Plugin

Code For

* Prevent access to application's code
* Prevent side-effects of plugin executions

1. import docker
2. client = docker.from\_env()
3. input\_including\_plugin\_code = ...
4. container = client.containers.run(
5. "my-image",
6. input\_including\_plugin\_code,
7. detach=True,

Code For

* Prevent access to network resources

1. ...
2. container = client.containers.run(
3. "my-image",
4. input\_including\_plugin\_code,
5. detach=True,
6. network\_disabled=True,
7. )

Code For

* Prevent exhausting system resources

1. ...
2. container = client.containers.run(
3. "my-image",
4. input\_including\_plugin\_code,
5. detach=True,
6. network\_disabled=True,
7. nano\_cpus=25 \* 10\*\*7,
8. mem\_limit="128m",
9. )

Code For

* Prevent side-effects of the solution

1. import requests
2. ...
3. MAX\_SECONDS\_TO\_RUN = 10
4. try:
5. container.wait(timeout=MAX\_SECONDS\_TO\_RUN)
6. except requests.exceptions.ConnectionError:
7. container.stop(timeout=0)
8. # process container output
9. ...
10. container.remove()

TESTING

Code For

1)First, Defining an Order model

1. from django.contrib.auth import get\_user\_model
2. from django.db import models
3. class Order(models.Model):
4. price = models.IntegerField()
5. user = models.ForeignKey(
6. get\_user\_model(),
7. on\_delete=models.CASCADE
8. )
9. secret\_code = models.CharField(max\_length=20)

Code For

2)Second, Django settings

1. from django.contrib.auth import get\_user\_model
2. from django.db import models
3. class Order(models.Model):
4. price = models.IntegerField()
5. user = models.ForeignKey(
6. get\_user\_model(),
7. on\_delete=models.CASCADE
8. )
9. secret\_code = models.CharField(max\_length=20)

Code For

3) Defining the endpoint

1. from rest\_framework import serializers, viewsets
2. from .models import Order
3. class OrderSerializer(serializers.ModelSerializer):
4. class Meta:
5. model = Order
6. fields = ["id", "price"]
7. class OrderViewSet(viewsets.ReadOnlyModelViewSet):
8. def get\_queryset(self):
9. return Order.objects.filter(user=self.request.user)
10. serializer\_class = OrderSerializer