Avaliação: Mini blog DIY Django

Nesta avaliação, você usará o conhecimento de Django que adquiriu no módulo Django Web Framework (Python) para criar um blog muito básico.

Pré-requisitos:	Antes de tentar esta avaliação, você já deve ter trabalhado em todos os artigos deste módulo.
Objetivo:	Para testar a compreensão dos fundamentos do Django, incluindo configurações de URL, modelos, visualizações, formulários e modelos.

Resumo do projeto

As páginas que precisam ser exibidas, seus URLs e outros requisitos estão listados abaixo:

Página	URL	Requisitos
Pagina inicial	`/` e `/blog/`	Uma página de índice que descreve o site.

Página	URL	Requisitos
Lista de todas as postagens do blog	`/blog/blogs/`	Lista de todas as postagens do blog: • Acessível a todos os usuários a partir de um link da barra lateral. • Lista ordenada por data de postagem (da mais recente para a mais antiga). • Lista paginada em grupos de 5 artigos. • Os itens da lista exibem o título do blog, a data da postagem e o autor. • Os nomes das postagens do blog são vinculados às páginas de detalhes do blog. • O Blogger (nomes dos autores) está vinculado às páginas de detalhes do autor do blog.

Página	URL	Requisitos
Página de detalhes do autor do blog (blogger)	`/blog/blogger/<author-id>`	Informações para um autor especificado (por id) e lista de suas postagens de blog: • Acessível a todos os usuários a partir de links de autor em postagens de blog etc. • Contém algumas informações biográficas sobre o blogueiro / autor. • Lista ordenada por data de postagem (da mais recente para a mais antiga). • Não paginado. • Os itens da lista exibem apenas o nome da postagem do blog e a data da postagem. • Os nomes das postagens do blog são vinculados às páginas de detalhes do blog.

Página	URL	Requisitos
Página de detalhes da postagem do blog	`/blog/<blog-id>`	Detalhes da postagem no blog. • Acessível a todos os usuários das listas de postagens do blog. • A página contém a postagem do blog: nome, autor, data da postagem e conteúdo. • Comments for the blog post should be displayed at bottom. • Comments should be sorted in order: oldest to most recent. • Contains link to add comments at end for logged in users (see Comment form page) • Blog posts and comments need only display plain text. There is no need to support any sort of HTML markup (e.g. links, images, bold/italic, etc).
List of all bloggers	`/blog/bloggers/`	List of bloggers on system: • Accessible to all users from site sidebar • Blogger names are linked to Blog author detail pages.

Página	URL	Requisitos
Comment form page	`/blog/<blog-id>/create`	Create comment for blog post: • Accessible to logged-in users (only) from link at bottom of blog post detail pages. • Displays form with description for entering comments (post date and blog is not editable). • After a comment has been posted, the page will redirect back to the associated blog post page. • Users cannot edit or delete their posts. • Logged out users will be directed to the login page to log in, before they can add comments. After logging in, they will be redirected back to the blog page they wanted to comment on. • Comment pages should include the name/link to the blogpost being commented on.
User authentication pages	`/accounts/<standard urls>`	Standard Django authentication pages for logging in, out and setting the password: • Login/out should be accessible via sidebar links.

Página	URL	Requisitos
Admin site	`/admin/<standard urls>`	Admin site should be enabled to allow create/edit/delete of blog posts, blog authors and blog comments (this is the mechanism for bloggers to create new blog posts): • Admin site blog posts records should display the list of associated comments inline (below each blog post). • Comment names in the Admin site are created by truncating the comment description to 75 characters. • Other types of records can use basic registration.

In addition you should write some basic tests to verify:

- All model fields have the correct label and length.
- All models have the expected object name (e.g. `__str__()` returns the expected value).
- Models have the expected URL for individual Blog and Comment records (e.g. `get_absolute_url()` returns the expected URL).
- The BlogListView (all-blog page) is accessible at the expected location (e.g. /blog/blogs)
- The BlogListView (all-blog page) is accessible at the expected named url (e.g. 'blogs')
- The BlogListView (all-blog page) uses the expected template (e.g. the default)
- The BlogListView paginates records by 5 (at least on the first page)

Note

Note

There are of course many other tests you can run. Use your discretion, but we'll expect you to do at least the tests above.

The following section shows screenshots of a site that implements the requirements above.

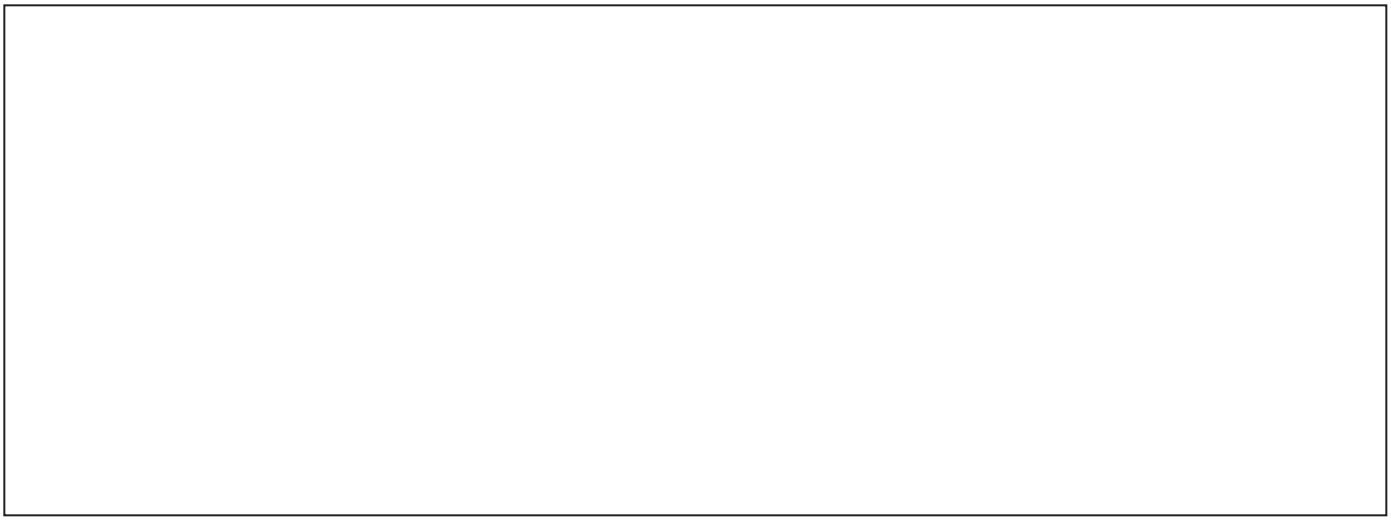
Screenshots

The following screenshots provide an example of what the finished program should output.

List of all blog posts

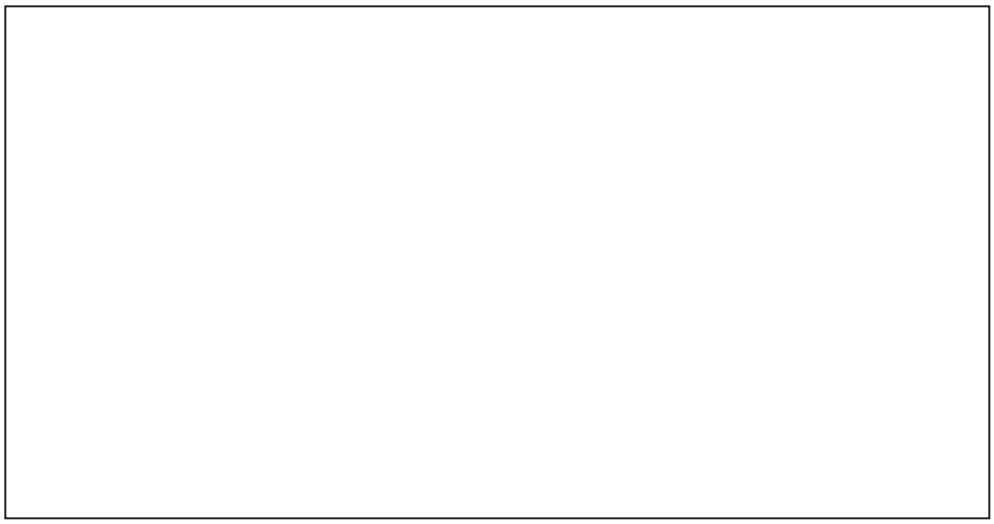
This displays the list of all blog posts (accessible from the "All blogs" link in the sidebar). Things to note:

- The sidebar also lists the logged in user.
- Individual blog posts and bloggers are accessible as links in the page.
- Pagination is enabled (in groups of 5)
- Ordering is newest to oldest.



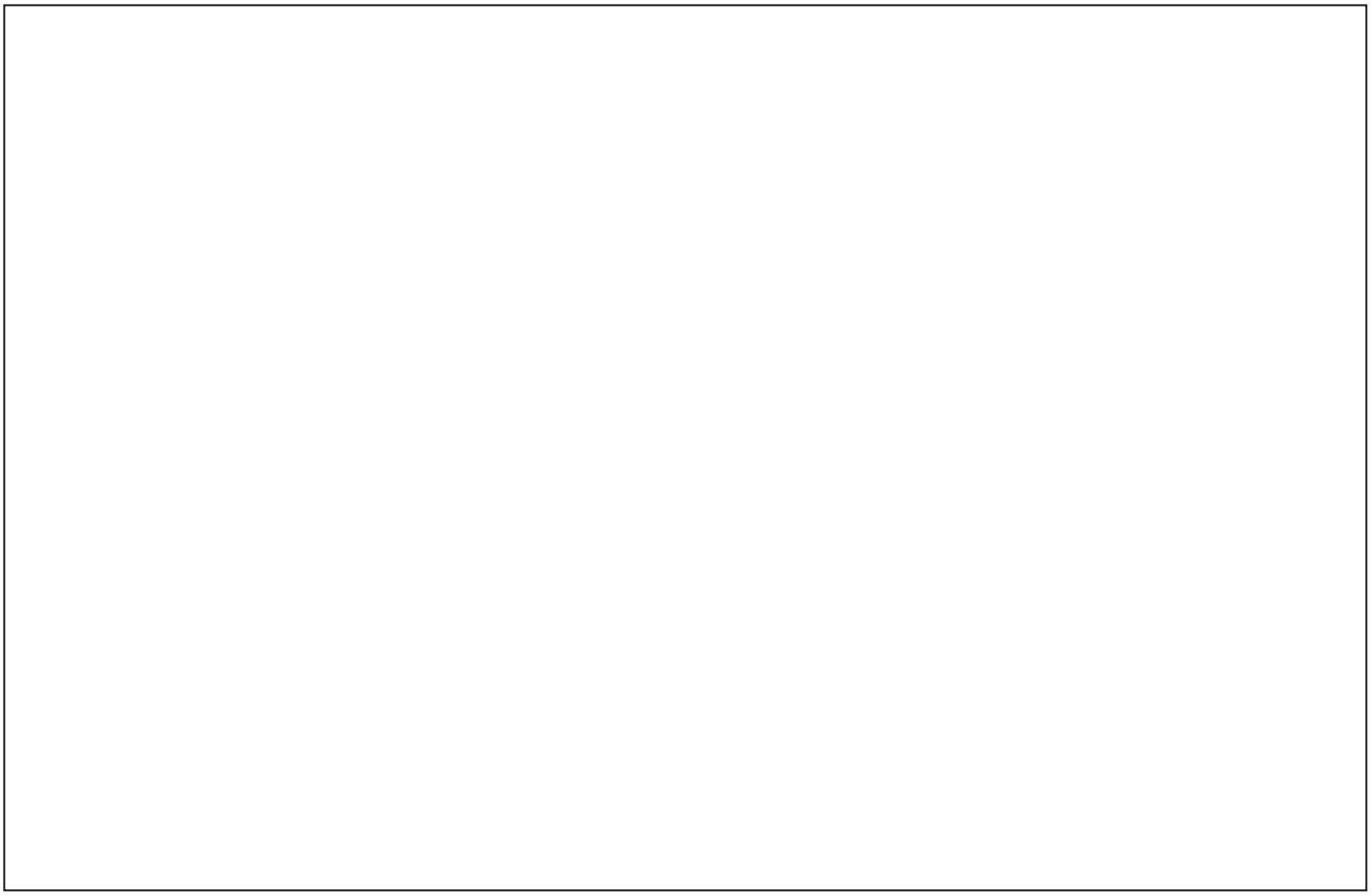
List of all bloggers

This provides links to all bloggers, as linked from the "All bloggers" link in the sidebar. In this case we can see from the sidebar that no user is logged in.

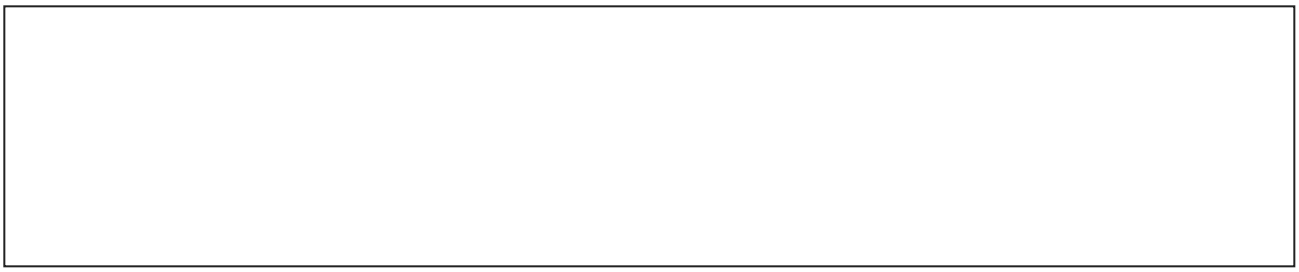


Blog detail page

This shows the detail page for a particular blog.



Note that the comments have a date *and* time, and are ordered from oldest to newest (opposite of blog ordering). At the end we have a link for accessing the form to add a new comment. If a user is not logged in we'd instead see a suggestion to log in.



Add comment form

This is the form to add comments. Note that we're logged in. When this succeeds we should be taken back to the associated blog post page.

Author bio

This displays bio information for a blogger along with their blog posts list.

Steps to complete

The following sections describe what you need to do.

1. Create a skeleton project and web application for the site (as described in Django Tutorial Part 2: Creating a skeleton website). You might use 'diyblog' for the project name and 'blog' for the application name.
2. Create models for the Blog posts, Comments, and any other objects needed. When thinking about your design, remember:
    - Each comment will have only one blog, but a blog may have many comments.
    - Blog posts and comments must be sorted by post date.
    - Not every user will necessarily be a blog author though any user may be a commenter.
    - Blog authors must also include bio information.
3. Run migrations for your new models and create a superuser.
4. Use the admin site to create some example blog posts and blog comments.
5. Create views, templates, and URL configurations for blog post and blogger list pages.
6. Create views, templates, and URL configurations for blog post and blogger detail pages.
7. Create a page with a form for adding new comments (remember to make this only available to logged in users!)

Hints and tips

This project is very similar to the LocalLibrary tutorial. You will be able to set up the skeleton, user login/logout behavior, support for static files, views, URLs, forms, base templates and admin site configuration using almost all the same approaches.

Some general hints:

1. The index page can be implemented as a basic function view and template (just like for the locallibrary).
2. The list view for blog posts and bloggers, and the detail view for blog posts can be created using the generic list and detail views.
3. The list of blog posts for a particular author can be created by using a generic blog list view and filtering for blog objects that match the specified author.
   - You will have to implement `get_queryset(self)` to do the filtering (much like in our library class `LoanedBooksAllListView`) and get the author information from the URL.
   - You will also need to pass the name of the author to the page in the context. To do this in a class-based view you need to implement `get_context_data()` (discussed below).
4. The *add comment* form can be created using a function-based view (and associated model and form) or using a generic `CreateView`. If you use a `CreateView` (recommended) then:
   - You will also need to pass the name of the blog post to the comment page in the context (implement `get_context_data()` as discussed below).
   - The form should only display the comment "description" for user entry (date and associated blog post should not be editable). Since they won't be in the form itself, your code will need to set the comment's author in the `form_valid()` function so it can be saved into the model (as described here — Django docs). In that same function we set the associated blog. A possible implementation is shown below (`pk` is a blog id passed in from the URL/URL configuration).

```
    def form_valid(self, form):
        """
        Add author and associated blog to form data before sett:
        """
        #Add logged-in user as author of comment
        form.instance.author = self.request.user
        #Associate comment with blog based on passed id
```

```
        form.instance.blog=get_object_or_404(Blog, pk = self.kwa
        # Call super-class form validation behavior
        return super(BlogCommentCreate, self).form_valid(form)
```

- You will need to provide a success URL to redirect to after the form validates; this should be the original blog. To do this you will need to override `get_success_url()` and "reverse" the URL for the original blog. You can get the required blog ID using the `self.kwargs` attribute, as shown in the `form_valid()` method above.

We briefly talked about passing a context to the template in a class-based view in the Django Tutorial Part 6: Generic list and detail views topic. To do this you need to override `get_context_data()` (first getting the existing context, updating it with whatever additional variables you want to pass to the template, and then returning the updated context). For example, the code fragment below shows how you can add a blogger object to the context based on their `BlogAuthor` id.

```
class SomeView(generic.ListView):
    ...

    def get_context_data(self, **kwargs):
        # Call the base implementation first to get a context
        context = super(SomeView, self).get_context_data(**kwargs)
        # Get the blogger object from the "pk" URL parameter and add it
        context['blogger'] = get_object_or_404(BlogAuthor, pk = self.kwa
        return context
```

Assessment

The assessment for this task is available on Github here. This assessment is primarily based on how well your application meets the requirements we listed above, though there are some parts of the assessment that check your code uses appropriate models, and that you have written at least some test code. When you're done, you can check out our the finished example which reflects a "full marks" project.

Once you've completed this module you've also finished all the MDN content for learning basic Django server-side website programming! We hope you enjoyed this module and feel you have a good grasp of the basics!

In this module

- Django introduction

- Setting up a Django development environment
- Django Tutorial: The Local Library website
- Django Tutorial Part 2: Creating a skeleton website
- Django Tutorial Part 3: Using models
- Django Tutorial Part 4: Django admin site
- Django Tutorial Part 5: Creating our home page
- Django Tutorial Part 6: Generic list and detail views
- Django Tutorial Part 7: Sessions framework
- Django Tutorial Part 8: User authentication and permissions
- Django Tutorial Part 9: Working with forms
- Django Tutorial Part 10: Testing a Django web application
- Django Tutorial Part 11: Deploying Django to production
- Django web application security
- DIY Django mini blog

Last modified: Feb 19, 2021, by MDN contributors