Software engineering

Assignment-5 Khush Patel-202001127



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The static analysis of a random git repository using the 'mypy' tool:

- The reference git repository link:
 https://github.com/hackstarsj/django-ecommerce-project-am azon-clone.git
- The command to install pylint on the command line:

```
python -m pip install pylint
```

• The command to detect errors in file on the command line:

```
Python -m pylint <file path>
```

Cloning the repository:

```
PS C:\Users\student\20200112\Lab-5_202001127> git clone https://github.com/hackstarsj/django-ecommerce-project-amazon-clone.git .
Cloning into '.'...
remote: Enumerating objects: 5290, done.
remote: Counting objects: 100% (5290/5290), done.
remote: Compressing objects: 100% (4205/4205), done.
remote: Total 5290 (delta 1124), reused 5240 (delta 1074), pack-reused 0
Receiving objects: 100% (5290/5290), 39.13 MiB | 12.93 MiB/s, done.
Resolving deltas: 100% (1124/1124), done.
Updating files: 100% (9628/9628), done.
```

Analysis of source code:

1.apps.py

Analysis:

Trailing whitespace: This error indicates that there is a trailing whitespace at the end of a line. It should be removed as it can cause issues in code execution.

Line too long (110/100): This error indicates that some lines of code exceed the recommended maximum limit of 100 characters. These lines should be modified by either breaking them into multiple lines or by using more descriptive names to avoid this error.

Final newline missing: This error indicates that there is no newline character at the end of the file. It is a good practice to add a newline character at the end of a file.

Unable to import 'django.contrib': This error indicates that there is an issue in importing the required module. It could be caused by the module not being installed or not being available in the correct path. This issue should be resolved by checking the import statement and ensuring that the module is installed and available in the correct path.

Unused admin imported from django.contrib: This error indicates that the imported module admin from django.contrib is not being used in the code. It should be removed to avoid confusion and clutter in the code.

2.adminurl.py

```
PS C:\Users\student\20200112\Lab-5_202001127> python -m pylint C:\Users\student\20200112\Lab-5_202001127\DjangoEcommerceApp\adminurls.py
*********** Module DjangoEcommerceApp.adminurls
DjangoEcommerceApp\adminurls.py:33:0: C0303: Trailing whitespace (trailing-whitespace)
DjangoEcommerceApp\adminurls.py:43:0: C0301: Line too long (110/100) (line-too-long)
DjangoEcommerceApp\adminurls.py:48:0: C0301: Line too long (105/100) (line-too-long)
DjangoEcommerceApp\adminurls.py:54:0: C0301: Line too long (109/100) (line-too-long)
DjangoEcommerceApp\adminurls.py:55:0: C0301: Line too long (112/100) (line-too-long) DjangoEcommerceApp\adminurls.py:56:0: C0301: Line too long (110/100) (line-too-long)
DjangoEcommerceApp\adminurls.py:57:0: C0301: Line too long (112/100) (line-too-long)
DjangoEcommerceApp\adminurls.py:68:0: C0301: Line too long (105/100) (line-too-long)
DjangoEcommerceApp\adminurls.py:70:0: C0304: Final newline missing (missing-final-newline)
DjangoEcommerceApp\adminurls.py:16:0: E0401: Unable to import 'django.contrib' (import-error)
DjangoEcommerceApp\adminurls.py:17:0: E0401: Unable to import 'django.urls' (import-error)
DjangoEcommerceApp\adminurls.py:20:0: E0401: Unable to import 'django.conf.urls.static' (import-error)
DjangoEcommerceApp\adminurls.py:20:0: C0411: third party import "from django.conf.urls.static import static" should be placed before "from DjangoEcomme
rceApp import views" (wrong-import-order)
DjangoEcommerceApp\adminurls.py:20:0: C0412: Imports from package django are not grouped (ungrouped-imports)
DjangoEcommerceApp\adminurls.py:16:0: W0611: Unused admin imported from django.contrib (unused-import)
DjangoEcommerceApp\adminurls.py:20:0: W0611: Unused static imported from django.conf.urls.static (unused-import)
DjangoEcommerceApp\adminurls.py:22:0: W0611: Unused settings imported from DjangoEcommerce (unused-import)
Your code has been rated at 0.00/10
PS C:\Users\student\20200112\Lab-5_202001127>
```

Analysis :

C0114: This message warns that the module is missing a docstring. A docstring is a string that appears at the beginning of a module, function, or class definition, and provides documentation about that entity. To address this message, you should add a docstring to the module.

E0401: This message indicates that there was an error while importing the django.apps module. This could be because the module is not installed, or because there is a typo in the import statement. To address this message, you

should ensure that the module is installed and that the import statement is correct.

C0115: This message warns that the class is missing a docstring. Similar to the module docstring, a class docstring provides documentation about the class. To address this message, you should add a docstring to the class.

R0903: This message warns that the class has too few public methods. In this case, the class has zero public methods, which may be a sign that the class is incomplete or unnecessary. To address this message, you should ensure that the class is necessary and that it has all of the necessary public methods.

3.Admin.py

Analysis :

- C0304: Final newline missing (missing-final-newline)
- C0114: Missing module docstring (missing-module-docstring)
- **E0401:** Unable to import 'django.shortcuts' (import-error) , but in this case, it is related to 'django.contrib'. So, it should be labeled as "E0401: Unable to import 'django.contrib' (import-error)".

4.model.py

************ Module DjangoEcommerceApp.models

```
DjangoEcommerceApp\models.py:68:4: C0116: Missing function or method docstring (missing-function-DjangoEcommerceApp\models.py:58:0: R0903: Too few public methods (1/2) (too-few-public-methods) DjangoEcommerceApp\models.py:73:0: C0115: Missing class docstring (missing-class-docstring) DjangoEcommerceApp\models.py:88:0: C0115: Missing class docstring (missing-class-docstring) DjangoEcommerceApp\models.py:88:0: C0115: Missing class docstring (missing-class-docstring) DjangoEcommerceApp\models.py:88:0: R0903: Too few public methods (0/2) (too-few-public-methods) DjangoEcommerceApp\models.py:97:0: C0115: Missing class docstring (missing-class-docstring) DjangoEcommerceApp\models.py:97:0: R0903: Too few public methods (0/2) (too-few-public-methods) DjangoEcommerceApp\models.py:107:0: C0115: Missing class docstring (missing-class-docstring) DjangoEcommerceApp\models.py:107:0: R0903: Too few public methods (0/2) (too-few-public-methods) DjangoEcommerceApp\models.py:115:0: C0115: Missing class docstring (missing-class-docstring) DjangoEcommerceApp\models.py:115:0: R0903: Too few public methods (0/2) (too-few-public-methods) DjangoEcommerceApp\models.py:115:0: R0903: Too few public methods (0/2) (too-few-public-methods) DjangoEcommerceApp\models.py:112:0: C0115: Missing class docstring (missing-class-docstring) DjangoEcommerceApp\models.py:122:0: C0115: Missing class docstring (missing-class-docstring) DjangoEcommerceApp\models.py:122:0: C0115: Missing class docstring (missing-class-docstring) DjangoEcommerceApp\models.py:122:0: C0115: Missing class docstring (missing-class-docstring)
  DjangoEcommerceApp\models.py:155:0: R0903: Too few public methods (0/2) (too-few-public-methods)
 DjangoEcommerceApp\models.py:160:0: C0115: Missing class docstring (missing-class-docstring)
 DjangoEcommerceApp\models.py:160:0: R0903: Too few public methods (0/2) (too-few-public-methods)
 DjangoEcommerceApp\models.py:167:0: C0115: Missing class docstring (missing-class-docstring)
 DjangoEcommerceApp\models.py:167:0: R0903: Too few public methods (0/2) (too-few-public-methods)
 DjangoEcommerceApp\models.py:176:0: C0115: Missing class docstring (missing-class-docstring)
 DjangoEcommerceApp\models.py:176:0: R0903: Too few public methods (0/2) (too-few-public-methods)
 DjangoEcommerceApp\models.py:186:0: C0116: Missing function or method docstring (missing-function-docstring)
 DjangoEcommerceApp\models.py:186:24: W0613: Unused argument 'sender' (unused-argument)
 DjangoEcommerceApp\models.py:186:0: W0613: Unused argument 'kwargs' (unused-argument)
 DjangoEcommerceApp\models.py:198:0: C0116: Missing function or method docstring (missing-function-docstring)
 DjangoEcommerceApp\models.py:198:22: W0613: Unused argument 'sender' (unused-argument)
 DjangoEcommerceApp\models.py:198:0: W0613: Unused argument 'kwargs' (unused-argument)
 Your code has been rated at 5.24/10
```

Analysis

PS C:\Users\student\20200112\Lab-5_202001127>

Missing module docstring: The module DjangoEcommerceApp.models should have a docstring at the beginning of the file explaining what it does.

Unable to import 'django.db': The django.db module could not be imported. This could be due to missing or incorrect installation of the Django framework.

Unable to import 'django.contrib.auth.models': The

django.contrib.auth.models module could not be imported. This could be due to missing or incorrect installation of the Django framework.

Unable to import 'django.dispatch': The django.dispatch module could not be imported. This could be due to missing or incorrect installation of the Django framework.

Unable to import 'django.db.models.signals': The

django.db.models.signals module could not be imported. This could be due to missing or incorrect installation of the Django framework.

5. Views.py

Analysis :

C0304: Final newline missing (missing-final-newline) - This error message indicates that there is no newline character at the end of the file. It is recommended to have a final newline character at the end of the file.

C0114: Missing module docstring (missing-module-docstring) - This error message indicates that there is no module-level docstring present in the code. It is recommended to have a docstring that describes the module's purpose and contents.

E0401: Unable to import 'django.shortcuts' (import-error) - This error message indicates that the module 'django.shortcuts' could not be imported. This could be due to a missing or incorrect installation of the Django framework or an issue with the import statement.

E0401: Unable to import 'django.contrib.auth' (import-error) - This error message indicates that the module 'django.contrib.auth' could not be imported. This could be due to a missing or incorrect installation of the Django framework or an issue with the import statement.