Creating a systemd Service for Gunicorn

To run Gunicorn as a background service managed by systemd, you can create a service file. This ensures Gunicorn starts automatically on boot and can be controlled using systemctl.

1. Create a systemd service file
Open a new service file in /etc/systemd/system/:

```
sudo nano /etc/systemd/system/gunicorn.service
```

2. Example Gunicorn service file

```
[Unit]
Description=Gunicorn instance to serve Flask/Django app
After=network.target

[Service]
User=root
Group=www-data
WorkingDirectory=/home/unigo_website
Environment="PATH=/home/unigo_website/venv/bin"
ExecStart=/home/unigo_website/venv/bin/gunicorn -w 4 -b 0.0.0.0:5050 app:app

[Install]
WantedBy=multi-user.target
```

3. Reload systemd to recognize the new service

```
sudo systemctl daemon-reexec
sudo systemctl daemon-reload
```

4. Start the Gunicorn service

```
sudo systemctl start gunicorn
```

5. Enable the service to start on boot

```
sudo systemctl enable gunicorn
```

6. Check service status

```
sudo systemctl status gunicorn
```

7. Stop/Restart the service if needed

```
sudo systemctl stop gunicorn
sudo systemctl restart gunicorn
```

Now your Gunicorn server is properly managed by systemd and will start automatically after server reboot.