Lost And Found App 13P documentation

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Project Title: Lost and Found

Description: A web-based application for posting, managing, and searching lost or found

items within a community or organization.

Technology Stack:

Programming Language: Python 3

Framework: Django Database: PostgreSQL

Frontend: Basic HTML/CSS (rendered via Django templates) and Bootstrap

Containerization: Docker (with Dockerfile and docker-compose.yml)

Web Server: Nginx (configured in the nginx/ folder)

Environment Management: .env.prod for production secrets and environment variables

Dependency Management: requirements.txt

Project Structure:

LostAndFoundApp_13P/	
items/	# Django main app
lost_and_found/	# Core Django project settings
nginx/	# Nginx configuration files
env.prod	# Environment variables for production
Dockerfile	# Docker image build instructions
docker-compose.yml	# Multi-container orchestration (web, db, nginx)
— Makefile	# CLI automation (build/run commands)
— manage.py	# Django utility script
requirements.txt	# Python dependencies
L— README.md	# Project overview (already included)

Project models:

Item Model:

Field Name	Type	Description
title	CharField	Short title of the item (max 100 chars)
description	TextField	Detailed description of the item
contact_telegram	CharField	Optional Telegram contact for reaching the user (max 255 chars)
image	ImageField	Optional image of the item (uploaded via item_image_path utility)
created_at	DateTimeField	Timestamp when the item was created (auto-generated)
user	ForeignKey → User	Reference to the reporting user (nullable, on delete: set to NULL)
status	CharField	Status of the item — LOST or FOUND (Enum-based choices)

Comment Model:

Field Name	Туре	Description
item	ForeignKey → Item	Reference to the associated item (cascade delete)
text	TextField	The content of the comment
created_at	DateTimeField	Timestamp when the comment was created (autogenerated)
user	ForeignKey → User	The user who left the comment (nullable, on delete: set to NULL)

Project Endpoints:

Core item:

URL Path	HTTP Method(s	View	Description
/	GET	ItemListView	Displays a paginated list of all items. Supports search by keyword and filtering by status (LOST or FOUND).
/ <int:pk>/</int:pk>	GET, POST	ItemDetailView	Shows item details. Also supports direct comment submission via POST.

/create/	GET, POST	ItemCreateView	Presents a form to create a new item. Requires user to be logged in.
/item/ <int:pk>/delete/</int:pk>	POST	ItemDeleteView	Deletes an item. Only available to the item's owner or admin users.
<pre>/change_status/ <int:pk>/</int:pk></pre>	POST	ChangeStatusView	Allows item owner or admin to change item status (LOST or FOUND).

User functionality:

URL Path	HTTP Method(s)	View	Description
/login/	GET, POST	LoginView	Standard login page using Django's built-in authentication (template: login.html).
/logout/	GET	LogoutView	Logs the user out and redirects appropriately.
/register/	GET, POST	RegisterView	User registration form. Automatically logs in the user upon successful registration.
/profile/	GET	ProfileView	Displays the profile of the currently logged-in user.
<pre>/profile/ <int:user_id>/</int:user_id></pre>	GET	ProfileView	Displays another user's profile and their items.

Comments:

URL Path	HTTP Metho d(s)	View	Description
<pre>/items/<int:item_id>/ comment/</int:item_id></pre>	POST	CommentCreateVi ew	Handles comment form submission for a specific item. Authenticated users are linked to the comment; guests are also allowed.

Additional

URL Path	Description
/api/	Includes API routes from the items app. Likely for RESTful access
/silk/	Silk profiling tool for performance monitoring and debugging. Useful during development.
/admin/	Django admin panel. Used for managing users, items, and comments through the admin interface.

Worflow:







