

Plan at a glance

Awesome—let's switch from the console "email" to **real SMTP email** to you/Ed. We'll do it safely with a `.env` file so you don't commit secrets, and I'll cover both common cases: **authenticated SMTP** (e.g., Office 365 / Gmail) and **campus relay** (no login).

1) Add an env loader (so secrets aren't committed)

In your activated venv (inside `codebase/`):

```
bash
pip install python-dotenv
```

Update `.gitignore` (repo root) if it doesn't already ignore `.env`:

```
bash
.env
```

Create `codebase/.env` (do not commit this file):

```
ini

# --- PICK ONE CONFIG ---

# A) Authenticated SMTP (e.g., Office 365, Gmail, etc.)
EMAIL_BACKEND=django.core.mail.backends.smtp.EmailBackend
EMAIL_HOST=smtp.office365.com
EMAIL_PORT=587
EMAIL_USE_TLS=true
EMAIL_HOST_USER=sklarz@berea.edu
EMAIL_HOST_PASSWORD=YOUR_SMTP_PASSWORD_OR_APP_PASSWORD
DEFAULT_FROM_EMAIL=Printing Services <sklarz@berea.edu>

# Where to send new ticket notifications (comma-separated)
EMAIL_TO=ed@berea.edu,sklarz@berea.edu

# B) Campus relay (no auth) – comment out the A-section above and use this:
# EMAIL_BACKEND=django.core.mail.backends.smtp.EmailBackend
# EMAIL_HOST=campus.smtp.server # ask IT for the hostname
# EMAIL_PORT=25
# EMAIL_USE_TLS=false
# EMAIL_HOST_USER=
# EMAIL_HOST_PASSWORD=
# DEFAULT_FROM_EMAIL=Printing Services <no-reply@berea.edu>
# EMAIL_TO=ed@berea.edu,sklarz@berea.edu
```

If you use **Gmail**, you'll need an **App Password** (not your normal password) and may need `EMAIL_PORT=587 + EMAIL_USE_TLS=true`.

2) Load `.env` in Django settings

Edit: codebase/printer_system/settings.py

Add near the top (after the existing imports):

```
python

from pathlib import Path
import os
from dotenv import load_dotenv

BASE_DIR = Path(__file__).resolve().parent.parent

# Load .env in development
env_path = BASE_DIR / ".env"
if env_path.exists():
    load_dotenv(env_path)
```

Replace your prior console backend with env-driven SMTP:

```
python

EMAIL_BACKEND = os.getenv("EMAIL_BACKEND", "django.core.mail.backends.console.EmailBackend")
EMAIL_HOST = os.getenv("EMAIL_HOST", "")
EMAIL_PORT = int(os.getenv("EMAIL_PORT", "25"))
EMAIL_USE_TLS = os.getenv("EMAIL_USE_TLS", "false").lower() == "true"
EMAIL_HOST_USER = os.getenv("EMAIL_HOST_USER", "")
EMAIL_HOST_PASSWORD = os.getenv("EMAIL_HOST_PASSWORD", "")
DEFAULT_FROM_EMAIL = os.getenv("DEFAULT_FROM_EMAIL", "no-reply@berea.local")

# Comma-separated list to Python list
EMAIL_TO = [e.strip() for e in os.getenv("EMAIL_TO", "").split(",") if e.strip()]
```

Commit (safe—no secrets are in the repo):

```
bash

git add codebase/printer_system/settings.py .gitignore
git commit -m "feat(email): load SMTP settings from .env; keep secrets out of git"
git push
```

3) Send to your real recipients from the view

Edit: codebase/tickets/views.py

Use the `EMAIL_TO` list from settings:

```
python

from django.conf import settings
# ...
send_mail(subject, body, settings.DEFAULT_FROM_EMAIL, settings.EMAIL_TO or ["you@example.com"])
```

Commit:

```
bash

git add codebase/tickets/views.py
git commit -m "feat(email): send ticket notifications to configured recipients"
git push
```

4) Test the SMTP config

1. **Restart the server** (if running): CTRL+C, then:

```
bash
python manage.py runserver
```

2. Submit a test ticket from **http://127.0.0.1:8000/p/<qr_token>/.**

3. Check:

- Terminal: if there's an SMTP error, Django prints a traceback.
- Inbox of addresses in **EMAIL_TO**: you should receive the message.

If you prefer a quick shell test:

```
bash
python manage.py shell

python
from django.core.mail import send_mail
from django.conf import settings
send_mail("Test from Django", "Hello from the capstone app.", settings.DEFAULT_FROM_EMAIL,
settings.EMAIL_TO)
exit()
```

5) Troubleshooting cheatsheet

- **TLS vs SSL**
 - Most providers: **PORT=587 + EMAIL_USE_TLS=true**.
 - Some legacy servers: **PORT=465** and use SSL (Django uses TLS flag for STARTTLS; for 465 you may need additional config—try 587 first).
- **Office 365**
 - **EMAIL_HOST=smtp.office365.com + PORT=587 + TLS=true**.
 - Account must be allowed to send SMTP or use authenticated relay.
- **Campus relay**
 - Usually **PORT=25, no auth, no TLS**, and the server whitelists your IP. Clear **EMAIL_HOST_USER/PASSWORD**.
- **Gmail**
 - Use an **App Password**, not your normal password; account must allow SMTP.
- **Firewalls**
 - If it silently hangs, outbound SMTP might be blocked on your network. Try from campus IT-approved networks or ask IT to allow it.

6) Optional: fail loudly during setup

While testing, make Django raise if email fails:

```
python

# in views.py just for debugging:
send_mail(subject, body, settings.DEFAULT_FROM_EMAIL, settings.EMAIL_TO, fail_silently=False)
```

(Flip back to `True` or omit the arg after you're confident.)

7) Update your README (good for your professor & handoff)

Add a section like:

Email setup

1. Copy `.env.example` → `.env`.
2. Fill SMTP settings (Office 365 or campus relay).
3. Run `python manage.py runserver`, submit a ticket, and verify email received.

If you want, I can generate a `.env.example` file for you now so teammates/admins know what to fill in—just say the word.

” Ask ChatGPT