

Entrega 06
Sistema Académico de Formación Empresarial - SAFE



Elaborado por:
Error 404

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1. Nombre de las herramientas utilizadas

Se utilizaron dos herramientas principales de análisis estático:

1.1. Ruff

Linter moderno y de alto desempeño escrito en Rust, que reemplaza a flake8, isort y parte de pylint.

Se usó para:

- Detección de errores de estilo
- Imports no utilizados
- Líneas demasiado largas
- Código muerto
- Errores sintácticos comunes

Ruff fue ejecutado mediante los comandos:

```
ruff check .  
ruff check . --fix
```

1.2. Mypy

Analizador estático de tipos para Python, que verifica que las funciones, parámetros y retornos correspondan a los tipos esperados.

Se usó principalmente para:

- Detectar incoherencias en tipos
- Errores comunes de uso de funciones Django
- Identificar posibles accesos inválidos

2. Configuración aplicada

2.1. Ruff

Ruff se ejecutó con su configuración por defecto.

No se creó un archivo `ruff.toml` personalizado.

Las únicas acciones realizadas fueron:

- `ruff check .` → análisis
- `ruff check . --fix` → corrección automática

Esto cumple con el requerimiento del linter sin sobrecargar el proyecto con reglas avanzadas.

2.2. Mypy

Se configuró el archivo `mypy.ini` para habilitar el análisis estático de tipos en un entorno Django.

La configuración usada fue:

```
[mypy]
python_version = 3.12
plugins = mypy_django_plugin.main
ignore_missing_imports = true
follow_imports = silent

strict_optional = true

[mypy.plugins.django-stubs]
django_settings_module = "config.settings"

# Ignorar migraciones porque son ruido
[mypy-*/migrations/*]
ignore_errors = true

# Ignorar tests porque no necesitan tipos estrictos
[mypy-*/tests/*]
ignore_errors = true
```

Resumen de esta configuración:

- Se habilita el plugin oficial para Django (`django-stubs`)
- Se evita que mypy se queje por módulos externos sin tipos
- Se ignoran migraciones y tests para no llenar el reporte con ruido
- Se activa `strict_optional` para detectar posibles `None` peligrosos

3. Resultados Obtenidos

3.1 Ruff:

F401 [*] `django.contrib.admin` imported but unused

--> accounts/admin.py:1:28

```
|  
1 | from django.contrib import admin  
|                               ^^^^^  
|
```

help: Remove unused import: `django.contrib.admin`

F401 [*] `django.db.models` imported but unused

--> administration/models.py:1:23

```
|  
1 | from django.db import models  
|               ^^^^^^^  
2 |  
3 | # Create your models here.  
|
```

help: Remove unused import: `django.db.models`

F401 [*] `django.test.TestCase` imported but unused

--> administration/tests.py:1:25

```
|  
1 | from django.test import TestCase  
|               ^^^^^^^^^  
2 |  
3 | # Create your tests here.  
|
```

help: Remove unused import: `django.test.TestCase`

F401 [*] `django.views.decorators.http.require_POST` imported but unused

--> administration/views.py:1:42

```
|  
1 | from django.views.decorators.http import require_POST  
|               ^^^^^^^^^^^^^^^^^  
2 | from django.shortcuts import render, redirect, get_object_or_404  
3 | from django.contrib.auth.decorators import login_required  
|
```

help: Remove unused import: `django.views.decorators.http.require_POST`

F401 [*] `django.shortcuts.redirect` imported but unused

--> administration/views.py:2:38

```
|  
1 | from django.views.decorators.http import require_POST  
2 | from django.shortcuts import render, redirect, get_object_or_404  
|               ^^^^^^^^^  
3 | from django.contrib.auth.decorators import login_required
```

```
4 | from django.http import HttpResponse
|
help: Remove unused import: `django.shortcuts.redirect`
```

```
F401 [*] `courses.models.Content` imported but unused
--> administration/views.py:5:44
|
3 | from django.contrib.auth.decorators import login_required
4 | from django.http import HttpResponse
5 | from courses.models import Course, Module, Content
|                                     ^^^^^^^^
6 | from accounts.models import AppUser
|
help: Remove unused import: `courses.models.Content`
```

```
F401 [*] `django.contrib.admin` imported but unused
--> config/urls.py:17:28
|
15 |     2. Add a URL to urlpatterns: path('blog/', include('blog.urls'))
16 | """
17 | from django.contrib import admin
|             ^^^^^^
18 | from django.urls import path, include
19 | from .health import db_health
|
help: Remove unused import: `django.contrib.admin`
```

```
F401 [*] `django.contrib.admin` imported but unused
--> courses/admin.py:1:28
|
1 | from django.contrib import admin
|             ^^^^^^
2 |
3 | # Register your models here.
|
help: Remove unused import: `django.contrib.admin`
```

```
F401 [*] `learning_paths.models.CourseInPath` imported but unused
--> courses/services/access.py:4:49
|
2 | from courses.models import Course, Content
3 | from enrollments.models import CourseInscription
4 | from learning_paths.models import LearningPath, CourseInPath
|                                     ^^^^^^^^^^^^^^^^^
5 | from teams.models import TeamUser
|
help: Remove unused import: `learning_paths.models.CourseInPath`
```

F401 [*] `django.views.decorators.http.require_POST` imported but unused

--> courses/views.py:1:42

|

1 | from django.views.decorators.http import require_POST

|

^^^^^^^^^^^^^^^^

2 | from django.shortcuts import render, redirect, get_object_or_404

3 | from django.contrib.auth.decorators import login_required

|

help: Remove unused import: `django.views.decorators.http.require_POST`

F401 [*] `django.shortcuts.redirect` imported but unused

--> courses/views.py:2:38

|

1 | from django.views.decorators.http import require_POST

2 | from django.shortcuts import render, redirect, get_object_or_404

|

^^^^^^^^

3 | from django.contrib.auth.decorators import login_required

4 | from django.http import HttpResponse

|

help: Remove unused import

F401 [*] `django.shortcuts.get_object_or_404` imported but unused

--> courses/views.py:2:48

|

1 | from django.views.decorators.http import require_POST

2 | from django.shortcuts import render, redirect, get_object_or_404

|

^^^^^^^^^^^^^^^^^^^^^^^^

3 | from django.contrib.auth.decorators import login_required

4 | from django.http import HttpResponse

|

help: Remove unused import

F401 [*] `django.contrib.auth.decorators.login_required` imported but unused

--> courses/views.py:3:44

|

1 | from django.views.decorators.http import require_POST

2 | from django.shortcuts import render, redirect, get_object_or_404

3 | from django.contrib.auth.decorators import login_required

|

^^^^^^^^^^^^^^^^

4 | from django.http import HttpResponse

5 | from .models import Course, Module, Content

|

help: Remove unused import: `django.contrib.auth.decorators.login_required`

F401 [*] `django.http.HttpResponse` imported but unused

--> courses/views.py:4:25

|

2 | from django.shortcuts import render, redirect, get_object_or_404

```

3 | from django.contrib.auth.decorators import login_required
4 | from django.http import HttpResponse
  |             ^^^^^^^^^^^^^^^
5 | from .models import Course, Module, Content
6 | def catalog(request):
  |
help: Remove unused import: `django.http.HttpResponse`

```

```

F401 [*] `.models.Course` imported but unused
--> courses/views.py:5:21
  |
3 | from django.contrib.auth.decorators import login_required
4 | from django.http import HttpResponse
5 | from .models import Course, Module, Content
  |             ^^^^^^^
6 | def catalog(request):
7 |     return render(request, "courses/catalog.html")
  |
help: Remove unused import

```

```

F401 [*] `.models.Module` imported but unused
--> courses/views.py:5:29
  |
3 | from django.contrib.auth.decorators import login_required
4 | from django.http import HttpResponse
5 | from .models import Course, Module, Content
  |             ^^^^^^^
6 | def catalog(request):
7 |     return render(request, "courses/catalog.html")
  |
help: Remove unused import

```

```

F401 [*] `.models.Content` imported but unused
--> courses/views.py:5:37
  |
3 | from django.contrib.auth.decorators import login_required
4 | from django.http import HttpResponse
5 | from .models import Course, Module, Content
  |             ^^^^^^^
6 | def catalog(request):
7 |     return render(request, "courses/catalog.html")
  |
help: Remove unused import

```

```

F401 [*] `django.contrib.admin` imported but unused
--> enrollments/admin.py:1:28
  |
1 | from django.contrib import admin

```

```
|          ^^^^^
2 |
3 | # Register your models here.
|
help: Remove unused import: `django.contrib.admin`
```

```
F401 [*] `django.test.TestCase` imported but unused
--> enrollments/tests.py:1:25
```

```
|
1 | from django.test import TestCase
|          ^^^^^^^^^
2 |
3 | # Create your tests here.
|
help: Remove unused import: `django.test.TestCase`
```

```
F401 [*] `django.shortcuts.redirect` imported but unused
--> enrollments/views.py:1:38
```

```
|
1 | from django.shortcuts import render, redirect
|          ^^^^^^^^^
2 | from django.views.decorators.http import require_POST
3 | from . import models
|
help: Remove unused import: `django.shortcuts.redirect`
```

```
F401 [*] `django.views.decorators.http.require_POST` imported but unused
--> enrollments/views.py:2:42
```

```
|
1 | from django.shortcuts import render, redirect
2 | from django.views.decorators.http import require_POST
|          ^^^^^^^^^^^^^
3 | from . import models
|
help: Remove unused import: `django.views.decorators.http.require_POST`
```

```
F401 [*] `.models` imported but unused
--> enrollments/views.py:3:15
```

```
|
1 | from django.shortcuts import render, redirect
2 | from django.views.decorators.http import require_POST
3 | from . import models
|          ^^^^^
4 |
5 | def home(request):
|
help: Remove unused import: `.models`
```


F401 [*] `django.contrib.admin` imported but unused

--> learning_paths/admin.py:1:28

```
|  
1 | from django.contrib import admin  
| |  
| |
```

```
| |  
2 |  
3 | # Register your models here.  
| |
```

```
| |  
3 | # Register your models here.  
| |
```

help: Remove unused import: `django.contrib.admin`

F401 [*] `enrollments.models.PathInscription` imported but unused

--> learning_paths/services/access.py:3:32

```
|  
1 | from accounts.models import AppUser  
2 | from learning_paths.models import LearningPath  
3 | from enrollments.models import PathInscription  
| |  
| |
```

```
| |  
4 | from teams.models import TeamUser  
| |
```

help: Remove unused import: `enrollments.models.PathInscription`

F401 [*] `django.urls.path` imported but unused

--> learning_paths/urls.py:1:25

```
|  
1 | from django.urls import path  
| |  
| |
```

```
| |  
2 | from . import views  
| |
```

help: Remove unused import: `django.urls.path`

F401 [*] `.views` imported but unused

--> learning_paths/urls.py:2:15

```
|  
1 | from django.urls import path  
2 | from . import views  
| |  
| |
```

```
| |  
3 |  
4 | urlpatterns = [  
| |
```

help: Remove unused import: `.views`

F401 [*] `django.shortcuts.render` imported but unused

--> learning_paths/views.py:1:30

```
|  
1 | from django.shortcuts import render, redirect  
| |  
| |
```

```
| |  
2 | from django.views.decorators.http import require_POST  
3 | from . import models
```



```
2 |
3 | # Create your models here.
  |
help: Remove unused import: `django.db.models`
```

```
F401 [*] `django.test.TestCase` imported but unused
--> notifications/tests.py:1:25
```

```
  |
1 | from django.test import TestCase
  |             ^^^^^^^^^
```

```
2 |
3 | # Create your tests here.
  |
help: Remove unused import: `django.test.TestCase`
```

```
F401 [*] `django.shortcuts.render` imported but unused
--> notifications/views.py:1:30
```

```
  |
1 | from django.shortcuts import render, redirect
  |             ^^^^^^^
2 | from django.views.decorators.http import require_POST
3 | from . import models
```

```
  |
help: Remove unused import: `django.shortcuts.render`
```

```
F401 [*] `django.views.decorators.http.require_POST` imported but unused
--> notifications/views.py:2:42
```

```
  |
1 | from django.shortcuts import render, redirect
2 | from django.views.decorators.http import require_POST
  |             ^^^^^^^^^^^^^^^^^
3 | from . import models
```

```
  |
help: Remove unused import: `django.views.decorators.http.require_POST`
```

```
F401 [*] `.models` imported but unused
--> notifications/views.py:3:15
```

```
  |
1 | from django.shortcuts import render, redirect
2 | from django.views.decorators.http import require_POST
3 | from . import models
  |             ^^^^^
```

```
4 |
5 | def notifications(request):
  |
help: Remove unused import: `.models`
```

```
F401 [*] `django.contrib.admin` imported but unused
```

```
--> teams/admin.py:1:28
|
1 | from django.contrib import admin
|             ^^^^^^
2 |
3 | # Register your models here.
|
help: Remove unused import: `django.contrib.admin`
```

```
F401 [*] `django.test.TestCase` imported but unused
--> teams/tests.py:1:25
|
1 | from django.test import TestCase
|             ^^^^^^^^^^
2 |
3 | # Create your tests here.
|
help: Remove unused import: `django.test.TestCase`
```

```
F401 [*] `django.urls.path` imported but unused
--> teams/urls.py:1:25
|
1 | from django.urls import path
|             ^^^^^
2 | from . import views
|
help: Remove unused import: `django.urls.path`
```

```
F401 [*] `.views` imported but unused
--> teams/urls.py:2:15
|
1 | from django.urls import path
2 | from . import views
|             ^^^^^
3 |
4 | urlpatterns = [
|
help: Remove unused import: `.views`
```

```
F401 [*] `django.shortcuts.render` imported but unused
--> teams/views.py:1:30
|
1 | from django.shortcuts import render, redirect
|             ^^^^^^^
2 | from django.views.decorators.http import require_POST
3 | from . import models
|
help: Remove unused import
```

F401 [*] `django.shortcuts.redirect` imported but unused

--> teams/views.py:1:38

|

1 | from django.shortcuts import render, redirect

|

^^^^^^^^

2 | from django.views.decorators.http import require_POST

3 | from . import models

|

help: Remove unused import

F401 [*] `django.views.decorators.http.require_POST` imported but unused

--> teams/views.py:2:42

|

1 | from django.shortcuts import render, redirect

2 | from django.views.decorators.http import require_POST

|

^^^^^^^^^^^^^^^^

3 | from . import models

|

help: Remove unused import: `django.views.decorators.http.require_POST`

F401 [*] `.models` imported but unused

--> teams/views.py:3:15

|

1 | from django.shortcuts import render, redirect

2 | from django.views.decorators.http import require_POST

3 | from . import models

|

^^^^^^

|

help: Remove unused import: `.models`

Found 44 errors.

[*] 44 fixable with the `--fix` option.

3.2 Mypy:

manage.py:11: error: Skipping analyzing "django.core.management": module is installed, but missing library stubs or py.typed marker [import-untyped]

teams/urls.py:2: error: Need type annotation for "urlpatterns" (hint: "urlpatterns: list[<type>] = ...") [var-annotated]

teams/models.py:1: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]

teams/models.py:2: error: Skipping analyzing "django.conf": module is installed, but missing library stubs or py.typed marker [import-untyped]

teams/apps.py:1: error: Skipping analyzing "django.apps": module is installed, but missing library stubs or py.typed marker [import-untyped]

teams/migrations/0001_initial.py:3: error: Skipping analyzing "django.db.models.deletion": module is installed, but missing library stubs or py.typed marker [import-untyped]

teams/migrations/0001_initial.py:3: error: Skipping analyzing "django.db.models": module is installed, but missing library stubs or py.typed marker [import-untyped]
teams/migrations/0001_initial.py:3: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]
teams/migrations/0001_initial.py:3: error: Skipping analyzing "django": module is installed, but missing library stubs or py.typed marker [import-untyped]
teams/migrations/0001_initial.py:4: error: Skipping analyzing "django.conf": module is installed, but missing library stubs or py.typed marker [import-untyped]
notifications/views.py:1: error: Skipping analyzing "django.shortcuts": module is installed, but missing library stubs or py.typed marker [import-untyped]
notifications/apps.py:1: error: Skipping analyzing "django.apps": module is installed, but missing library stubs or py.typed marker [import-untyped]
learning_paths/urls.py:2: error: Need type annotation for "urlpatterns" (hint: "urlpatterns: list[<type>] = ...") [var-annotated]
learning_paths/apps.py:1: error: Skipping analyzing "django.apps": module is installed, but missing library stubs or py.typed marker [import-untyped]
learning_paths/migrations/0001_initial.py:3: error: Skipping analyzing "django.db.models.deletion": module is installed, but missing library stubs or py.typed marker [import-untyped]
learning_paths/migrations/0001_initial.py:3: error: Skipping analyzing "django.db.models": module is installed, but missing library stubs or py.typed marker [import-untyped]
learning_paths/migrations/0001_initial.py:3: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]
learning_paths/migrations/0001_initial.py:3: error: Skipping analyzing "django": module is installed, but missing library stubs or py.typed marker [import-untyped]
learning_paths/migrations/0001_initial.py:4: error: Skipping analyzing "django.conf": module is installed, but missing library stubs or py.typed marker [import-untyped]
enrollments/views.py:1: error: Skipping analyzing "django.shortcuts": module is installed, but missing library stubs or py.typed marker [import-untyped]
enrollments/apps.py:1: error: Skipping analyzing "django.apps": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/views.py:1: error: Skipping analyzing "django.shortcuts": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/models.py:1: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/models.py:2: error: Skipping analyzing "django.conf": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/apps.py:1: error: Skipping analyzing "django.apps": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/migrations/0001_initial.py:3: error: Skipping analyzing "django.db.models.deletion": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/migrations/0001_initial.py:3: error: Skipping analyzing "django.db.models": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/migrations/0001_initial.py:3: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/migrations/0001_initial.py:3: error: Skipping analyzing "django": module is installed, but missing library stubs or py.typed marker [import-untyped]

courses/migrations/0001_initial.py:4: error: Skipping analyzing "django.conf": module is installed, but missing library stubs or py.typed marker [import-untyped]
config/wsgi.py:12: error: Skipping analyzing "django.core.wsgi": module is installed, but missing library stubs or py.typed marker [import-untyped]
config/health.py:1: error: Skipping analyzing "django.http": module is installed, but missing library stubs or py.typed marker [import-untyped]
config/health.py:2: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]
config/health.py:3: error: Skipping analyzing "django.db.utils": module is installed, but missing library stubs or py.typed marker [import-untyped]
config/asgi.py:12: error: Skipping analyzing "django.core.asgi": module is installed, but missing library stubs or py.typed marker [import-untyped]
administration/apps.py:1: error: Skipping analyzing "django.apps": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/models.py:1: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/models.py:2: error: Skipping analyzing "django.contrib.auth.models": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/apps.py:1: error: Skipping analyzing "django.apps": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/migrations/0003_alter_rolechangelog_old_role.py:3: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/migrations/0002_rolechangelog.py:3: error: Skipping analyzing "django.db.models.deletion": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/migrations/0002_rolechangelog.py:3: error: Skipping analyzing "django.db.models": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/migrations/0002_rolechangelog.py:3: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/migrations/0002_rolechangelog.py:3: error: Skipping analyzing "django": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/migrations/0002_rolechangelog.py:4: error: Skipping analyzing "django.conf": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/migrations/0001_initial.py:3: error: Skipping analyzing "django.contrib.auth.models": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/migrations/0001_initial.py:3: note: See https://mypy.readthedocs.io/en/stable/running_mypy.html#missing-imports
accounts/migrations/0001_initial.py:3: error: Skipping analyzing "django.contrib.auth": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/migrations/0001_initial.py:3: error: Skipping analyzing "django.contrib": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/migrations/0001_initial.py:3: error: Skipping analyzing "django": module is installed, but missing library stubs or py.typed marker [import-untyped]

accounts/migrations/0001_initial.py:4: error: Skipping analyzing "django.contrib.auth.validators": module is installed, but missing library stubs or py.typed marker [import-untyped]

accounts/migrations/0001_initial.py:5: error: Skipping analyzing "django.utils.timezone": module is installed, but missing library stubs or py.typed marker [import-untyped]

accounts/migrations/0001_initial.py:5: error: Skipping analyzing "django.utils": module is installed, but missing library stubs or py.typed marker [import-untyped]

accounts/migrations/0001_initial.py:6: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]

notifications/urls.py:1: error: Skipping analyzing "django.urls": module is installed, but missing library stubs or py.typed marker [import-untyped]

learning_paths/models.py:1: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]

learning_paths/models.py:2: error: Skipping analyzing "django.conf": module is installed, but missing library stubs or py.typed marker [import-untyped]

enrollments/urls.py:1: error: Skipping analyzing "django.urls": module is installed, but missing library stubs or py.typed marker [import-untyped]

courses/urls.py:1: error: Skipping analyzing "django.urls": module is installed, but missing library stubs or py.typed marker [import-untyped]

config/urls.py:17: error: Skipping analyzing "django.urls": module is installed, but missing library stubs or py.typed marker [import-untyped]

administration/views.py:1: error: Skipping analyzing "django.shortcuts": module is installed, but missing library stubs or py.typed marker [import-untyped]

administration/views.py:2: error: Skipping analyzing "django.contrib.auth.decorators": module is installed, but missing library stubs or py.typed marker [import-untyped]

administration/views.py:3: error: Skipping analyzing "django.http": module is installed, but missing library stubs or py.typed marker [import-untyped]

administration/admin.py:1: error: Skipping analyzing "django.contrib": module is installed, but missing library stubs or py.typed marker [import-untyped]

accounts/views.py:1: error: Skipping analyzing "django.shortcuts": module is installed, but missing library stubs or py.typed marker [import-untyped]

accounts/views.py:2: error: Skipping analyzing "django.views.decorators.http": module is installed, but missing library stubs or py.typed marker [import-untyped]

accounts/views.py:3: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]

accounts/services.py:1: error: Skipping analyzing "django.core.exceptions": module is installed, but missing library stubs or py.typed marker [import-untyped]

enrollments/models.py:2: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]

enrollments/models.py:3: error: Skipping analyzing "django.conf": module is installed, but missing library stubs or py.typed marker [import-untyped]

enrollments/migrations/0001_initial.py:3: error: Skipping analyzing "django.db.models.deletion": module is installed, but missing library stubs or py.typed marker [import-untyped]

enrollments/migrations/0001_initial.py:3: error: Skipping analyzing "django.db.models": module is installed, but missing library stubs or py.typed marker [import-untyped]

enrollments/migrations/0001_initial.py:3: error: Skipping analyzing "django.db": module is installed, but missing library stubs or py.typed marker [import-untyped]

enrollments/migrations/0001_initial.py:3: error: Skipping analyzing "django": module is installed, but missing library stubs or py.typed marker [import-untyped]
enrollments/migrations/0001_initial.py:5: error: Skipping analyzing "django.conf": module is installed, but missing library stubs or py.typed marker [import-untyped]
administration/urls.py:1: error: Skipping analyzing "django.urls": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/urls.py:1: error: Skipping analyzing "django.urls": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/tests/test_roles.py:1: error: Skipping analyzing "django.test": module is installed, but missing library stubs or py.typed marker [import-untyped]
accounts/tests/test_roles.py:2: error: Skipping analyzing "django.core.exceptions": module is installed, but missing library stubs or py.typed marker [import-untyped]
learning_paths/tests/test_access.py:1: error: Skipping analyzing "django.test": module is installed, but missing library stubs or py.typed marker [import-untyped]
learning_paths/tests/test_access.py:2: error: Skipping analyzing "django.contrib.auth": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/tests/test_access_learning_paths_courses.py:1: error: Skipping analyzing "django.test": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/tests/test_access_learning_paths_courses.py:2: error: Skipping analyzing "django.contrib.auth": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/tests/test_access_courses.py:1: error: Skipping analyzing "django.test": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/tests/test_access_courses.py:2: error: Skipping analyzing "django.contrib.auth": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/tests/test_access_contents.py:1: error: Skipping analyzing "django.test": module is installed, but missing library stubs or py.typed marker [import-untyped]
courses/tests/test_access_contents.py:2: error: Skipping analyzing "django.contrib.auth": module is installed, but missing library stubs or py.typed marker [import-untyped]
Found 86 errors in 43 files (checked 81 source files)

4. Evidencia de ejecución

