

Content Mate

Triples Content Managers' Productivity

Content

- The Problem
- The Solution
- How it's Made
- Under the Hood



The Problem

The more products have an online store on display, the more potential customers it could attract.

Product cards must be visually appealing and contain actual information about goods. That is why creating product cards is labor intensive and slow process.

Long tail retail strategy means that unique items in the assortment are sold rarely, so the spendings on the content for each item affects costs significantly.



Typical Workflow Slow and Expensive

Images

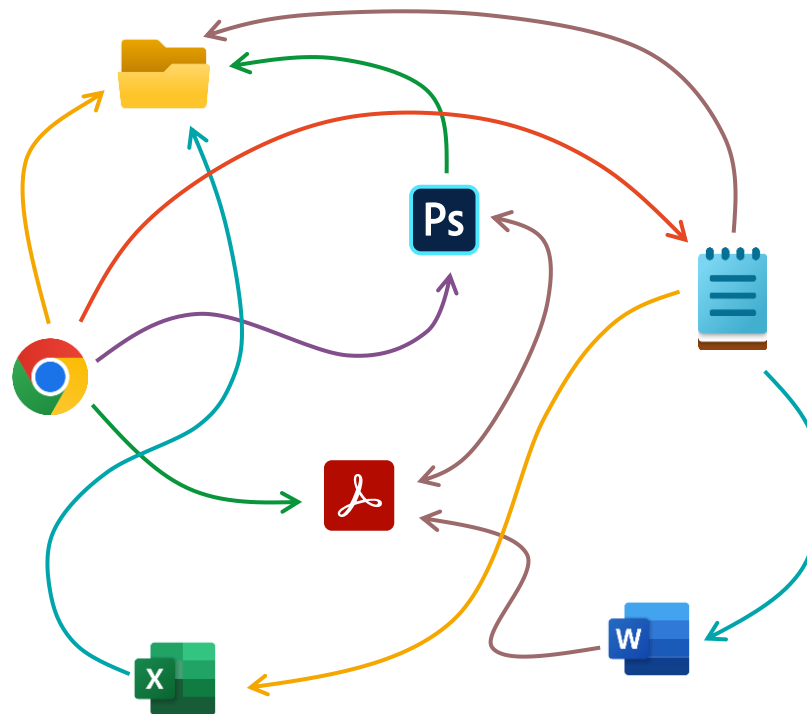
Crop, pad,
resize, enhance

Files

Download, rename,
add header and footer

Specifications

Create list
of specifications



Texts

Compose name, write preview
text and description

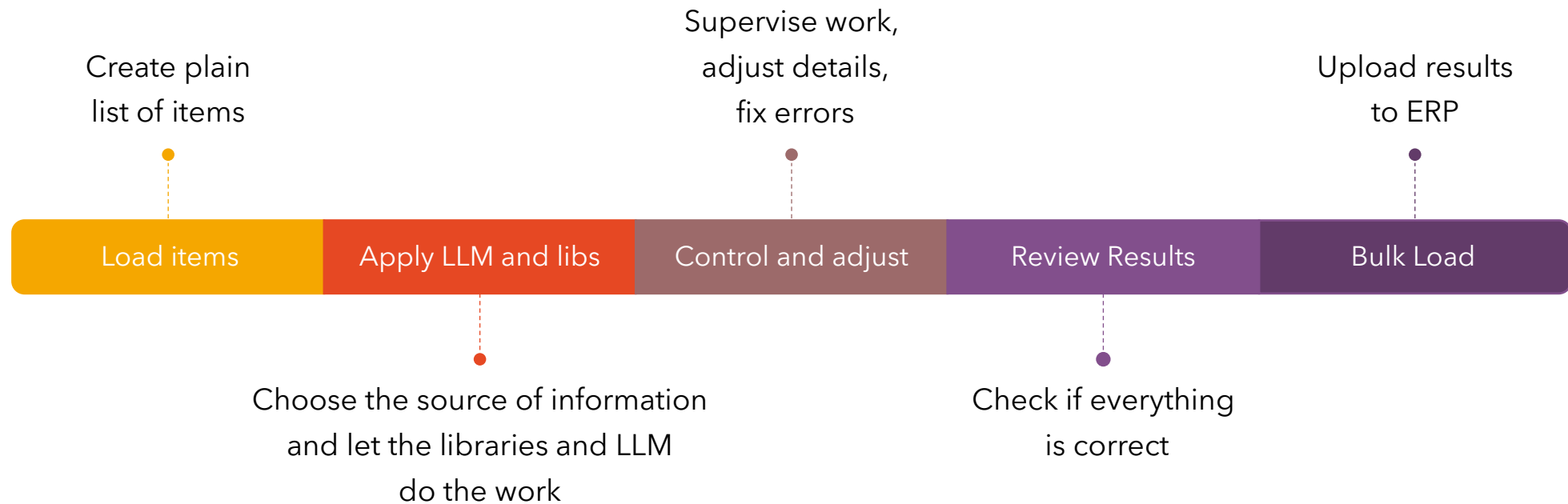
Attributes

Fill in weight, volume and other
essential attributes

Properties

Fill list of properties varying
across categories

The Solution



How it's Made

Content Mate is a web application that consolidates dozens of fragmented operations into a single interface. The input is a list of product SKUs, and the output is an archive containing processed images, PDF documents, and spreadsheets with product names, descriptions, attributes, and key features—ready for bulk upload.

Content Mate

My Page

Create a task

My Tasks • All Tasks

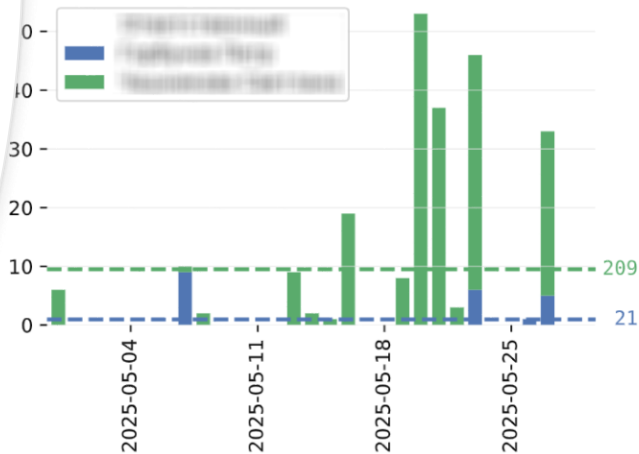
No tasks found

Tasks to review

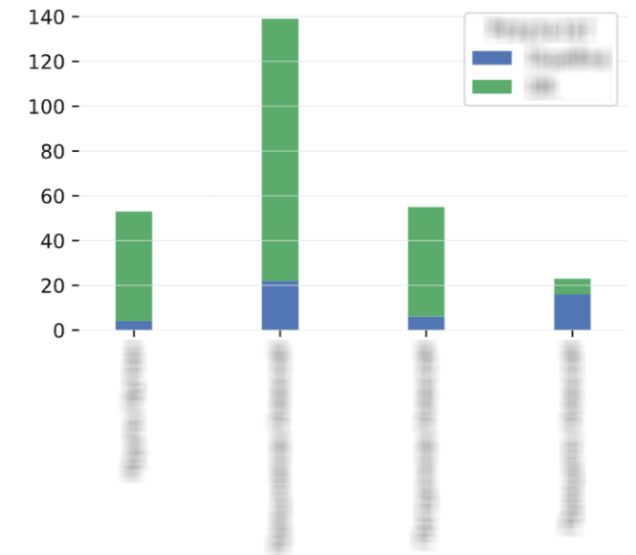
Name	#	Vendor	Reviewer	Items	Updated
Add new SMARTEC products	15815	SMARTEC	[Reviewer Name]	15	27.05.2025 14:39:4
Add new iFLOW products	15806	iFLOW	[Reviewer Name]	24	16.05.2025 16:59:3
Add new OPTIMUS products	15829	OPTIMUS	[Reviewer Name]	11	23.05.2025 07:55:3

Statistics

Completed [\[i\]](#)



Reviews [\[i\]](#)



Content Mate

Hello, Alexey!

Tasks

Add new iFLOW products

Process

Full

Responsible

Александр Павлов

External Task ID

#15806

Vendor

iFLOW

Main Category

IP DVR

Completed

7 / 98

Reviewer

Александр Павлов

✎

✓

F-NR-2324

IP DVR

1

1

11

21

5

1

1

1

✓

F-NR-2644

IP DVR

1

1

11

21

5

1

1

1

✓

F-VI-5445

Intercom kit

1

1

14

23

4

1

1

1

✓

F-VI-3242PE1

Video Doorbell Monitor

1

-

8

12

4

1

1

1

✗

F-VI-3445PE1

Video Doorbell Monitor

1

1

7

12

5

1

1

1

✓

F-VI-3445PWE1

Video Doorbell Monitor

1

1

8

12

5

1

1

1

✓

F-VI-1500SCE1

Outdoor panel

1

1

6

12

5

1

1

1

✓

F-VI-1301ASC

Outdoor panel

1

-

7

11

-

1

1

1

✗

F-AD-3323PAC

Biometric system

1

-

9

31

-

1

1

1

✗

F-AD-3323PAC

Biometric system

1

-

9

31

-

1

1

1

⊙

F-AD-2455BAC

Code Panel

1

-

8

1

-

1

1

1

⊙

F-AD-2455BACBW

Code Panel

1

-

8

1

-

1

1

1

⊙

F-AD-2455BAPWBW

Code Panel

1

-

9

1

-

1

1

1

⊙

F-AD-4301PAC

Reader

1

1

8

3

4

1

1

1

⊙

F-AD-4301PM

Reader

1

1

8

3

4

1

1

1

⊙

F-AD-4302PM

Reader

1

-

8

3

-

1

1

1

Content Mate

Hello, Alexey!

Tasks

Edit Details

Task Name

Добавить новый iFLOW

Process

Full

Responsible

Александр Павлов

#

15806

Task List

Task Tracker

Vendor

iFLOW

or New Vendor

Main Category

NVR

Reviewer

Александр Павлов

Close a task

Items

✓

Item

Rename

Hide

✓

F-NR-2324

F-NR-2324

✓

F-NR-2644

F-NR-2644

✓

F-VI-5445

F-VI-5445

✓

F-VI-3242PE1

F-VI-3242PE1

✗

F-VI-3445PE1

F-VI-3445PE1

✓

F-VI-3445PWE1

F-VI-3445PWE1

✓

F-VI-1500SCE1

F-VI-1500SCE1

✓

F-VI-1301ASC

F-VI-1301ASC

Content Mate

Hello, Alexey!

Add DAHUA Sensors +

DHI-ARD2251E-W2 - Images

Delete all images and start over?

Select the appropriate images from the ones found on the page.


Image

alt

Width

Height

Pick




product img

400

400

☒




product img

400

400

☒




product img

400

400

☒




product img

400

400

☒



small img

400

400

☐


Content Mate

Hello, Alexey!

Add new OPTIMUS products

IP-E012.1(2.8)MPL - Results

Images



Documents

File

Size

IP-E012.1(2.8)MPL___Specifications.pdf

140.1 KB

IP-E012.1(2.8)MPL___User Guide.pdf

1.8 MB

Name and description

Name

Length

2MP Outdoor IP Camera IP-E012.1(2.8)MPL OPTIMUS with Microphone

64

Preview

Similarity

Length

2MP IP-E012.1(2.8)MPL OPTIMUS Outdoor IP Video Camera with Microphone. 1/2.9" MS2009 Progressive Scan CMOS sensor. GIG205V210 processor. Color sensitivity 0.01 lux (F1.2), black and white 0.001 lux (F1.2). It is equipped with a 2.8 mm lens. IR Illumination: 3 IR diodes, range up to 20 m. Support for H.265H.264 codecs. Operating temperature range from +45°C to +50°C. Dimensions: 150x65x87 mm, weight: 105 g, body material - metal / plastic, IP67 degree of protection.

0.36

482

Advantages

Dual Illumination: IR and Warm White Light

Detection of movement, detection of people

Built-in microphone

Optimus Connect mobile app

IP67 protection

Description

Similarity

Length

The Optimus IP-E012.1(2.8)MPL outdoor IP video camera is based on 1/2.9" 2 MP MS2009 Progressive Scan CMOS. It is equipped with a fixed 2.8mm lens and a built-in IR filter. The camera's light sensitivity is: color image - 0.01 Lux (F1.2), black and white - 0.001 Lux (F1.2), 0 Lux when the IR is turned on. At night, 3 IR diodes with a range of up to 20 m and 3 warm light diodes with a range of

0.71

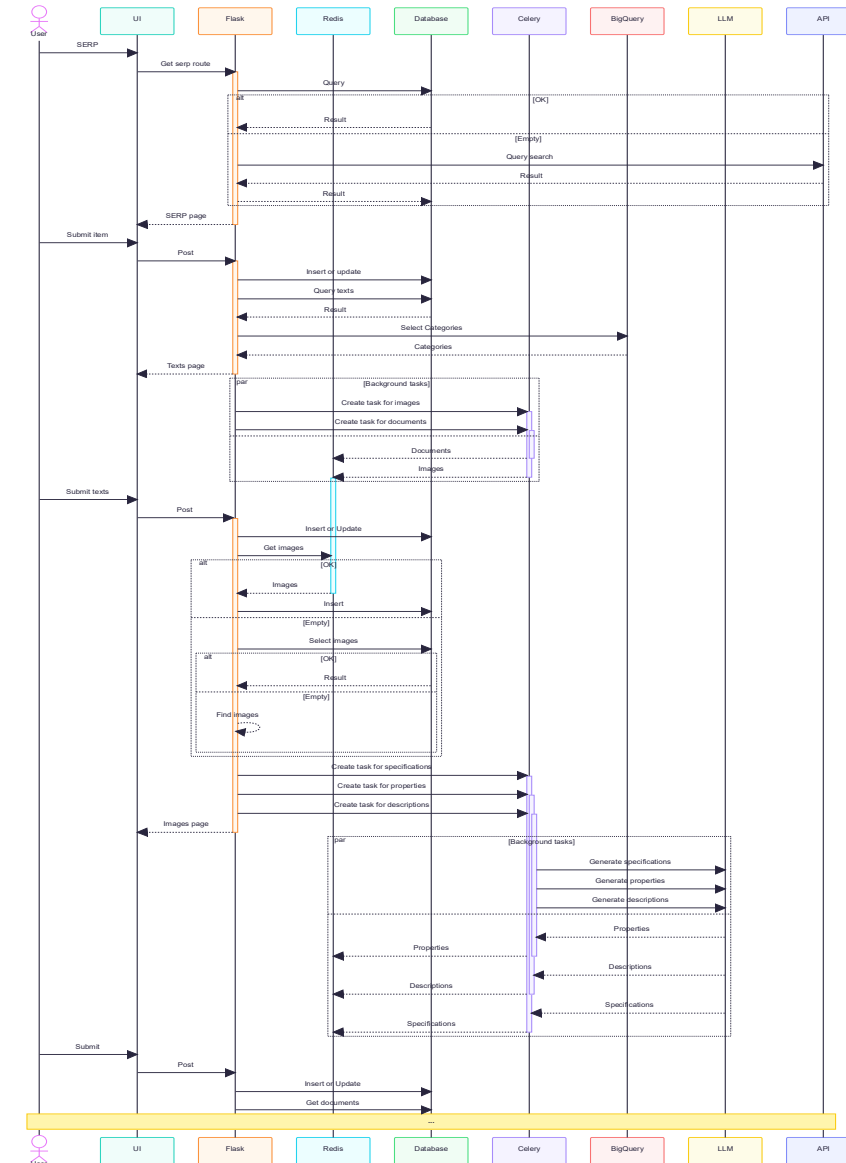
862

Design

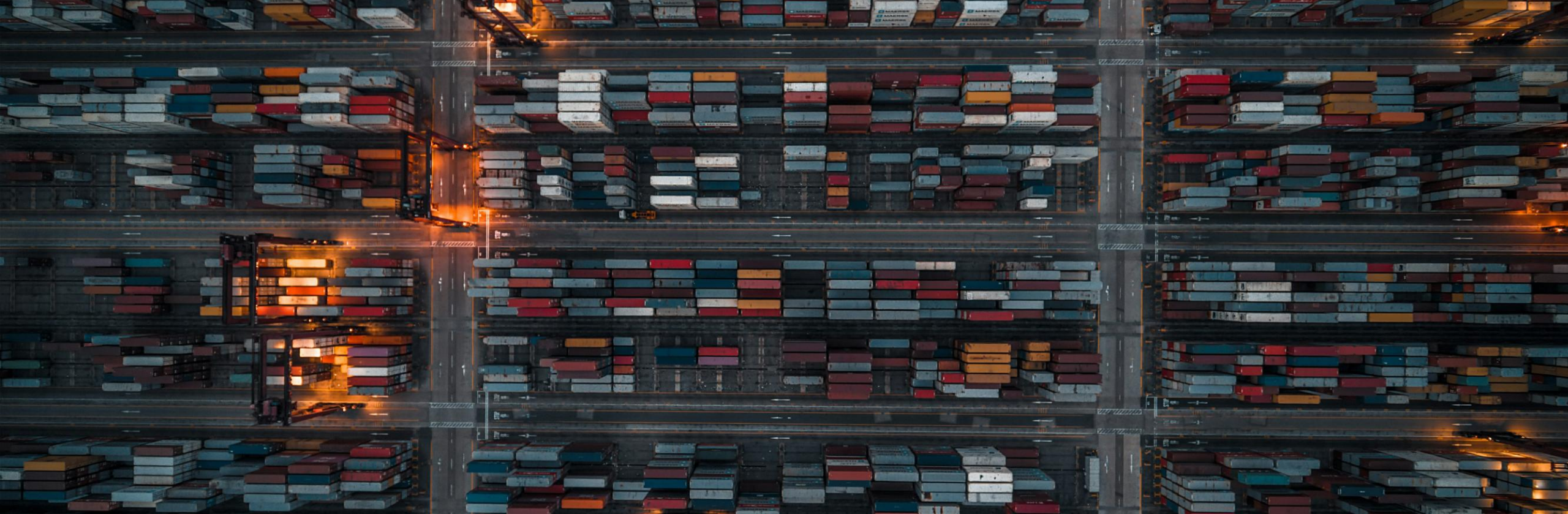
The application design is characterized by its minimalism and clarity. A consistent set of controls is maintained throughout all screens. There are two primary workflows for creation and review processes. The architecture of the application enables lengthy tasks, such as queries to the LLM, to be carried out in the background, ensuring fast and responsive user experience.

Under the Hood

- Flask, Gunicorn for serving the app
- SQLite, BigQuery, Pandas for working with data
- Celery, RabbitMQ, Redis for background and scheduled tasks
- Frontend: HTML, Jinja, CSS, JavaScript
- Libraries: bs4, pymupdf, pillow, matplotlib, langchain
- Docker compose for building



Sequence diagram of the first two screens
of the creation workflow (click to open)



Aleksei
Prishchepo
[LinkedIn](#)

Thank you

Images' credits

[Mark König](#)

[Nana Smirnova](#)

[Marcin Jozwiak](#)

[Timelab](#)