow Manager

Модуль содержит основные модели данных для управления рекламными кампания

- [bannerflow_app](#)

- [models_with_doxygen](#)
- Generated by [doxygen](#) 1.9.8



Файл:

namespacebannerflow_app_1_1services.html

BannerFlow Manager API 1.0
Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#)

bannerflow_app.services Namespace Reference

Classes

class [BannerService](#)

Service for banner-related operations. [More...](#)

Detailed Description

@package bannerflow_app.services

@brief Service layer for BannerFlow Manager business logic

This module contains service classes for business operations.

- [bannerflow_app](#)
- [services](#)
- Generated by [doxygen](#) 1.9.8



Файл:

namespacebannerflow__app_1_1tests.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Classes](#)
bannerflow__app.tests Namespace Reference

Classes

class [TestAPIAndServices](#)

class [TestBannerModel](#)

class [TestCampaignModel](#)

class [TestNegativeScenarios](#)

- [bannerflow__app](#)
- [tests](#)
- Generated by [doxygen](#) 1.9.8



Файл:

namespacebannerflow__app_1_1test__simple.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Classes](#)
bannerflow__app.test__simple Namespace Reference

Classes

class [SimpleTest](#)

- [bannerflow_app](#)
- [test_simple](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_app_1_1urls.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Variables](#)
bannerflow_app.urls Namespace Reference

Variables

list [urlpatterns](#)

Variable Documentation

◆ [urlpatterns](#)

list bannerflow_app.urls.urlpatterns

Initial value:

```
1 = [  
2 # Основные страницы  
3 path('', views.home, name='home'),  
4 path('dashboard/', views.dashboard, name='dashboard'),  
5  
6 # Генератор баннеров (основная функциональность проекта)  
7 path('generator/', views.banner_generator, name='banner_generator'),  
8 path('generate/', views.generate_banner, name='generate_banner'),  
9 path('banner/preview/<int:banner_id>', views.banner_preview,  
name='banner_preview'),
```

```
10 path('banner/export/<int:banner_id>/', views.export_banner,  
name='export_banner'),  
11 path('banner/list/', views.banner_list, name='banner_list'),  
12  
13 # API  
14 path('api/public/banners/', views.api_banners, name='public_banners'),  
15  
16 path('upload-data/', views.upload_game_data,  
name='upload_game_data'),  
17]
```

Definition at line [4](#) of file [bannerflow_app/urls.py](#).

- [bannerflow_app](#)
- [urls](#)
- Generated by [doxygen](#) 1.9.8



Файл:

namespacebannerflow_app_1_1views.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Functions](#)
bannerflow_app.views Namespace Reference

Functions

[home](#) (request)

[dashboard](#) (request)

[banner_generator](#) (request)

[generate_banner](#) (request)

[banner_preview](#) (request, banner_id)

[api_banners](#) (request)

[upload_game_data](#) (request)

[export_banner](#) (request, banner_id)

[banner_list](#) (request)

Function Documentation

◆ [api_banners\(\)](#)

`bannerflow_app.views.api_banners (request)`

API для получения баннеров

Definition at line [121](#) of file [views.py](#).

```
121 def api_banners(request):
122     """API для получения баннеров"""
123     try:
124         from .models import Campaign
125         campaigns = Campaign.objects.filter(status='active')
126
127         banners_data = []
128         for campaign in campaigns:
129             for banner in campaign.banners.all():
130                 banners_data.append({
131                     'id': banner.id,
132                     'title': banner.title,
133                     'campaign': campaign.name,
134                     'status': campaign.status,
135                 })
136
137         return JsonResponse({'banners': banners_data})
138     except Exception as e:
139         return JsonResponse({'error': str(e)}, status=500)
140
```

◆ [banner_generator\(\)](#)

`bannerflow_app.views.banner_generator (request)`

Главная страница генератора баннеров

Definition at line [19](#) of file [views.py](#).

```

19def banner_generator(request):
20 """Главная страница генератора баннеров"""
21 try:
22 from .models import BannerTemplate, GameData
23 templates = BannerTemplate.objects.all()
24 game_data = GameData.objects.all()
25
26 return render(request, 'bannerflow_app/banner_generator.html', {
27 'templates': templates,
28 'game_data': game_data,
29 })
30 except Exception as e:
31 return render(request, 'bannerflow_app/banner_generator.html', {
32 'templates': [],
33 'game_data': [],
34 'error': str(e)
35 })
36

```

◆ banner_list()

`bannerflow_app.views.banner_list (request)`

Список баннеров для экспорта

Definition at line [202](#) of file [views.py](#).

```

202def banner_list(request):
203 """Список баннеров для экспорта"""
204 from .models import GeneratedBanner
205 from django.shortcuts import render
206
207 banners = GeneratedBanner.objects.all().order_by('-created_at')
208
209 return render(request, 'bannerflow_app/banner_list.html', {
210 'banners': banners
211 })

```

◆ banner_preview()

`bannerflow_app.views.banner_preview (request,
banner_id
)`

Предпросмотр сгенерированного баннера

Definition at line [95](#) of file [views.py](#).

```

95def banner_preview(request, banner_id):
96 """Предпросмотр сгенерированного баннера"""

```

```

97 try:
98 from .models import GeneratedBanner
99 banner = GeneratedBanner.objects.get(id=banner_id)
100
101 return render(request, 'bannerflow_app/banner_preview.html', {
102 'banner': banner
103 })
104 except Exception as e:
105 return HttpResponse(f'<h1>Ошибка:</h1><p>{str(e)}</p>')
106
107 def cleanup():
108 try:
109 os.unlink(temp_path)
110 except:
111 pass
112
113 # Прикрепляем cleanup к response
114 response._resource_to_cleanup = temp_path
115
116 return response
117
118 except Exception as e:
119 return HttpResponse(f'Ошибка экспорта: {str(e)}')
120

```

◆ **dashboard()**

`bannerflow_app.views.dashboard (request)`

Панель управления

Definition at line [13](#) of file [views.py](#).

```

13def dashboard(request):
14 """Панель управления"""
15 return render(request, 'bannerflow_app/dashboard.html')
16
17# ===== ГЕНЕРАТОР БАННЕРОВ =====
18

```

◆ **export_banner()**

`bannerflow_app.views.export_banner (request,
banner_id
)`

Экспорт баннера для Godot - РАБОЧАЯ ВЕРСИЯ

Definition at line [145](#) of file [views.py](#).


```
145 def export_banner(request, banner_id):
146     """Экспорт баннера для Godot - РАБОЧАЯ ВЕРСИЯ"""
147     try:
148         from .models import GeneratedBanner
149         from .banner_generator import BannerGenerator
150         from django.http import FileResponse
151         import tempfile
152         import os
153
154         banner = GeneratedBanner.objects.get(id=banner_id)
155
156         # Создаем экспорт для Godot
157         godot_script = BannerGenerator.export_for_godot(
158             banner.html_content,
159             banner.name,
160             banner.template
161         )
162
163         # Создаем временный файл с расширением .gd
164         with tempfile.NamedTemporaryFile(
165             mode='w',
166             suffix='.gd',
167             delete=False,
168             encoding='utf-8'
169         ) as temp_file:
170             temp_file.write(godot_script)
171             temp_path = temp_file.name
172
173         # Создаем имя файла
174         filename = f"banner_{banner.id}.gd"
175
176         # Отправляем файл для скачивания
177         response = FileResponse(
178             open(temp_path, 'rb'),
179             as_attachment=True,
180             filename=filename,
181             content_type='text/plain'
182         )
183
184         # Удаляем временный файл
185         import atexit
186         def cleanup():
187             try:
188                 os.unlink(temp_path)
189             except:
190                 pass
191         atexit.register(cleanup)
192
193         return response
194
195     except GeneratedBanner.DoesNotExist:
196         from django.http import HttpResponse
```

```
197 return HttpResponse("Баннер не найден", status=404)
198 except Exception as e:
199 from django.http import HttpResponse
200 return HttpResponse(f'Ошибка: {str(e)}', status=500)
201
```

◆ generate_banner()

bannerflow_app.views.generate_banner (*request*)

Генерация баннера

Definition at line [37](#) of file [views.py](#).

```
37 def generate_banner(request):
38     """Генерация баннера"""
39     from django.contrib import messages
40     from django.shortcuts import redirect
41
42     if request.method == 'POST':
43         try:
44             from .models import BannerTemplate, GameData, GeneratedBanner
45             from .banner_generator import BannerGenerator
46             import tempfile
47             import os
48             from django.core.files import File
49
50             template_id = request.POST.get('template')
51             game_data_id = request.POST.get('game_data')
52             banner_name = request.POST.get('name', 'Новый баннер')
53
54             template = BannerTemplate.objects.get(id=template_id)
55             game_data = GameData.objects.get(id=game_data_id)
56
57             # Генерируем HTML
58             html_content = BannerGenerator.generate_html(template, game_data)
59
60             # Создаём экспорт для Godot
61             godot_script = BannerGenerator.export_for_godot(
62                 html_content,
63                 banner_name,
64                 template
65             )
66
67             # Сохраняем в базе
68             banner = GeneratedBanner.objects.create(
69                 name=banner_name,
70                 template=template,
71                 game_data=game_data,
72                 html_content=html_content,
73             )
```

```

74
75 # Сохраняем файл экспорта
76 with tempfile.NamedTemporaryFile(mode='w', suffix='.gd',
delete=False, encoding='utf-8') as f:
77 f.write(godot_script)
78 temp_path = f.name
79
80 with open(temp_path, 'rb') as f:
81 banner.godot_export.save(f'banner_{banner.id}.gd', File(f))
82
83 os.unlink(temp_path)
84
85 messages.success(request, f'Баннер "{banner_name}" успешно
создан!')
86 return redirect('banner_preview', banner_id=banner.id)
87
88 except Exception as e:
89 messages.error(request, f'Ошибка генерации: {str(e)}')
90 return redirect('banner_generator')
91
92 return redirect('banner_generator')
93
94

```

◆ **home()**

`bannerflow_app.views.home (request)`

Домашняя страница

Definition at line [9](#) of file [views.py](#).

```

9def home(request):
10 """Домашняя страница"""
11 return render(request, 'bannerflow_app/home.html')
12

```

◆ **upload_game_data()**

`bannerflow_app.views.upload_game_data (request)`

Загрузка данных игры

Definition at line [141](#) of file [views.py](#).

```

141def upload_game_data(request):
142 """Загрузка данных игры"""
143 return render(request, 'bannerflow_app/upload_game_data.html')
144

```

- [bannerflow_app](#)

- [views](#)
- Generated by [doxygen](#) 1.9.8



Файл: namespacebannerflow_app.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Namespaces](#)
bannerflow_app Namespace Reference

Namespaces

namespace [admin](#)

namespace [banner_generator](#)

namespace [migrations](#)

namespace [models](#)

namespace [urls](#)

namespace [views](#)

Detailed Description

Created on 9 нояб. 2025 г.

@author: dorokhova

- [bannerflow_app](#)
- Generated by [doxygen](#) 1.9.8



Файл:

namespacebannerflow_project_1_1settings.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Variables](#)
bannerflow_project.settings Namespace Reference

Variables

[BASE_DIR](#) = Path(__file__).resolve().parent.parent

str [SECRET_KEY](#) = 'django-insecure-your-secret-key-here'

bool [DEBUG](#) = True

list [ALLOWED_HOSTS](#) = []

list [INSTALLED_APPS](#)

list [MIDDLEWARE](#)

str [ROOT_URLCONF](#) = 'bannerflow_project.urls'

list [TEMPLATES](#)

str [WSGI_APPLICATION](#) = 'bannerflow_project.wsgi.application'

dict [DATABASES](#)

str [LANGUAGE_CODE](#) = 'en-us'

str [TIME_ZONE](#) = 'UTC'

bool [USE_I18N](#) = True

bool [USE_TZ](#) = True

str [STATIC_URL](#) = 'static/'

```
str  DEFAULT\_AUTO\_FIELD = 'django.db.models.BigAutoField'

dict  REST\_FRAMEWORK

str  MEDIA\_URL = '/media/'

MEDIA\_ROOT = os.path.join(BASE\_DIR, 'media')

str  EMAIL\_BACKEND =
'django.core.mail.backends.console.EmailBackend'

str  DEFAULT\_FROM\_EMAIL = 'noreply@bannerflow.com'

str  EMAIL\_HOST = 'smtp.mail.ru'

int  EMAIL\_PORT = 465

bool EMAIL\_USE\_SSL = True

str  EMAIL\_HOST\_USER = 'bannerflow_manager@mail.ru'

str  EMAIL\_HOST\_PASSWORD = 'DyAQzqEBGdfyyBBl3iym'

str  SERVER\_EMAIL = 'bannerflow_manager@mail.ru'
```

Detailed Description

Django settings for bannerflow_project.

Variable Documentation

◆ [ALLOWED_HOSTS](#)

list bannerflow_project.settings.ALLOWED_HOSTS = []

Definition at line [13](#) of file [settings.py](#).

◆ **BASE_DIR**

```
bannerflow_project.settings.BASE_DIR =  
Path(__file__).resolve().parent.parent
```

Definition at line [7](#) of file [settings.py](#).

◆ **DATABASES**

```
dict bannerflow_project.settings.DATABASES
```

Initial value:

```
1= {  
2 'default': {  
3 'ENGINE': 'django.db.backends.sqlite3',  
4 'NAME': BASE_DIR / 'db.sqlite3',  
5 }  
6}
```

Definition at line [55](#) of file [settings.py](#).

◆ **DEBUG**

```
bool bannerflow_project.settings.DEBUG = True
```

Definition at line [11](#) of file [settings.py](#).

◆ **DEFAULT_AUTO_FIELD**

```
str bannerflow_project.settings.DEFAULT_AUTO_FIELD =  
'django.db.models.BigAutoField'
```

Definition at line [68](#) of file [settings.py](#).

◆ **DEFAULT_FROM_EMAIL**

```
str bannerflow_project.settings.DEFAULT_FROM_EMAIL =  
'noreply@bannerflow.com'
```

Definition at line [86](#) of file [settings.py](#).

◆ EMAIL_BACKEND

```
str bannerflow_project.settings.EMAIL_BACKEND =  
'django.core.mail.backends.console.EmailBackend'
```

Definition at line [85](#) of file [settings.py](#).

◆ EMAIL_HOST

```
str bannerflow_project.settings.EMAIL_HOST = 'smtp.mail.ru'
```

Definition at line [89](#) of file [settings.py](#).

◆ EMAIL_HOST_PASSWORD

```
str bannerflow_project.settings.EMAIL_HOST_PASSWORD =  
'DyAQzqEBGdfyyBBl3iym'
```

Definition at line [93](#) of file [settings.py](#).

◆ EMAIL_HOST_USER

```
str bannerflow_project.settings.EMAIL_HOST_USER =  
'bannerflow_manager@mail.ru'
```

Definition at line [92](#) of file [settings.py](#).

◆ EMAIL_PORT

```
int bannerflow_project.settings.EMAIL_PORT = 465
```

Definition at line [90](#) of file [settings.py](#).

◆ EMAIL_USE_SSL

```
bool bannerflow_project.settings.EMAIL_USE_SSL = True
```

Definition at line [91](#) of file [settings.py](#).

◆ **INSTALLED_APPS**

list bannerflow_project.settings.INSTALLED_APPS

Initial value:

```
1 = [  
2 'django.contrib.admin',  
3 'django.contrib.auth',  
4 'django.contrib.contenttypes',  
5 'django.contrib.sessions',  
6 'django.contrib.messages',  
7 'django.contrib.staticfiles',  
8 'rest_framework',  
9 'bannerflow_app',  
10]
```

Definition at line [15](#) of file [settings.py](#).

◆ **LANGUAGE_CODE**

str bannerflow_project.settings.LANGUAGE_CODE = 'en-us'

Definition at line [62](#) of file [settings.py](#).

◆ **MEDIA_ROOT**

bannerflow_project.settings.MEDIA_ROOT = os.path.join([BASE_DIR](#),
'media')

Definition at line [82](#) of file [settings.py](#).

◆ **MEDIA_URL**

str bannerflow_project.settings.MEDIA_URL = '/media/'

Definition at line [81](#) of file [settings.py](#).

◆ **MIDDLEWARE**

list bannerflow_project.settings.MIDDLEWARE

Initial value:

```
1 = [  
2 'django.middleware.security.SecurityMiddleware',  
3 'django.contrib.sessions.middleware.SessionMiddleware',  
4 'django.middleware.common.CommonMiddleware',
```

```
5 'django.middleware.csrf.CsrfViewMiddleware',
6 'django.contrib.auth.middleware.AuthenticationMiddleware',
7 'django.contrib.messages.middleware.MessageMiddleware',
8 'django.middleware.clickjacking.XFrameOptionsMiddleware',
9]
```

Definition at line [25](#) of file [settings.py](#).

◆ **REST_FRAMEWORK**

dict bannerflow_project.settings.REST_FRAMEWORK

Initial value:

```
1= {
2 'DEFAULT_RENDERER_CLASSES': [
3 'rest_framework.renderers.JSONRenderer', # Только JSON, без HTML
4 ],
5 'DEFAULT_PERMISSION_CLASSES': [
6 'rest_framework.permissions.IsAuthenticated',
7 ]
8 }
```

Definition at line [70](#) of file [settings.py](#).

◆ **ROOT_URLCONF**

str bannerflow_project.settings.ROOT_URLCONF =
'bannerflow_project.urls'

Definition at line [35](#) of file [settings.py](#).

◆ **SECRET_KEY**

str bannerflow_project.settings.SECRET_KEY = 'django-insecure-your-secret-key-here'

Definition at line [9](#) of file [settings.py](#).

◆ **SERVER_EMAIL**

str bannerflow_project.settings.SERVER_EMAIL =
'bannerflow_manager@mail.ru'

Definition at line [95](#) of file [settings.py](#).

◆ STATIC_URL

str bannerflow_project.settings.STATIC_URL = 'static/'

Definition at line [67](#) of file [settings.py](#).

◆ TEMPLATES

list bannerflow_project.settings.TEMPLATES

Initial value:

```
1 = [  
2 {  
3 'BACKEND': 'django.template.backends.django.DjangoTemplates',  
4 'DIRS': [],  
5 'APP_DIRS': True,  
6 'OPTIONS': {  
7 'context_processors': [  
8 'django.template.context_processors.debug',  
9 'django.template.context_processors.request',  
10 'django.contrib.auth.context_processors.auth',  
11 'django.contrib.messages.context_processors.messages',  
12 ],  
13 },  
14 },  
15]
```

Definition at line [37](#) of file [settings.py](#).

◆ TIME_ZONE

str bannerflow_project.settings.TIME_ZONE = 'UTC'

Definition at line [63](#) of file [settings.py](#).

◆ USE_I18N

bool bannerflow_project.settings.USE_I18N = True

Definition at line [64](#) of file [settings.py](#).

◆ USE_TZ

bool bannerflow_project.settings.USE_TZ = True

Definition at line [65](#) of file [settings.py](#).

◆ **WSGI_APPLICATION**

```
str bannerflow_project.settings.WSGI_APPLICATION =  
'bannerflow\_project.wsgi.application'
```

Definition at line [53](#) of file [settings.py](#).

- [bannerflow_project](#)
- [settings](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_project_1_1urls.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Variables](#)
bannerflow_project.urls Namespace Reference

Variables

list [urlpatterns](#)

[MEDIA_URL](#)

[document_root](#)

Variable Documentation

◆ **document_root**

bannerflow_project.urls.document_root

Definition at line [12](#) of file [bannerflow_project/urls.py](#).

◆ **MEDIA_URL**

`bannerflow_project.urls.MEDIA_URL`

Definition at line [12](#) of file [bannerflow_project/urls.py](#).

◆ **urlpatterns**

`list bannerflow_project.urls.urlpatterns`

Initial value:

```
1 = [  
2 path('admin/', admin.site.urls),  
3 path('', include('bannerflow_app.urls')),  
4 ]
```

Definition at line [6](#) of file [bannerflow_project/urls.py](#).

- [bannerflow_project](#)
- [urls](#)
- Generated by [doxygen](#) 1.9.8



Файл:

[namespacebannerflow_project_1_1wsgi.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Variables](#)
bannerflow_project.wsgi Namespace Reference

Variables

[application](#) = `get_wsgi_application()`

Detailed Description

WSGI config for bannerflow_project project.

Variable Documentation

◆ application

```
bannerflow_project.wsgi.application = get_wsgi_application()
```

Definition at line 11 of file [wsgi.py](#).

- [bannerflow_project](#)
- [wsgi](#)
- Generated by [doxygen](#) 1.9.8

Файл: namespacebannerflow_project.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Namespaces](#)
bannerflow_project Namespace Reference

Namespaces

namespace [settings](#)

namespace [urls](#)

namespace [wsgi](#)

Detailed Description

Created on 9 нояб. 2025 г.

@author: dorokhova

- [bannerflow_project](#)
- Generated by [doxygen](#) 1.9.8

Файл: [namespacemembers_func.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

Here is a list of all namespace functions with links to the namespace documentation for each function:

- `api_banners()` : [bannerflow_app.views](#)
 - `banner_generator()` : [bannerflow_app.views](#)
 - `banner_list()` : [bannerflow_app.views](#)
 - `banner_preview()` : [bannerflow_app.views](#)
 - `dashboard()` : [bannerflow_app.views](#)
 - `export_banner()` : [bannerflow_app.views](#)
 - `generate_banner()` : [bannerflow_app.views](#)
 - `home()` : [bannerflow_app.views](#)
 - `upload_game_data()` : [bannerflow_app.views](#)
 - `validate_media_file()` : [bannerflow_app.models](#)
- Generated by [doxygen](#) 1.9.8

Файл: [namespacemembers.html](#)

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

Here is a list of all namespace members with links to the namespace documentation for each member:

- a -

- ALLOWED_HOSTS : [bannerflow_project.settings](#)
- api_banners() : [bannerflow_app.views](#)
- application : [bannerflow_project.wsgi](#)

- b -

- banner_generator() : [bannerflow_app.views](#)
- banner_list() : [bannerflow_app.views](#)
- banner_preview() : [bannerflow_app.views](#)
- BASE_DIR : [bannerflow_project.settings](#)

- d -

- dashboard() : [bannerflow_app.views](#)
- DATABASES : [bannerflow_project.settings](#)
- DEBUG : [bannerflow_project.settings](#)
- DEFAULT_AUTO_FIELD : [bannerflow_project.settings](#)
- DEFAULT_FROM_EMAIL : [bannerflow_project.settings](#)
- document_root : [bannerflow_project.urls](#)

- e -

- EMAIL_BACKEND : [bannerflow_project.settings](#)
- EMAIL_HOST : [bannerflow_project.settings](#)
- EMAIL_HOST_PASSWORD : [bannerflow_project.settings](#)
- EMAIL_HOST_USER : [bannerflow_project.settings](#)
- EMAIL_PORT : [bannerflow_project.settings](#)
- EMAIL_USE_SSL : [bannerflow_project.settings](#)
- export_banner() : [bannerflow_app.views](#)

- g -

- generate_banner() : [bannerflow_app.views](#)

- h -

- home() : [bannerflow_app.views](#)

- i -

- INSTALLED_APPS : [bannerflow_project.settings](#)

- l -

- LANGUAGE_CODE : [bannerflow_project.settings](#)

- m -

- MEDIA_ROOT : [bannerflow_project.settings](#)
- MEDIA_URL : [bannerflow_project.settings](#), [bannerflow_project.urls](#)
- MIDDLEWARE : [bannerflow_project.settings](#)

- r -

- REST_FRAMEWORK : [bannerflow_project.settings](#)
- ROOT_URLCONF : [bannerflow_project.settings](#)

- s -

- SECRET_KEY : [bannerflow_project.settings](#)
- SERVER_EMAIL : [bannerflow_project.settings](#)
- STATIC_URL : [bannerflow_project.settings](#)

- t -

- TEMPLATES : [bannerflow_project.settings](#)
- TIME_ZONE : [bannerflow_project.settings](#)

- u -

- upload_game_data() : [bannerflow_app.views](#)
- urlpatterns : [bannerflow_app.urls](#), [bannerflow_project.urls](#)
- USE_I18N : [bannerflow_project.settings](#)
- USE_TZ : [bannerflow_project.settings](#)

- v -

- validate_media_file() : [bannerflow_app.models](#)

- w -

- WSGI_APPLICATION : [bannerflow_project.settings](#)
 - Generated by [doxygen](#) 1.9.8
-



Файл: `namespacemembers_vars.html`

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

Here is a list of all namespace variables with links to the namespace documentation for each variable:

- a -

- ALLOWED_HOSTS : [bannerflow_project.settings](#)
- application : [bannerflow_project.wsgi](#)

- b -

- BASE_DIR : [bannerflow_project.settings](#)

- d -

- DATABASES : [bannerflow_project.settings](#)
- DEBUG : [bannerflow_project.settings](#)
- DEFAULT_AUTO_FIELD : [bannerflow_project.settings](#)
- DEFAULT_FROM_EMAIL : [bannerflow_project.settings](#)
- document_root : [bannerflow_project.urls](#)

- e -

- EMAIL_BACKEND : [bannerflow_project.settings](#)
- EMAIL_HOST : [bannerflow_project.settings](#)
- EMAIL_HOST_PASSWORD : [bannerflow_project.settings](#)
- EMAIL_HOST_USER : [bannerflow_project.settings](#)
- EMAIL_PORT : [bannerflow_project.settings](#)
- EMAIL_USE_SSL : [bannerflow_project.settings](#)

- i -

- INSTALLED_APPS : [bannerflow_project.settings](#)

- l -

- LANGUAGE_CODE : [bannerflow_project.settings](#)

- m -

- MEDIA_ROOT : [bannerflow_project.settings](#)
- MEDIA_URL : [bannerflow_project.settings](#), [bannerflow_project.urls](#)
- MIDDLEWARE : [bannerflow_project.settings](#)

- r -

- REST_FRAMEWORK : [bannerflow_project.settings](#)
- ROOT_URLCONF : [bannerflow_project.settings](#)

- s -

- SECRET_KEY : [bannerflow_project.settings](#)
- SERVER_EMAIL : [bannerflow_project.settings](#)
- STATIC_URL : [bannerflow_project.settings](#)

- t -

- TEMPLATES : [bannerflow_project.settings](#)
- TIME_ZONE : [bannerflow_project.settings](#)

- u -

- urlpatterns : [bannerflow_app.urls](#), [bannerflow_project.urls](#)
- USE_I18N : [bannerflow_project.settings](#)
- USE_TZ : [bannerflow_project.settings](#)

- w -

- WSGI_APPLICATION : [bannerflow_project.settings](#)
- Generated by [doxygen](#) 1.9.8



Файл: namespaces.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
Namespace List
Here is a list of all namespaces with brief descriptions:
[detail level 1234]
▼N[bannerflow_app](#)
 ▼N[admin](#)
 C[ABTestAdmin](#)
 C[BannerAdmin](#)
 C[BannerTemplateAdmin](#)

- [CCampaignAdmin](#)
- [CCampaignStatisticsAdmin](#)
- [CCustomUserAdmin](#)
- [CGameDataAdmin](#)
- [CGeneratedBannerAdmin](#)
- [CUserProfileAdmin](#)
- [CUserProfileInline](#)
- ▼N[banner_generator](#)
 - [CBannerGenerator](#)
- ▼N[migrations](#)
 - ▼N[0001_initial](#)
 - [CMigration](#)
 - ▼N[0002_campaign_start_date](#)
 - [CMigration](#)
 - ▼N[0003_campaign_end_date_campaign_target_game_version_and_more](#)
 - [CMigration](#)
 - ▼N[0004_campaign_is_ab_test_abtest_campaignstatistics](#)
 - [CMigration](#)
 - ▼N[0005_remove_banner_image_url_banner_media_file_and_more](#)
 - [CMigration](#)
 - ▼N[0006_alter_banner_media_file](#)
 - [CMigration](#)
 - ▼N[0007_alter_banner_media_file](#)
 - [CMigration](#)
 - ▼N[0008_bannertemplate_gamedata_generatedbanner](#)
 - [CMigration](#)
- ▼N[models](#)
 - [CABTest](#)
 - [CBanner](#)
 - ▼C[BannerTemplate](#)
 - [CMeta](#)
 - [CCampaign](#)
 - ▼C[CampaignStatistics](#)
 - [CMeta](#)
 - ▼C[GameData](#)
 - [CMeta](#)
 - ▼C[GeneratedBanner](#)
 - [CMeta](#)
 - [CUserProfile](#)
- N[urls](#)
- N[views](#)
- ▼N[bannerflow_project](#)

[Nsettings](#)

[Nurls](#)

[Nwsgi](#)

- Generated by [doxygen](#) 1.9.8



Файл: services_8py.html

BannerFlow Manager API 1.0

Django-based advertising banner management system

Loading...

Searching...

No Matches

[Classes](#) | [Namespaces](#)

services.py File Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.services.BannerService](#)

Service for banner-related operations. [More...](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.services](#)

- [bannerflow_app](#)
 - [services.py](#)
 - Generated by [doxygen](#) 1.9.8
-



Файл: services_8py_source.html

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
services.py
Go to the documentation of this file.
1 """
2 @package bannerflow_app.services
3 @brief Service layer for BannerFlow Manager business logic
4
5 This module contains service classes for business operations.
6 """
7
8 from django.core.mail import send_mail
9 from .models import Campaign, Banner
10
11 class BannerService:
12     """!
13     @brief Service for banner-related operations
14
15     Provides business logic for banner management and operations.
16     """
17
18     @staticmethod
19     def get\_active\_banners(platform=None):
20         """!
21         @brief Get active banners with platform filtering
22
23         Retrieves active banners with optional platform filtering.
24
25         @param platform Target platform: 'iOS', 'Android', or None for all
26         @return QuerySet of active Banner objects
27         """
28         campaigns = Campaign.objects.filter(is_active=True)
29
30         if platform and platform in ['iOS', 'Android']:
31             campaigns = campaigns.filter(target_platform__in=[platform, 'Both'])
32
33         banners = Banner.objects.filter(campaign__in=campaigns)
34         return banners
35
36     @staticmethod
37     def check\_budget\_and\_notify(campaign):
38         """!
39         @brief Check campaign budget and send notifications
40
```

```
41 Verifies if campaign budget is exhausted and sends email
notifications.
42
43 @param campaign Campaign object to check
44 @return bool True if budget is exceeded, False otherwise
45 """
46 # Placeholder implementation
47 budget_exceeded = False
48
49 if budget_exceeded:
50 send_mail(
51 'Campaign Budget Exceeded',
52 f'Campaign "{campaign.name}" has exceeded its budget.',
53 'noreply@bannerflow.com',
54 ['marketer@company.com'],
55 fail_silently=False,
56 )
57
58 return budget_exceeded
bannerflow\_app.services.BannerService
Service for banner-related operations.
Definition services.py:11
bannerflow\_app.services.BannerService.get\_active\_banners
get_active_banners(platform=None)
Get active banners with platform filtering.
Definition services.py:19
bannerflow\_app.services.BannerService.check\_budget\_and\_notify
check_budget_and_notify(campaign)
Check campaign budget and send notifications.
Definition services.py:37
```

- [bannerflow_app](#)
- [services.py](#)
- Generated by [doxygen](#) 1.9.8

Файл: settings_8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Namespaces](#) | [Variables](#)
settings.py File Reference

[Go to the source code of this file.](#)

Namespaces

namespace [bannerflow_project](#)

namespace [bannerflow_project.settings](#)

Variables

[bannerflow_project.settings.BASE_DIR](#) =
Path(__file__).resolve().parent.parent

str [bannerflow_project.settings.SECRET_KEY](#) = 'django-insecure-your-secret-key-here'

bool [bannerflow_project.settings.DEBUG](#) = True

list [bannerflow_project.settings.ALLOWED_HOSTS](#) = []

list [bannerflow_project.settings.INSTALLED_APPS](#)

list [bannerflow_project.settings.MIDDLEWARE](#)

str [bannerflow_project.settings.ROOT_URLCONF](#) =
'bannerflow_project.urls'

list [bannerflow_project.settings.TEMPLATES](#)

str [bannerflow_project.settings.WSGI_APPLICATION](#) =
'bannerflow_project.wsgi.application'

dict [bannerflow_project.settings.DATABASES](#)

str [bannerflow_project.settings.LANGUAGE_CODE](#) = 'en-us'

str [bannerflow_project.settings.TIME_ZONE](#) = 'UTC'

bool [bannerflow_project.settings.USE_I18N](#) = True

bool [bannerflow_project.settings.USE_TZ](#) = True


```
str bannerflow\_project.settings.STATIC\_URL = 'static/'

str bannerflow\_project.settings.DEFAULT\_AUTO\_FIELD =
'django.db.models.BigAutoField'

dict bannerflow\_project.settings.REST\_FRAMEWORK

str bannerflow\_project.settings.MEDIA\_URL = '/media/'

bannerflow\_project.settings.MEDIA\_ROOT =
os.path.join(BASE\_DIR, 'media')

str bannerflow\_project.settings.EMAIL\_BACKEND =
'django.core.mail.backends.console.EmailBackend'

str bannerflow\_project.settings.DEFAULT\_FROM\_EMAIL =
'noreply@bannerflow.com'

str bannerflow\_project.settings.EMAIL\_HOST = 'smtp.mail.ru'

int bannerflow\_project.settings.EMAIL\_PORT = 465

bool bannerflow\_project.settings.EMAIL\_USE\_SSL = True

str bannerflow\_project.settings.EMAIL\_HOST\_USER =
'bannerflow_manager@mail.ru'

str bannerflow\_project.settings.EMAIL\_HOST\_PASSWORD =
'DyAQzqEBGdfyyBB13iym'

str bannerflow\_project.settings.SERVER\_EMAIL =
'bannerflow_manager@mail.ru'
```

- [bannerflow_project](#)
 - [settings.py](#)
 - Generated by [doxygen](#) 1.9.8
-



Файл: settings_8py_source.html

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
settings.py
Go to the documentation of this file.
1 """
2 Django settings for bannerflow_project.
3 """
4
5 from pathlib import Path
6
7 BASE_DIR = Path(__file__).resolve().parent.parent
8
9 SECRET_KEY = 'django-insecure-your-secret-key-here'
10
11 DEBUG = True
12
13 ALLOWED_HOSTS = []
14
15 INSTALLED_APPS = [
16     'django.contrib.admin',
17     'django.contrib.auth',
18     'django.contrib.contenttypes',
19     'django.contrib.sessions',
20     'django.contrib.messages',
21     'django.contrib.staticfiles',
22     'rest_framework',
23     'bannerflow_app',
24 ]
25 MIDDLEWARE = [
26     'django.middleware.security.SecurityMiddleware',
27     'django.contrib.sessions.middleware.SessionMiddleware',
28     'django.middleware.common.CommonMiddleware',
29     'django.middleware.csrf.CsrfViewMiddleware',
30     'django.contrib.auth.middleware.AuthenticationMiddleware',
31     'django.contrib.messages.middleware.MessageMiddleware',
32     'django.middleware.clickjacking.XFrameOptionsMiddleware',
33 ]
34
35 ROOT_URLCONF = 'bannerflow_project.urls'
36
37 TEMPLATES = [
38     {
39         'BACKEND': 'django.template.backends.django.DjangoTemplates',
40         'DIRS': [],
41         'APP_DIRS': True,
```

```

42 'OPTIONS': {
43 'context_processors': [
44 'django.template.context_processors.debug',
45 'django.template.context_processors.request',
46 'django.contrib.auth.context_processors.auth',
47 'django.contrib.messages.context_processors.messages',
48 ],
49 },
50 },
51]
52
53WSGI_APPLICATION = 'bannerflow_project.wsgi.application'
54
55DATABASES = {
56 'default': {
57 'ENGINE': 'django.db.backends.sqlite3',
58 'NAME': BASE_DIR / 'db.sqlite3',
59 }
60}
61
62LANGUAGE_CODE = 'en-us'
63TIME_ZONE = 'UTC'
64USE_I18N = True
65USE_TZ = True
66
67STATIC_URL = 'static/'
68DEFAULT_AUTO_FIELD = 'django.db.models.BigAutoField'
69
70REST_FRAMEWORK = {
71 'DEFAULT_RENDERER_CLASSES': [
72 'rest_framework.renderers.JSONRenderer', # Только JSON, без
HTML
73 ],
74 'DEFAULT_PERMISSION_CLASSES': [
75 'rest_framework.permissions.IsAuthenticated',
76 ]
77}
78import os
79
80# Медиафайлы
81MEDIA_URL = '/media/'
82MEDIA_ROOT = os.path.join(BASE_DIR, 'media')
83
84# Настройки email (для уведомлений)
85EMAIL_BACKEND =
'django.core.mail.backends.console.EmailBackend' # Для тестов -
ВЫВОДИТ В КОНСОЛЬ
86DEFAULT_FROM_EMAIL = 'noreply@bannerflow.com'
87
88EMAIL_BACKEND = 'django.core.mail.backends.smtp.EmailBackend'
89EMAIL_HOST = 'smtp.mail.ru'
90EMAIL_PORT = 465

```

```
91EMAIL_USE_SSL = True
92EMAIL_HOST_USER = 'bannerflow_manager@mail.ru'
93EMAIL_HOST_PASSWORD = 'DyAQzqEBGdfyyBBl3iym'
94DEFAULT_FROM_EMAIL = 'bannerflow_manager@mail.ru'
95SERVER_EMAIL = 'bannerflow_manager@mail.ru'
```

- [bannerflow_project](#)
- [settings.py](#)
- Generated by [doxygen](#) 1.9.8

Файл: tests_8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Classes](#) | [Namespaces](#)
tests.py File Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.tests.TestCampaignModel](#)

class [bannerflow_app.tests.TestBannerModel](#)

class [bannerflow_app.tests.TestNegativeScenarios](#)

class [bannerflow_app.tests.TestAPIAndServices](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.tests](#)

- [bannerflow_app](#)
- [tests.py](#)
- Generated by [doxygen](#) 1.9.8

Файл: tests_8py_source.html

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
tests.py
Go to the documentation of this file.
1import pytest
2from django.test import TestCase, Client
3from django.db import transaction
4from .models import Campaign, Banner
5
6class TestCampaignModel(TestCase):
7    def test\_campaign\_creation\_and\_methods(self):
8        """Тест создания кампании и ее методов"""
9        campaign = Campaign.objects.create(
10            name="Test Campaign",
11            budget=1000.00,
12            is_active=False,
13        )
14        # Проверка создания
15        self.assertEqual(campaign.name, "Test Campaign")
16        self.assertEqual(float(campaign.budget), 1000.00)
17
18        # Проверка активации
19        result = campaign.activate()
20        self.assertTrue(campaign.is_active)
21        self.assertIn("активирована", result)
22
23        # Проверка деактивации
24        result = campaign.deactivate()
25        self.assertFalse(campaign.is_active)
26        self.assertIn("деактивирована", result)
27
28class TestBannerModel(TestCase):
29    def setUp(self):
30        self.campaign = Campaign.objects.create(
```

```

31 name="Banner Test Campaign",
32 budget=1000.00,
33 )
34
35 def test_banner_creation_and_url_validation(self):
36 """Тест создания баннера и валидации URL"""
37 # Тест создания баннера
38 banner = Banner.objects.create(
39 campaign=self.campaign,
40 title="Test Banner",
41 image_url="http://example.com/banner.png"
42 )
43
44 self.assertEqual(banner.title, "Test Banner")
45 self.assertEqual(banner.image_url, "http://example.com/banner.png")
46 self.assertEqual(banner.campaign, self.campaign)
47 self.assertEqual(str(banner), "Баннер: Test Banner")
48
49 # Тест валидных URL (параметризованный подход)
50 valid_urls = [
51 'http://example.com/banner.png',
52 'https://example.com/banner.jpg',
53 'http://test.com/video.mp4'
54 ]
55
56 for url in valid_urls:
57 with self.subTest(url=url):
58 banner = Banner.objects.create(
59 campaign=self.campaign,
60 title="URL Test Banner",
61 image_url=url
62 )
63 self.assertEqual(banner.image_url, url)
64
65 class TestNegativeScenarios(TestCase):
66 def test_negative_cases(self):
67 """Тестирование ошибочных сценариев"""
68 # Тест отрицательного бюджета
69 campaign = Campaign.objects.create(
70 name="Negative Budget Campaign",
71 budget=-100.00,
72 )
73 self.assertEqual(float(campaign.budget), -100.00)
74
75 # Тест баннера без кампании (изолируем в отдельной транзакции)
76 try:
77 with transaction.atomic():
78 Banner.objects.create(
79 title="Orphan Banner",
80 image_url="http://example.com/orphan.png"
81 )
82 self.fail("Ожидалась ошибка при создании баннера без кампании")

```

```

83 except Exception:
84     pass # Ожидаемое поведение
85
86 # Тест невалидного URL
87 campaign2 = Campaign.objects.create(
88     name="URL Test Campaign",
89     budget=1000.00,
90 )
91 try:
92     Banner.objects.create(
93         campaign=campaign2,
94         title="Invalid URL Banner",
95         image_url="invalid_url"
96     )
97 except Exception:
98     pass # Ожидаемое поведение для невалидного URL
99
100 class TestAPIAndServices(TestCase):
101     def setUp(self):
102         self.client = Client()
103         self.campaign = Campaign.objects.create(
104             name="API Test Campaign",
105             budget=1000.00,
106             is_active=True,
107         )
108         self.banner = Banner.objects.create(
109             campaign=self.campaign,
110             title="API Test Banner",
111             image_url="http://example.com/api_banner.png"
112         )
113
114     def test_api_functionality(self):
115         """Тестирование API endpoints"""
116         # Тест главной страницы
117         response = self.client.get('/')
118         self.assertEqual(response.status_code, 200)
119
120         # Тест API баннеров
121         response = self.client.get('/api/banners/')
122         self.assertEqual(response.status_code, 200)
123
124         # Тест сервисного слоя
125         try:
126             from .services import BannerService
127             banners = BannerService.get_active_banners()
128             self.assertIsNotNone(banners)
129         except ImportError:
130             self.skipTest("Сервис BannerService не найден")

```

[bannerflow_app.tests.TestAPIAndServices](#)
Definition [tests.py:100](#)
[bannerflow_app.tests.TestAPIAndServices.banner](#)
 banner

Definition [tests.py:108](#)
[bannerflow_app.tests.TestAPIAndServices.test_api_functionality](#)
[test_api_functionality\(self\)](#)

Definition [tests.py:114](#)
[bannerflow_app.tests.TestAPIAndServices.setUp](#)
[setUp\(self\)](#)

Definition [tests.py:101](#)
[bannerflow_app.tests.TestAPIAndServices.campaign](#)
[campaign](#)

Definition [tests.py:103](#)
[bannerflow_app.tests.TestAPIAndServices.client](#)
[client](#)

Definition [tests.py:102](#)
[bannerflow_app.tests.TestBannerModel](#)

Definition [tests.py:28](#)
[bannerflow_app.tests.TestBannerModel.setUp](#)
[setUp\(self\)](#)

Definition [tests.py:29](#)
[bannerflow_app.tests.TestBannerModel.test_banner_creation_and_url_validation](#)
[test_banner_creation_and_url_validation\(self\)](#)

Definition [tests.py:35](#)
[bannerflow_app.tests.TestBannerModel.campaign](#)
[campaign](#)

Definition [tests.py:30](#)
[bannerflow_app.tests.TestCampaignModel](#)

Definition [tests.py:6](#)
[bannerflow_app.tests.TestCampaignModel.test_campaign_creation_and_methods](#)
[test_campaign_creation_and_methods\(self\)](#)

Definition [tests.py:7](#)
[bannerflow_app.tests.TestNegativeScenarios](#)

Definition [tests.py:65](#)
[bannerflow_app.tests.TestNegativeScenarios.test_negative_cases](#)
[test_negative_cases\(self\)](#)

Definition [tests.py:66](#)

- [bannerflow_app](#)
- [tests.py](#)
- Generated by [doxygen](#) 1.9.8



Файл: test_simple_8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...

No Matches

[Classes](#) | [Namespaces](#)

test_simple.py File Reference

[Go to the source code of this file.](#)

Classes

class [bannerflow_app.test_simple.SimpleTest](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.test_simple](#)

- [bannerflow_app](#)
- [test_simple.py](#)
- Generated by [doxygen](#) 1.9.8

Файл: test_simple_8py_source.html

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
test_simple.py
Go to the documentation of this file.
1import pytest
2from django.test import TestCase
3
4class SimpleTest(TestCase):
5    def test_basic_addition(self):
6        """Простейший тест для проверки работы"""
7        self.assertEqual(1 + 1, 2)
8
9    def test_basic_assertion(self):
10        """Еще один простой тест"""
```

```
11 assert True == True
bannerflow\_app.test\_simple.SimpleTest
Definition test\_simple.py:4
bannerflow\_app.test\_simple.SimpleTest.test\_basic\_assertion
test_basic_assertion(self)
Definition test\_simple.py:9
bannerflow\_app.test\_simple.SimpleTest.test\_basic\_addition
test_basic_addition(self)
Definition test\_simple.py:5
```

- [bannerflow_app](#)
- [test_simple.py](#)
- Generated by [doxygen](#) 1.9.8

Файл: [views_8py.html](#)

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Namespaces](#) | [Functions](#)
views.py File Reference

[Go to the source code of this file.](#)

Namespaces

namespace [bannerflow_app](#)

namespace [bannerflow_app.views](#)

Functions

[bannerflow_app.views.home](#) (request)

[bannerflow_app.views.dashboard](#) (request)

[bannerflow_app.views.banner_generator](#) (request)

[bannerflow_app.views.generate_banner](#) (request)

[bannerflow_app.views.banner_preview](#) (request, banner_id)

[bannerflow_app.views.api_banners](#) (request)

[bannerflow_app.views.upload_game_data](#) (request)

[bannerflow_app.views.export_banner](#) (request, banner_id)

[bannerflow_app.views.banner_list](#) (request)

- [bannerflow_app](#)
- [views.py](#)
- Generated by [doxygen](#) 1.9.8



Файл: [views_8py_source.html](#)

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
views.py
Go to the documentation of this file.
1from django.shortcuts import render, redirect, get_object_or_404
2from django.http import HttpResponse, JsonResponse
3from django.contrib.auth.decorators import login_required
4from django.contrib import messages
5import json
6
7# Импорт моделей (будем импортировать внутри функций при
необходимости)
8
9def home(request):
10     """Домашняя страница"""
11     return render(request, 'bannerflow_app/home.html')
12
13def dashboard(request):
14     """Панель управления"""
```

```

15 return render(request, 'bannerflow_app/dashboard.html')
16
17# ===== ГЕНЕРАТОР БАННЕРОВ =====
18
19def banner_generator(request):
20     """Главная страница генератора баннеров"""
21     try:
22         from .models import BannerTemplate, GameData
23         templates = BannerTemplate.objects.all()
24         game_data = GameData.objects.all()
25
26         return render(request, 'bannerflow_app/banner_generator.html', {
27             'templates': templates,
28             'game_data': game_data,
29         })
30     except Exception as e:
31         return render(request, 'bannerflow_app/banner_generator.html', {
32             'templates': [],
33             'game_data': [],
34             'error': str(e)
35         })
36
37def generate_banner(request):
38     """Генерация баннера"""
39     from django.contrib import messages
40     from django.shortcuts import redirect
41
42     if request.method == 'POST':
43         try:
44             from .models import BannerTemplate, GameData, GeneratedBanner
45             from .banner_generator import BannerGenerator
46             import tempfile
47             import os
48             from django.core.files import File
49
50             template_id = request.POST.get('template')
51             game_data_id = request.POST.get('game_data')
52             banner_name = request.POST.get('name', 'Новый баннер')
53
54             template = BannerTemplate.objects.get(id=template_id)
55             game_data = GameData.objects.get(id=game_data_id)
56
57             # Генерируем HTML
58             html_content = BannerGenerator.generate_html(template,
game_data)
59
60             # Создаём экспорт для Godot
61             godot_script = BannerGenerator.export_for_godot(
62                 html_content,
63                 banner_name,
64                 template
65             )

```

```

66
67 # Сохраняем в базе
68 banner = GeneratedBanner.objects.create(
69 name=banner_name,
70 template=template,
71 game_data=game_data,
72 html_content=html_content,
73 )
74
75 # Сохраняем файл экспорта
76 with tempfile.NamedTemporaryFile(mode='w', suffix='.gd',
delete=False, encoding='utf-8') as f:
77 f.write(godot_script)
78 temp_path = f.name
79
80 with open(temp_path, 'rb') as f:
81 banner.godot_export.save(f'banner_{banner.id}.gd', File(f))
82
83 os.unlink(temp_path)
84
85 messages.success(request, f'Баннер "{banner_name}" успешно
создан!')
86 return redirect('banner_preview', banner_id=banner.id)
87
88 except Exception as e:
89 messages.error(request, f'Ошибка генерации: {str(e)}')
90 return redirect('banner_generator')
91
92 return redirect('banner_generator')
93
94
95 def banner_preview(request, banner_id):
96 """Предпросмотр сгенерированного баннера"""
97 try:
98 from .models import GeneratedBanner
99 banner = GeneratedBanner.objects.get(id=banner_id)
100
101 return render(request, 'bannerflow_app/banner_preview.html', {
102 'banner': banner
103 })
104 except Exception as e:
105 return HttpResponse(f'<h1>Ошибка:</h1><p>{str(e)}</p>')
106
107 def cleanup():
108 try:
109 os.unlink(temp_path)
110 except:
111 pass
112
113 # Прикрепляем cleanup к response
114 response._resource_to_cleanup = temp_path
115

```

```

116 return response
117
118 except Exception as e:
119 return HttpResponse(f'Ошибка экспорта: {str(e)}')
120
121 def api\_banners(request):
122 """API для получения баннеров"""
123 try:
124 from .models import Campaign
125 campaigns = Campaign.objects.filter(status='active')
126
127 banners_data = []
128 for campaign in campaigns:
129 for banner in campaign.banners.all():
130 banners_data.append({
131 'id': banner.id,
132 'title': banner.title,
133 'campaign': campaign.name,
134 'status': campaign.status,
135 })
136
137 return JsonResponse({'banners': banners_data})
138 except Exception as e:
139 return JsonResponse({'error': str(e)}, status=500)
140
141 def upload\_game\_data(request):
142 """Загрузка данных игры"""
143 return render(request, 'bannerflow_app/upload_game_data.html')
144
145 def export\_banner(request, banner_id):
146 """Экспорт баннера для Godot - РАБОЧАЯ ВЕРСИЯ"""
147 try:
148 from .models import GeneratedBanner
149 from .banner_generator import BannerGenerator
150 from django.http import FileResponse
151 import tempfile
152 import os
153
154 banner = GeneratedBanner.objects.get(id=banner_id)
155
156 # Создаем экспорт для Godot
157 godot_script = BannerGenerator.export_for_godot(
158 banner.html_content,
159 banner.name,
160 banner.template
161 )
162
163 # Создаем временный файл с расширением .gd
164 with tempfile.NamedTemporaryFile(
165 mode='w',
166 suffix='.gd',
167 delete=False,

```

```

168 encoding='utf-8'
169 ) as temp_file:
170 temp_file.write(godot_script)
171 temp_path = temp_file.name
172
173 # Создаем имя файла
174 filename = f"banner_{banner.id}.gd"
175
176 # Отправляем файл для скачивания
177 response = FileResponse(
178 open(temp_path, 'rb'),
179 as_attachment=True,
180 filename=filename,
181 content_type='text/plain'
182 )
183
184 # Удаляем временный файл
185 import atexit
186 def cleanup():
187 try:
188 os.unlink(temp_path)
189 except:
190 pass
191 atexit.register(cleanup)
192
193 return response
194
195 except GeneratedBanner.DoesNotExist:
196 from django.http import HttpResponse
197 return HttpResponse("Баннер не найден", status=404)
198 except Exception as e:
199 from django.http import HttpResponse
200 return HttpResponse(f'Ошибка: {str(e)}', status=500)
201
202 def banner_list(request):
203 """Список баннеров для экспорта"""
204 from .models import GeneratedBanner
205 from django.shortcuts import render
206
207 banners = GeneratedBanner.objects.all().order_by('-created_at')
208
209 return render(request, 'bannerflow_app/banner_list.html', {
210 'banners': banners
211 })

```

[bannerflow_app.views.api_banners](#)
[api_banners\(request\)](#)
Definition [views.py:121](#)
[bannerflow_app.views.dashboard](#)
[dashboard\(request\)](#)
Definition [views.py:13](#)
[bannerflow_app.views.generate_banner](#)
[generate_banner\(request\)](#)

Definition [views.py:37](#)
[bannerflow_app.views.banner_preview](#)
banner_preview(request, banner_id)
Definition [views.py:95](#)
[bannerflow_app.views.home](#)
home(request)
Definition [views.py:9](#)
[bannerflow_app.views.banner_list](#)
banner_list(request)
Definition [views.py:202](#)
[bannerflow_app.views.upload_game_data](#)
upload_game_data(request)
Definition [views.py:141](#)
[bannerflow_app.views.export_banner](#)
export_banner(request, banner_id)
Definition [views.py:145](#)

- [bannerflow_app](#)
- [views.py](#)
- Generated by [doxygen](#) 1.9.8

Файл: wsgi_8py.html

BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
[Namespaces](#) | [Variables](#)
wsgi.py File Reference

[Go to the source code of this file.](#)

Namespaces

namespace [bannerflow_project](#)

namespace [bannerflow_project.wsgi](#)

Variables


```
bannerflow_project.wsgi.application = get_wsgi_application()
```

- [bannerflow_project](#)
- [wsgi.py](#)
- Generated by [doxygen](#) 1.9.8



Файл: wsgi_8py_source.html

```
BannerFlow Manager API 1.0
Django-based advertising banner management system
Loading...
Searching...
No Matches
wsgi.py
Go to the documentation of this file.
1"""
2WSGI config for bannerflow_project project.
3"""
4
5import os
6
7from django.core.wsgi import get_wsgi_application
8
9os.environ.setdefault('DJANGO_SETTINGS_MODULE',
'bannerflow_project.settings')
10
11application = get_wsgi_application()
```

- [bannerflow_project](#)
- [wsgi.py](#)
- Generated by [doxygen](#) 1.9.8

Статистика

Всего объединено файлов: 0

Полный путь к HTML файлам: docs/html

Для лучшего просмотра используйте оригинальные HTML файлы с навигацией