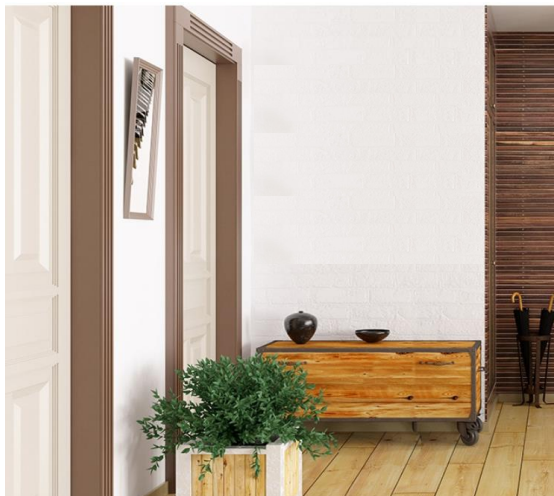# AI기반 그림 추천 서비스

(주) 데이터앤트

서비스 개요

사용자가 원하는 **분위기**에 맞는 그림 추천

서비스 개요

안녕하세요.
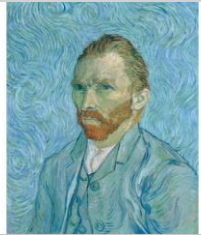　작품 검색 서비스 XXX 입니다.

원하는 분위기의 그림을 설명해 주세요.

설명이 어렵나요? 그러면 원하는 분위기의 그림을 올려주세요.

1. 구문 분석
2. 분류 코드 추출
3. 코드를 통한 DB 검색
4. 결과 이미지 리스트 추출

1. 그림 분석 수행
2. 결과 구문 추출

이미지 리스트 제공
액자 종류 제공

3D 공간 렌더링
결과 제공

개발 내용

1. 데이터 베이스 구축

- 실제 판매될 그림에 대한 이미지 추출
- 추출된 이미지를 AI 분석을 통해 분류
  1) 이미지에 대한 묘사 텍스트를 얻음
  2) 분석 AI 기술을 활용하여 묘사 텍스트에 대한 구문 분석
  3) 분위기에 관련된 내용 추출하여 데이터 베이스에 저장

In a dramatic tableau inspired by Game of Thrones, dragons take center stage, their powerful forms locked in fierce combat amidst a snowy landscape. As one dragon soars through the frosty air, fire blazes in a nearby field, casting an ominous glow on the scene. The narrative unfolds further as groups of people gather near a waterfall and traverse the snow-laden ground, each with their own purpose and role in the unfolding story. This vivid depiction captures the essence of the popular series, immersing viewers in an enthralling world where fantasy and reality collide with breathtaking intensity.

* 서비스 되고 있는 분석 AI 기술
(SceneXplain, GPT4 plugin 등)

2. 사용자 입력 구문 분석 및 추천

- 사용자 입력 구문 분석 및 추천
  1) 사용자가 입력한 구문 분석
  2) 원하는 분위기를 가진 그림 탐색 및 추천

개발 내용

3. Web front-end

- 2D UI 제공
- 3D 결과물 제공

안녕하세요. 작품 검색 서비스 XXX 입니다.

원하는 분위기의 그림을 설명해 주세요.

설명이 어렵나요? 그러면 원하는 분위기의 그림을 올려주세요.

3D View

2D View

서비스를 위한 데이터 베이스 구축(예)

https://scenex.jina.ai/
결과 문구

In a cozy, well-lit room adorned with various artworks, a prominent framed painting catches the viewer's attention. The painting depicts two elegantly designed wooden chairs, positioned at a slight angle within the room. The chairs feature sleek lines and a rich, dark wood finish, exuding a sense of sophistication and comfort. The room itself is bathed in soft, warm lighting, creating a welcoming and inviting atmosphere.

Adjacent to the framed painting, another artwork showcases a white couch adorned with a colorful background. The couch is depicted with meticulous detail, revealing its plush cushions and elegant design. Resting on top of the couch, a small bird adds a whimsical touch to the scene, its vibrant colors contrasting beautifully against the white upholstery.

In another part of the room, a striking painting of the same white couch is displayed against a vibrant backdrop. The couch is artfully rendered, capturing its clean lines and contemporary aesthetic. A starfish is delicately positioned on the couch, serving as a unique and eye-catching focal point.
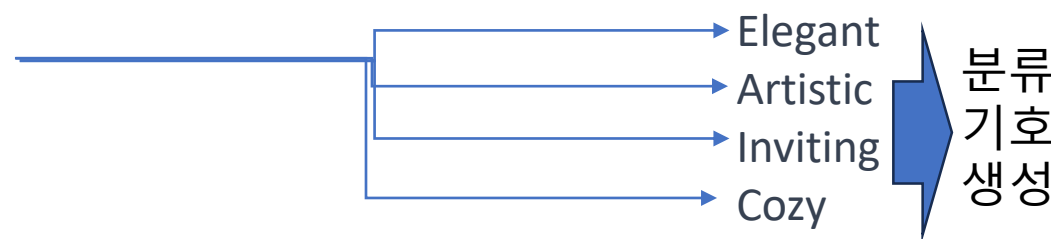
To complement the collection, a separate painting captures three white chairs placed in a grassy field. The chairs are elegantly designed, featuring a minimalistic yet stylish aesthetic. The grassy field adds a touch of natural beauty to the scene, imbuing it with a sense of tranquility and serenity.

With its carefully curated collection of paintings, this room exudes an air of sophistication and artistic appreciation, inviting viewers to sit back, relax, and immerse themselves in the beauty and creativity of the artwork.

서비스를 위한 데이터 베이스 구축(예)

ChatGPT3

categorize bellow descrition to overall emotional expression in one word
explain environment veiw of bellow description in one world
explain bellow description in one world

Elegant
Artistic
Inviting
Cozy

분류 기호 생성

" In a cozy, well-lit room adorned with various artworks, a prominent framed painting catches the viewer's attention. The painting depicts two elegantly designed wooden chairs, positioned at a slight angle within the room. The chairs feature sleek lines and a rich, dark wood finish, exuding a sense of sophistication and comfort. The room itself is bathed in soft, warm lighting, creating a welcoming and inviting atmosphere. Adjacent to the framed painting, another artwork showcases a white couch adorned with a colorful background. The couch is depicted with meticulous detail, revealing its plush cushions and elegant design. Resting on top of the couch, a small bird adds a whimsical touch to the scene, its vibrant colors contrasting beautifully against the white upholstery. In another part of the room, a striking painting of the same white couch is displayed against a vibrant backdrop. The couch is artfully rendered, capturing its clean lines and contemporary aesthetic. A starfish is delicately positioned on the couch, serving as a unique and eye-catching focal point. To complement the collection, a separate painting captures three white chairs placed in a grassy field. The chairs are elegantly designed, featuring a minimalistic yet stylish aesthetic. The grassy field adds a touch of natural beauty to the scene, imbuing it with a sense of tranquility and serenity. With its carefully curated collection of paintings, this room exudes an air of sophistication and artistic appreciation, inviting viewers to sit back, relax, and immerse themselves in the beauty and creativity of the artwork. "

- 질문에 따라 다양한 분석이 도출됨
- 분류기호 생성을 위해 다양한 형태로 질문을 해야 함
- 즉, 질문을 어떤 방식으로 하는지가 중요함

서비스를 위한 데이터 베이스 구축

- 앞 슬라이드의 모든 결과물은 web api 형태로 구현 가능
- 아래와 같은 구조로 간략하게 서비스 구조를 설명할 수 있음

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                    ┌─────────────────────────────┐
                    │      Web frontend           │
                    │  -  2D UI 제공(HTML)         │
                    │  -  3D 공간 제공(WebGL)      │
                    └─────────────────────────────┘
                                 ↕
┌──────────────────┐   ┌─────────────────────────────┐
│   AI API         │   │      Web backend            │
│  -  ChatGPT      │   │  -  로그인 정보             │
│  -  SceneX.jina  │←→ │  -  DB처리                 │
│      -  …         │   │  -  이미지 저장 및 분석     │
│                  │   ├─────────────────────────────┤   ┌──────────────┐
│                  │   │      AWS EC2 Server         │←→ │   AWS DB     │
└──────────────────┘   └─────────────────────────────┘   └──────────────┘
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