
django

Python
web framework

Django - Why? How?

Django - Why?

우리가 Django를 배우는 이유

1. Python 기반의 프레임워크

2. 검증된 프레임워크

Spotify

Instagram

Dropbox

Delivery Hero

2. 검증된 프레임워크

Version	Date[36]	Notes[37]
0.90[38]	16 Nov 2005	
0.91[39]	11 Jan 2006	"new-admin"
0.95[40]	29 Jul 2006	"magic removal"
0.96[41]	23 Mar 2007	"newforms", testing tools
1.0[42]	3 Sep 2008	API stability, decoupled admin, unicode
1.1[43]	29 Jul 2009	Aggregates, transaction based tests
1.2[44]	17 May 2010	Multiple db connections, CSRF, model validation
1.3[45]	23 Mar 2011	Class based views, staticfiles
1.4 LTS[46]	23 Mar 2012	Timezones, in browser testing, app templates.
1.5[47]	26 Feb 2013	Python 3 Support, configurable user model
1.6[48]	6 Nov 2013	Dedicated to Malcolm Tredinnick, db transaction management, connection pooling.
1.7[49]	2 Sep 2014	Migrations, application loading and configuration.
1.8 LTS[50]	1 Apr 2015	Native support for multiple template engines. *Supported until at least April 2018*
1.9[51]	1 Dec 2015	Automatic password validation. New styling for admin interface.
1.10[52]	1 Aug 2016	Full text search for PostgreSQL. New-style middleware.
1.11 LTS[53]	4 Apr 2017	Last version to support Python 2.7. *Supported until at least April 2020*
2.0[54]	2 Dec 2017	First Python 3-only release, Simplified URL routing syntax, Mobile friendly admin.
2.1[55]	1 Aug 2018	Model "view" permission.
2.2 LTS[56]	1 Apr 2019	Security release. *Supported until at least April 2022*
3.0[57]	2 Dec 2019	
3.1[58]	Aug 2020	
3.2 LTS[58]	Apr 2021	*Supported until at least April 2024*
Old version	Older version, still supported	**Latest version**	Latest preview version	Future release		

출처: 위키백과(django)

2005년 v1.0

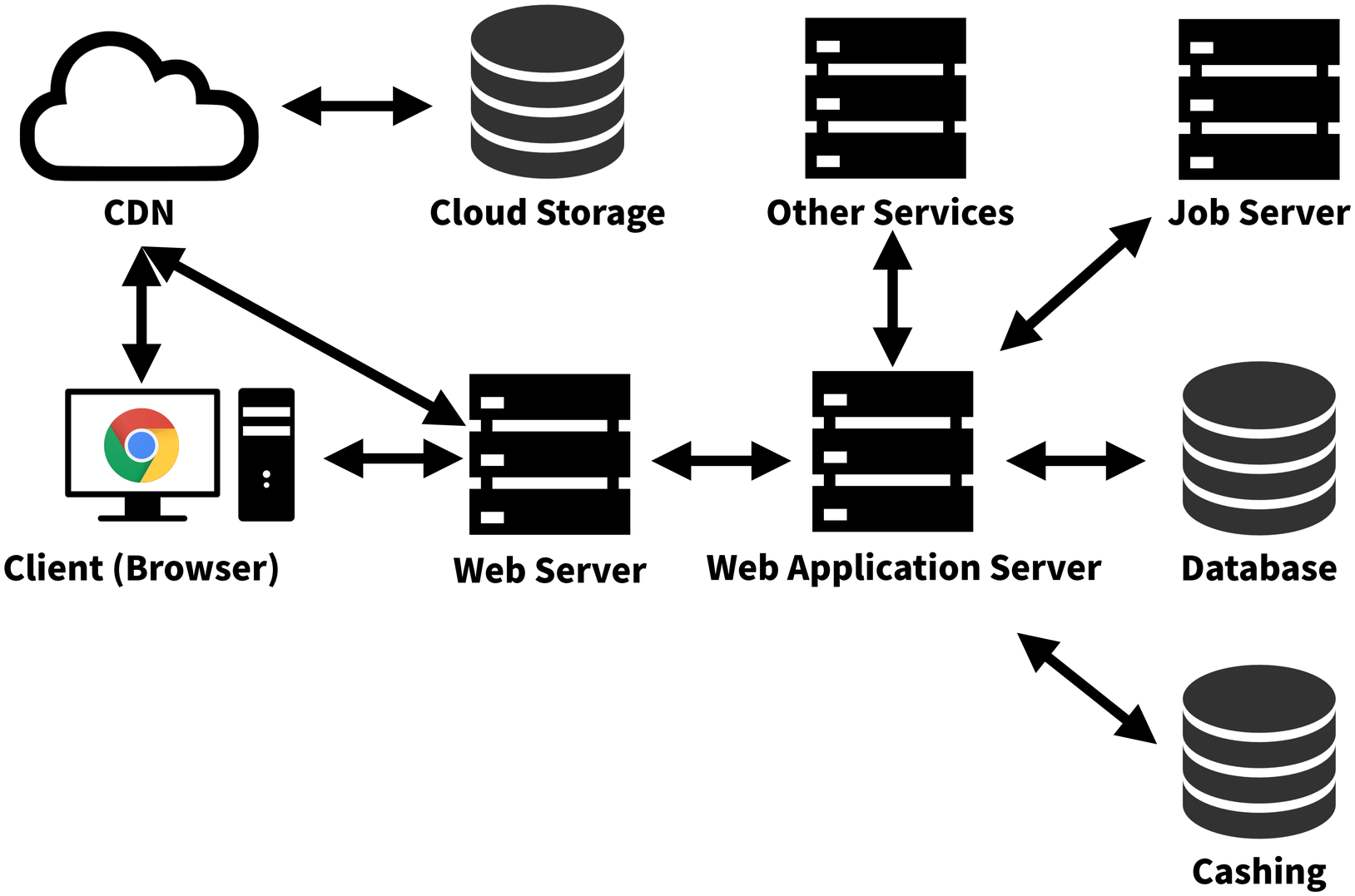
2017년 v2.0

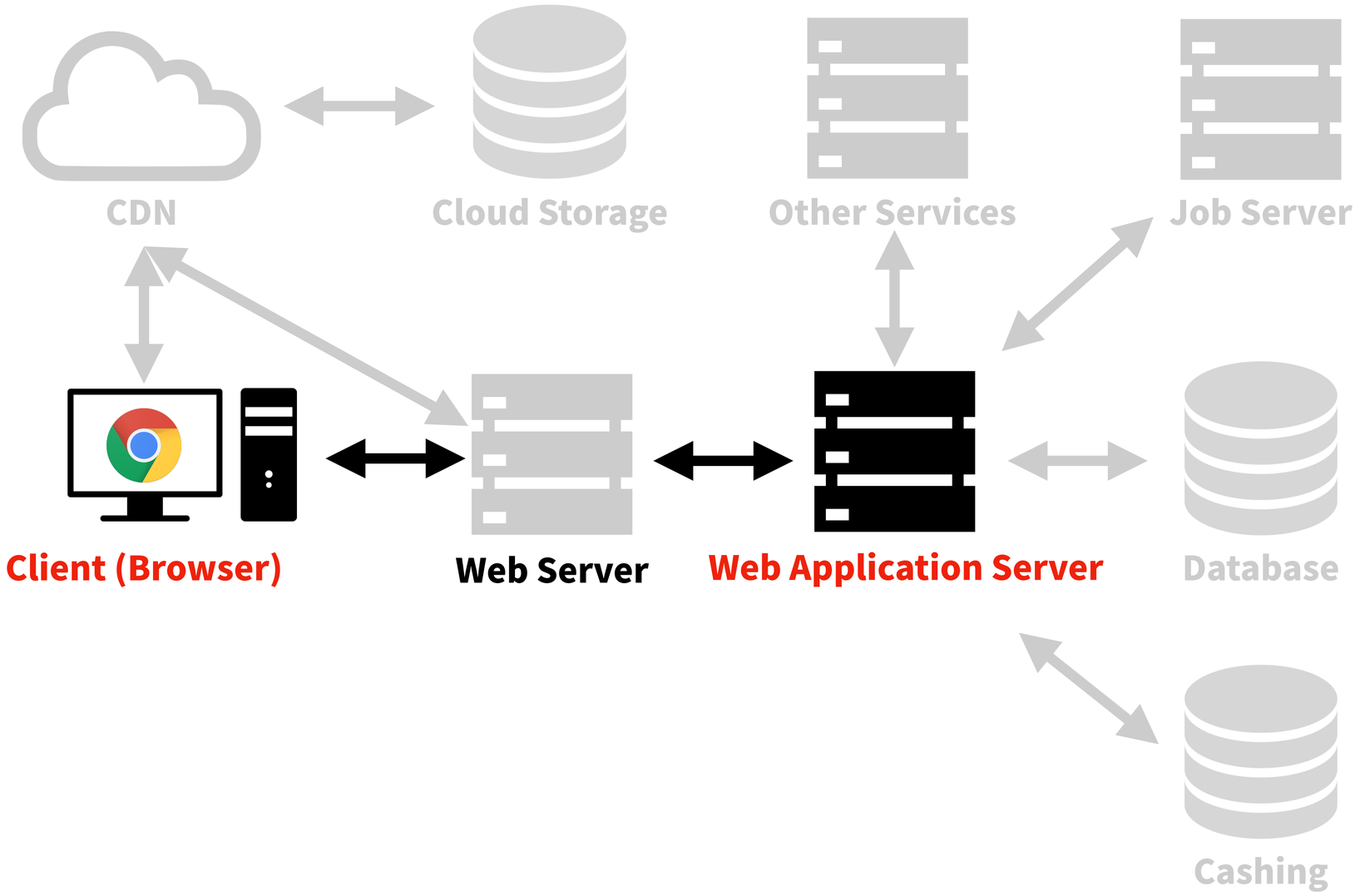
2019년 v3.0

Django - How?

어떻게 동작 하는건가요?

Web Application


CDN
Cloud Storage
Other Services
Job Server
Client (Browser)
Web Server
Web Application Server
Database
Cashing


CDN
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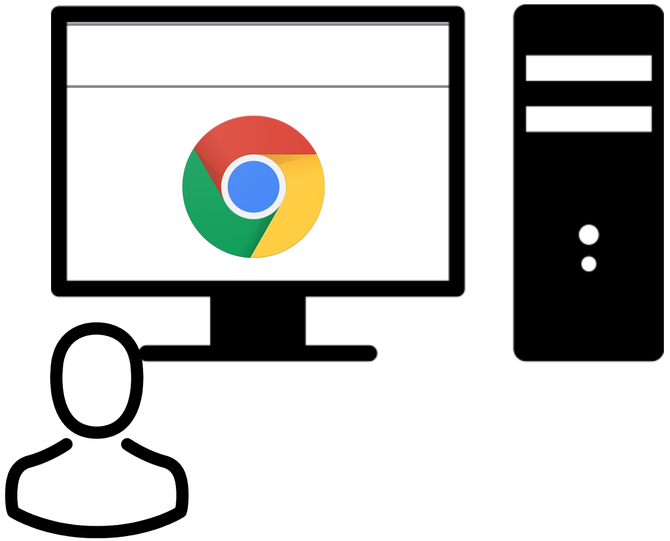
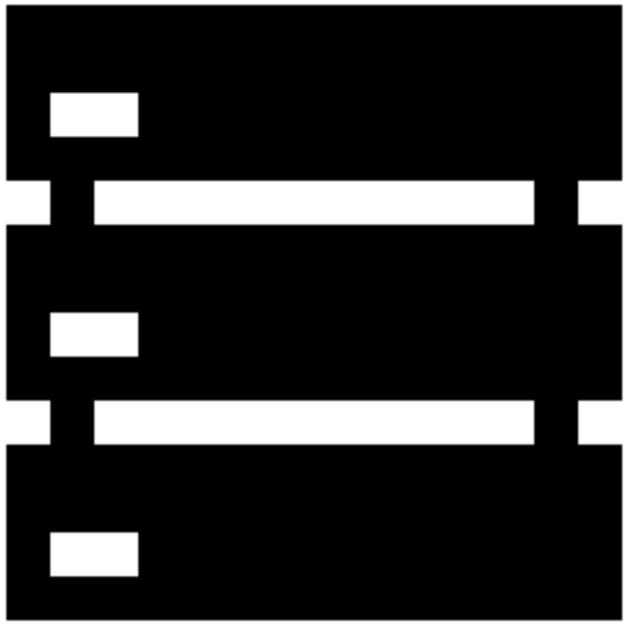
Cashing



Request(요청)

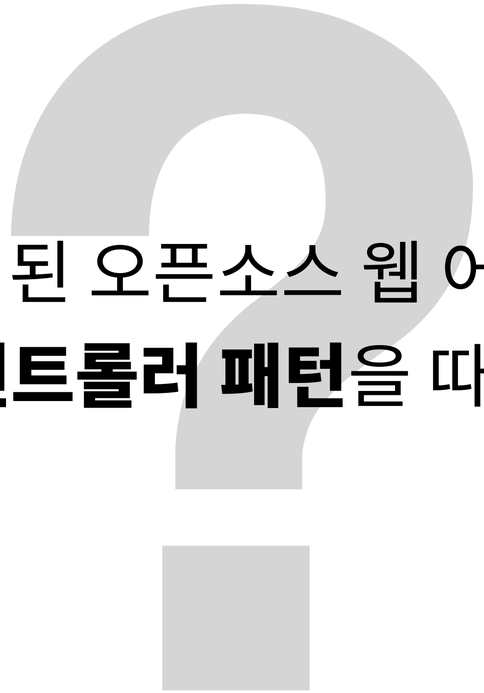
Respond(응답)



클라이언트 (Client)

서버 (Server)


django



django는 파이썬으로 작성된 오픈소스 웹 어플리케이션 프레임워크로,
모델-뷰-컨트롤러 패턴을 따르고 있다.

출처: 위키백과(django)

모델-뷰-컨트롤러 패턴

모델-뷰-컨트롤러(Model–View–Controller, MVC)는 소프트웨어 공학에서 사용되는 **소프트웨어 디자인 패턴**이다.

이 패턴을 성공적으로 사용하면, 사용자 인터페이스로부터 비즈니스 로직을 분리하여 애플리케이션의 시각적 요소나 그 이면에서 실행되는 비즈니스 로직을 서로 영향 없이 쉽게 고칠 수 있는 애플리케이션을 만들 수 있다.

MVC에서 모델은 애플리케이션의 정보(데이터)를 나타내며, 뷰는 텍스트, 체크박스 항목 등과 같은 사용자 인터페이스 요소를 나타내고, 컨트롤러는 데이터와 비즈니스 로직 사이의 상호동작을 관리한다.

출처: 위키백과(모델, 뷰, 컨트롤러)

소프트웨어 디자인 패턴
MVC

Model

View

Controller

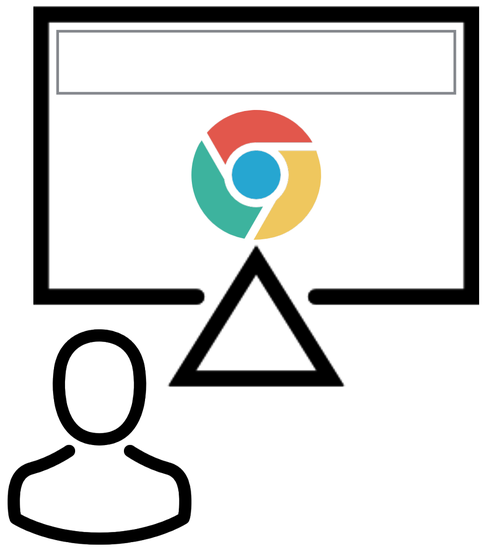
Model

Template

View

MTV

Model	Template	View
M	**T**	**V**
데이터 관리 (DB 동작)	사용자가 보는 화면 (인터페이스)	중간 관리자 (상호 동작)

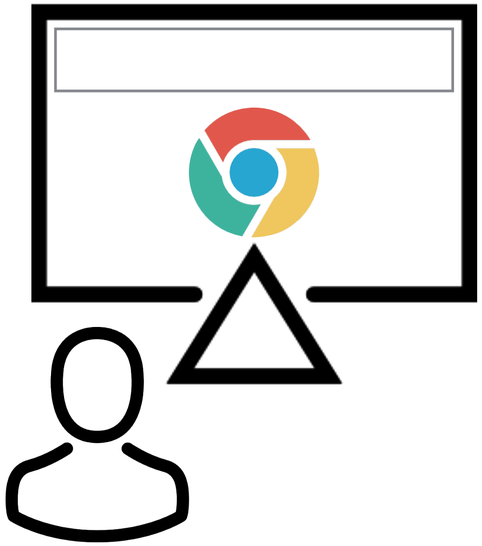


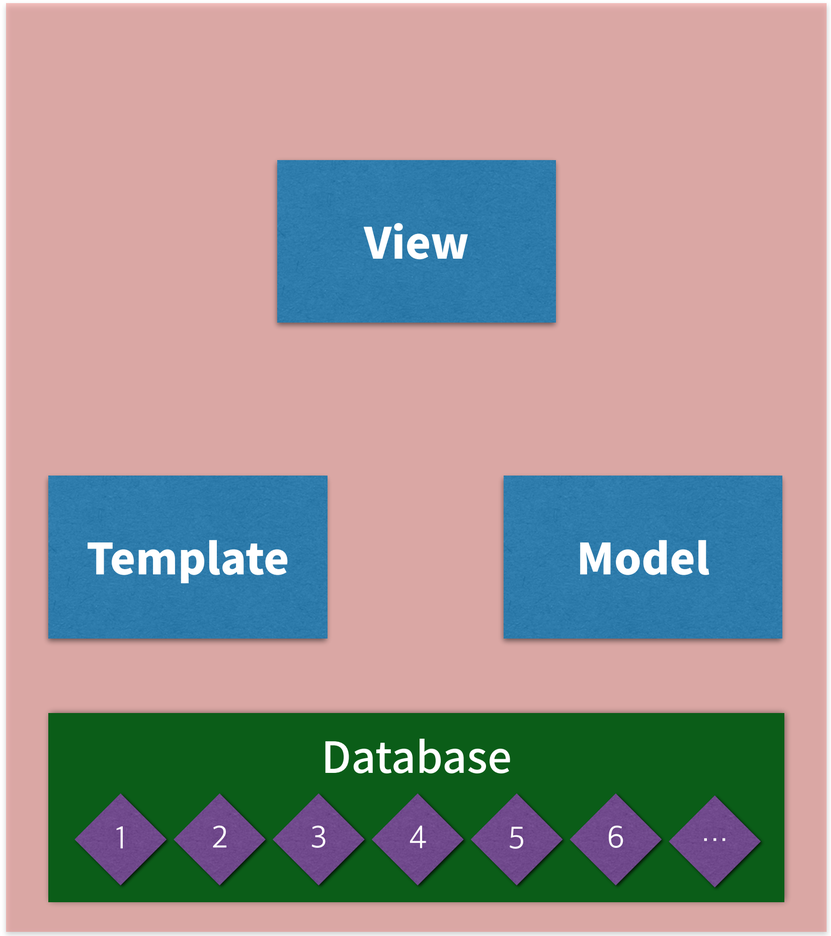
Request(요청)

Respond(응답)

Web Application

django

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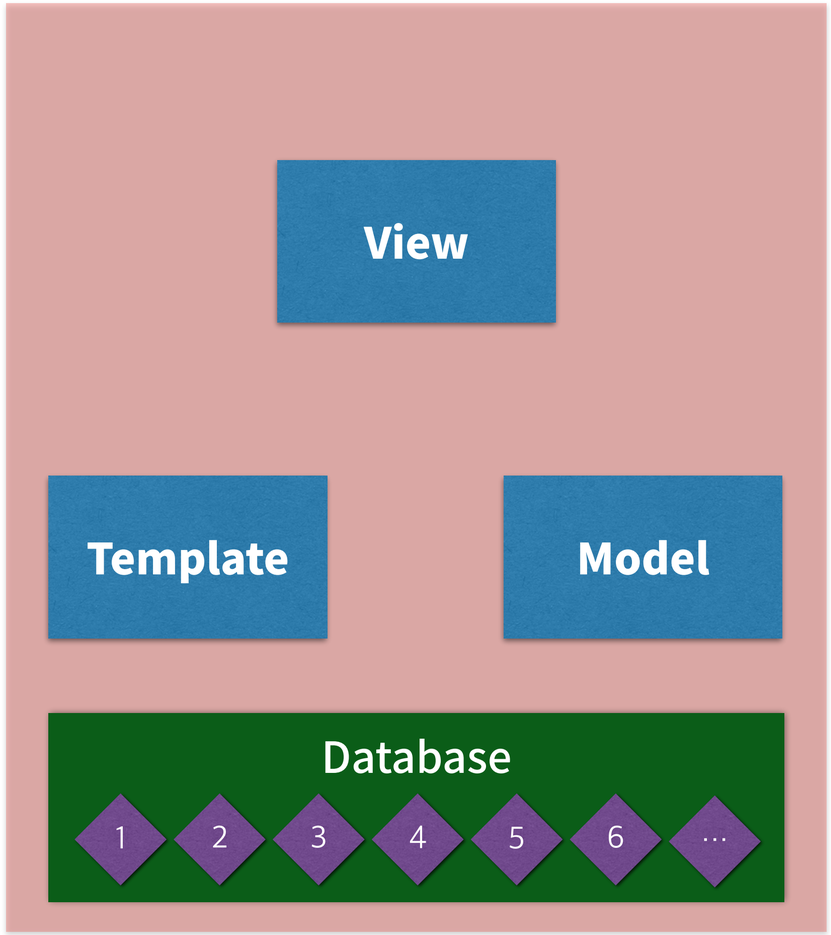
1번 강의를 봐야지!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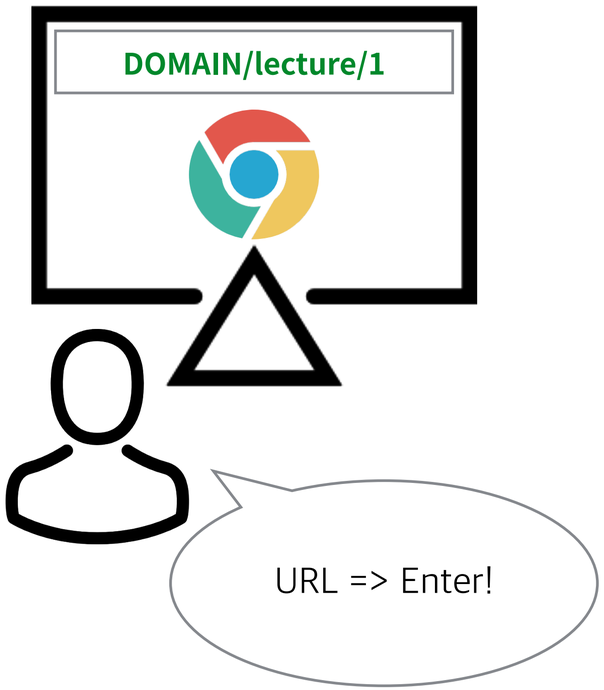
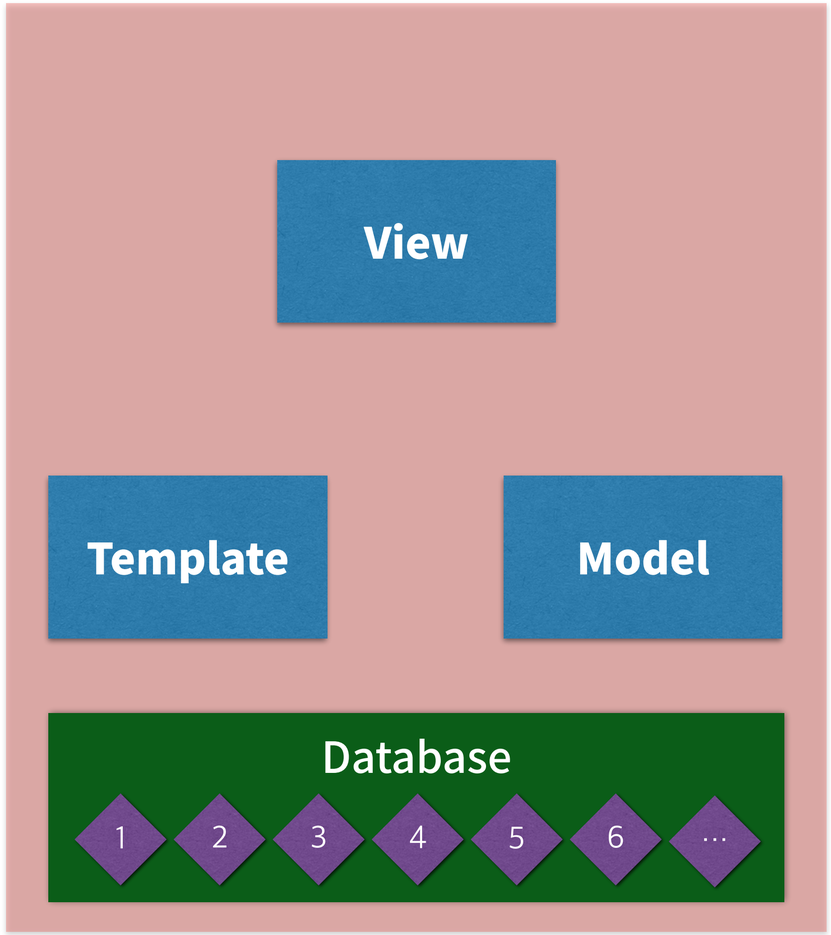

DOMAIN/lecture/1
URL => Enter!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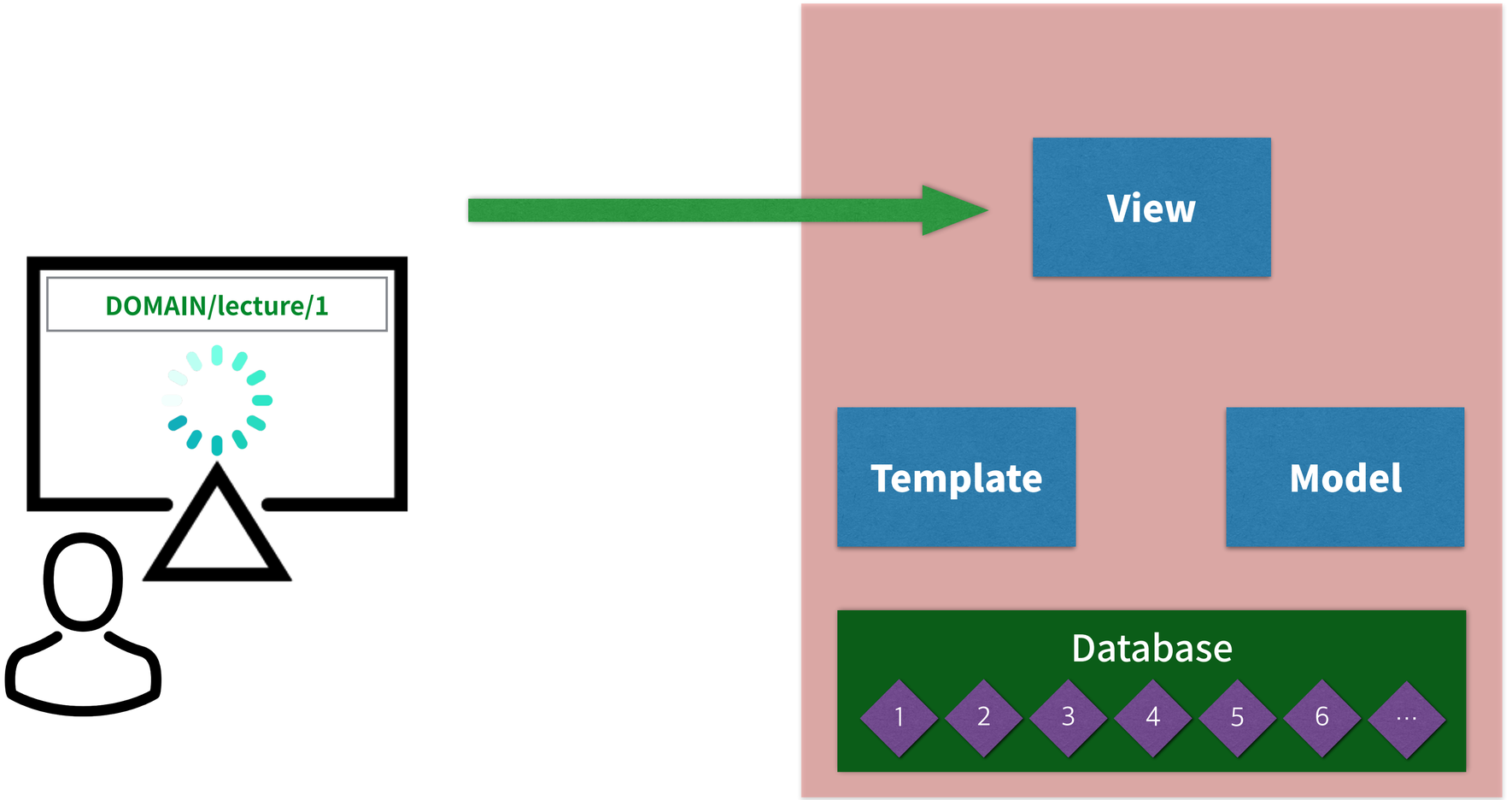
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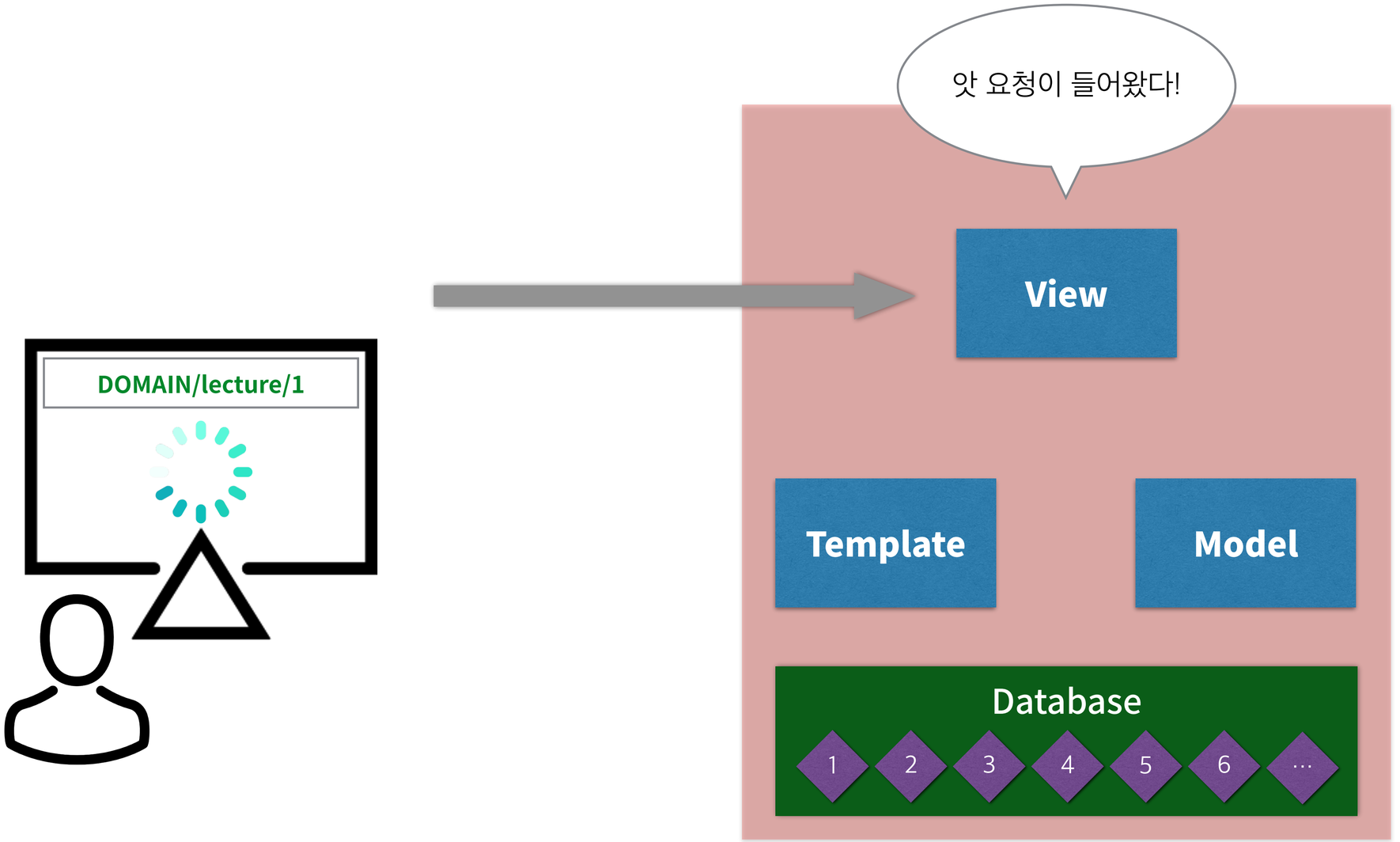
DOMAIN/lecture/1
앗 요청이 들어왔다!
View
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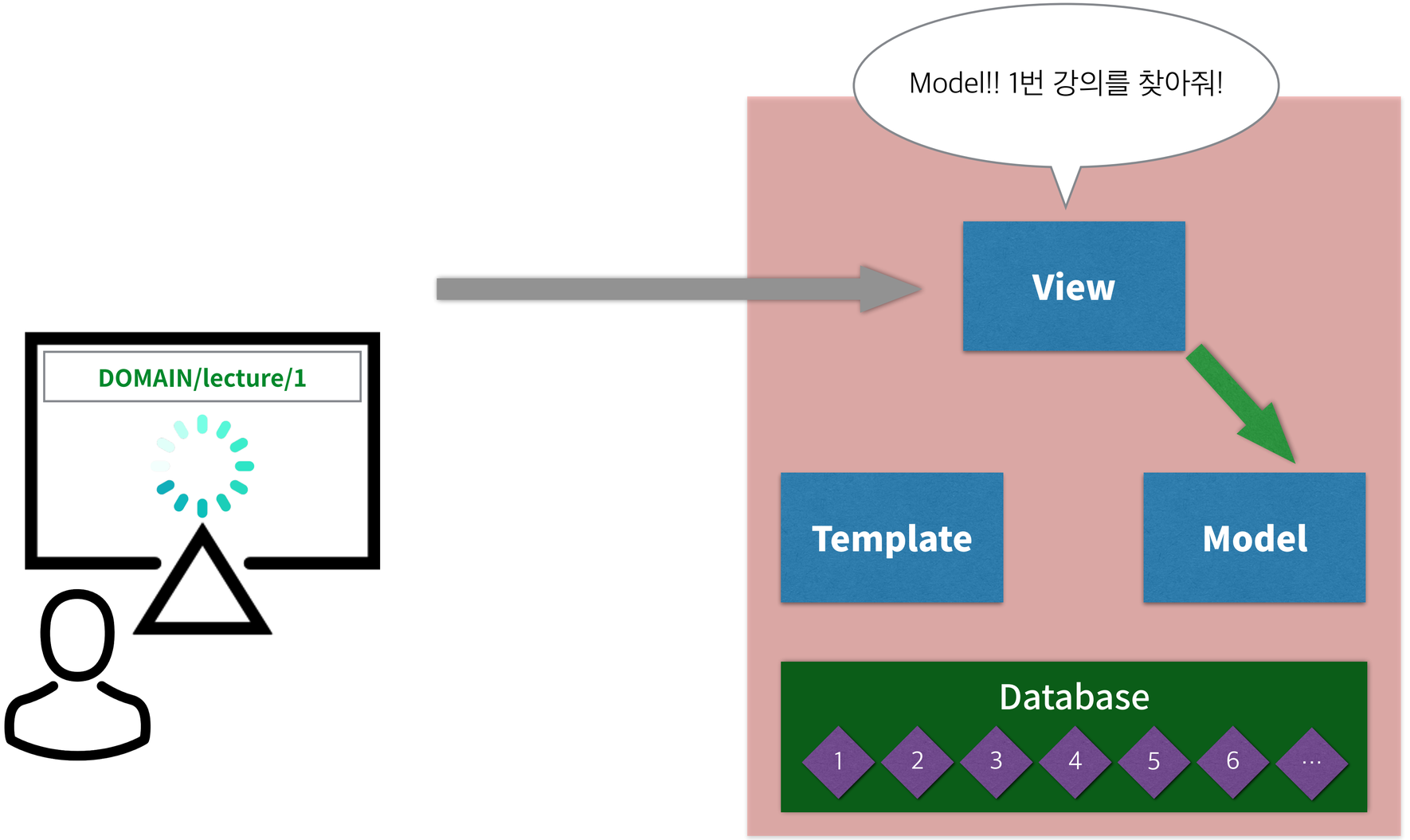
DOMAIN/lecture/1
Model!! 1번 강의를 찾아줘!
View
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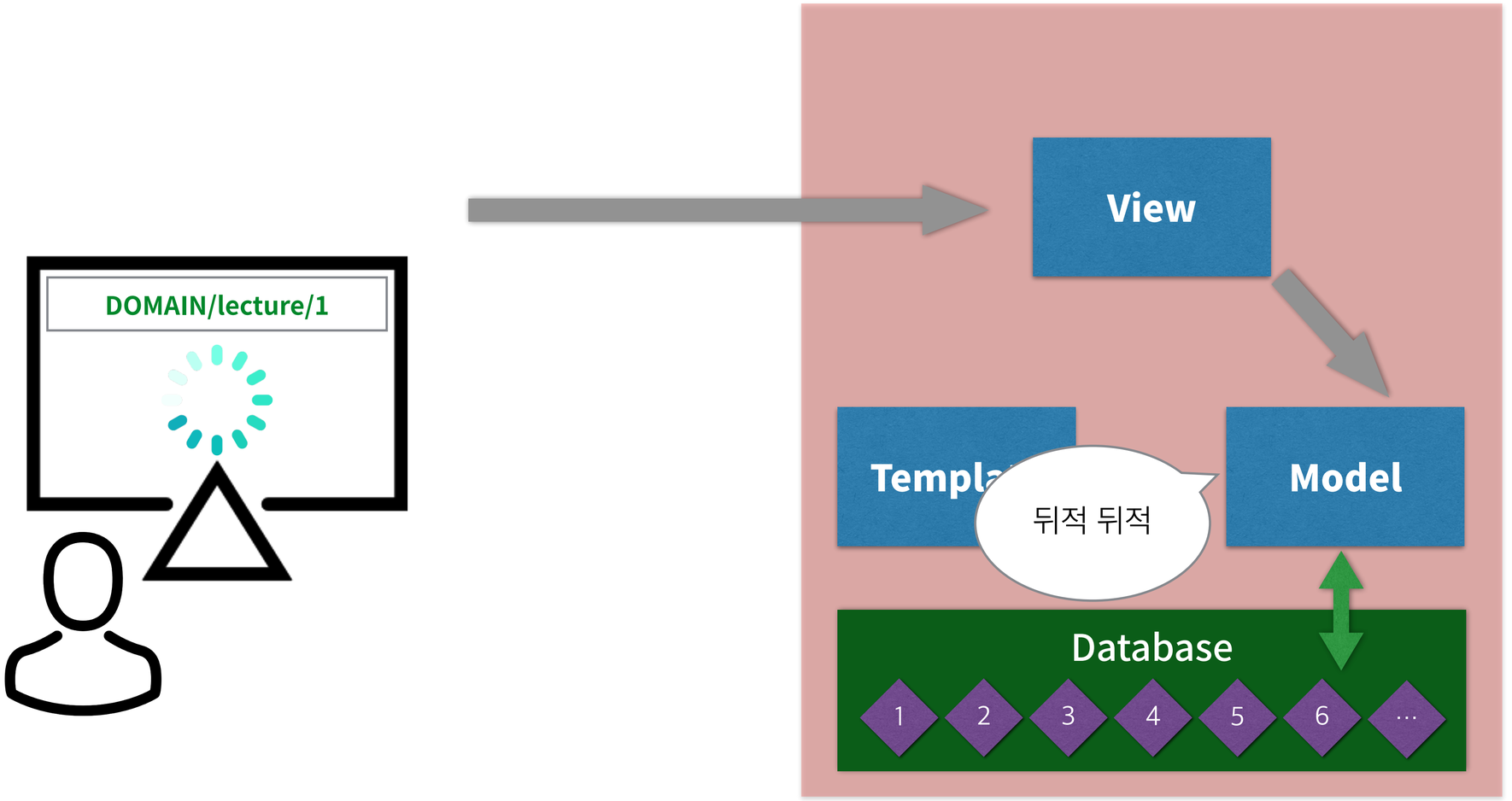
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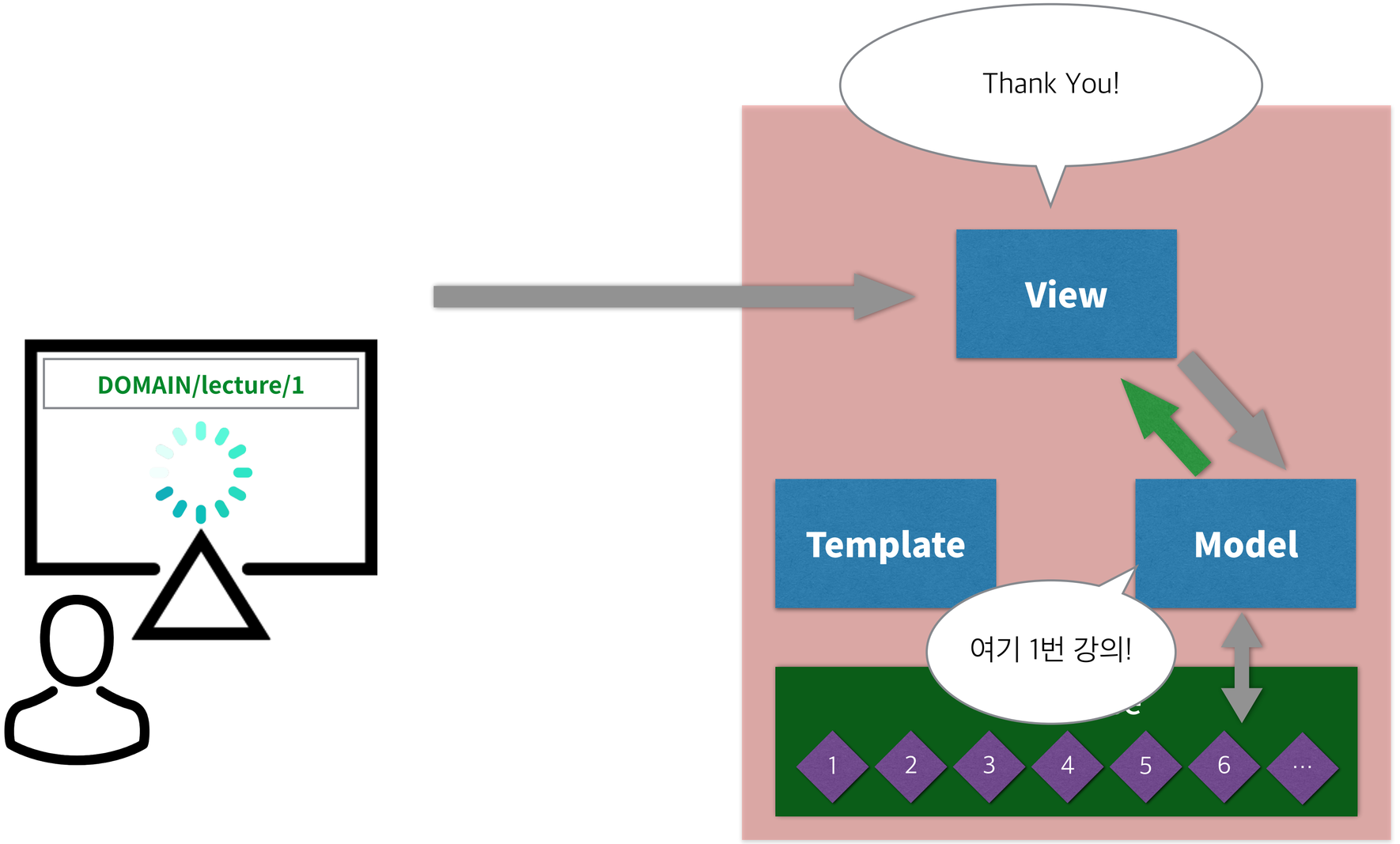
DOMAIN/lecture/1
Thank You!
View
Template
Model
여기 1번 강의!
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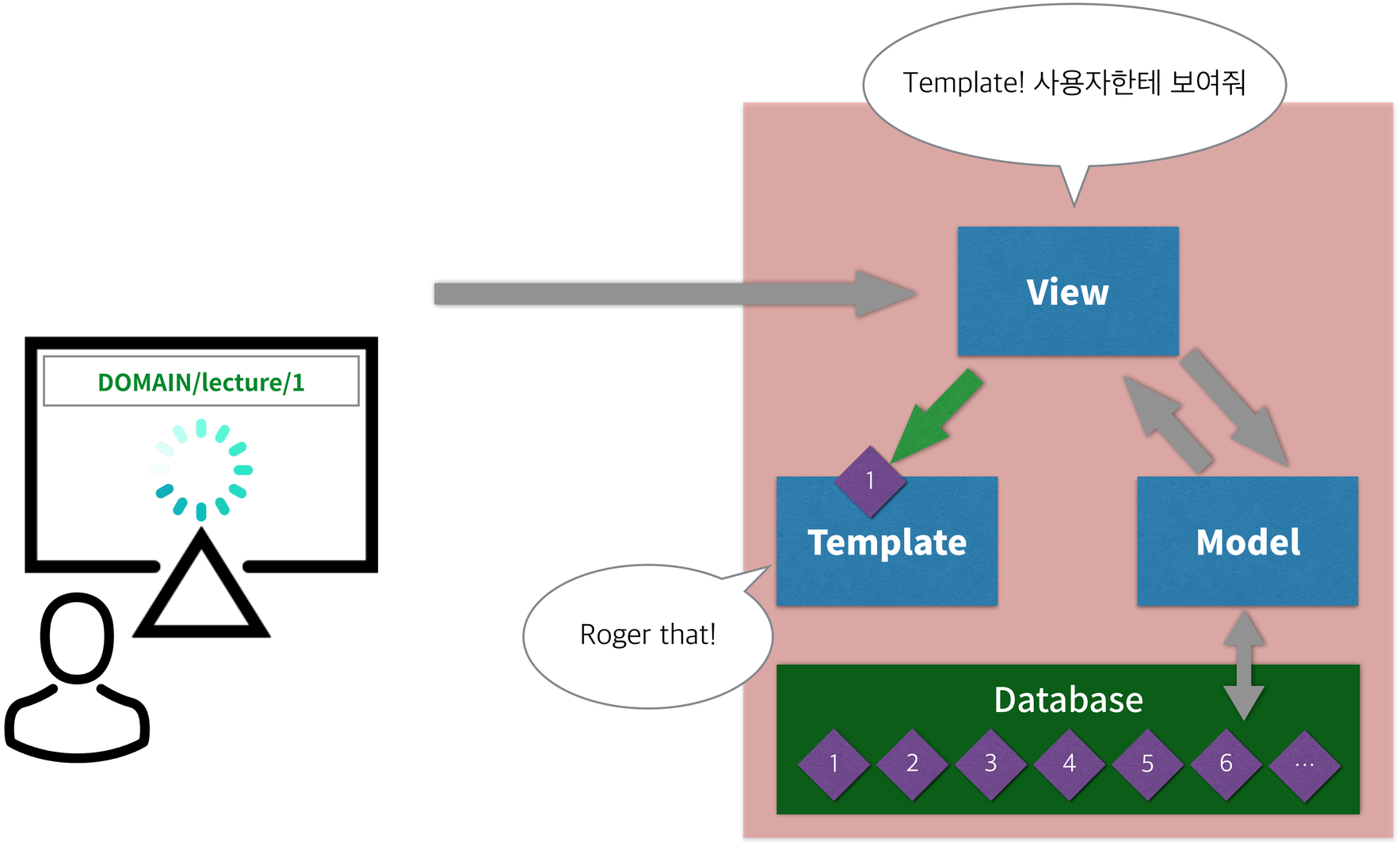
DOMAIN/lecture/1
Template! 사용자한테 보여줘
View
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Template
Model
Roger that!
Database
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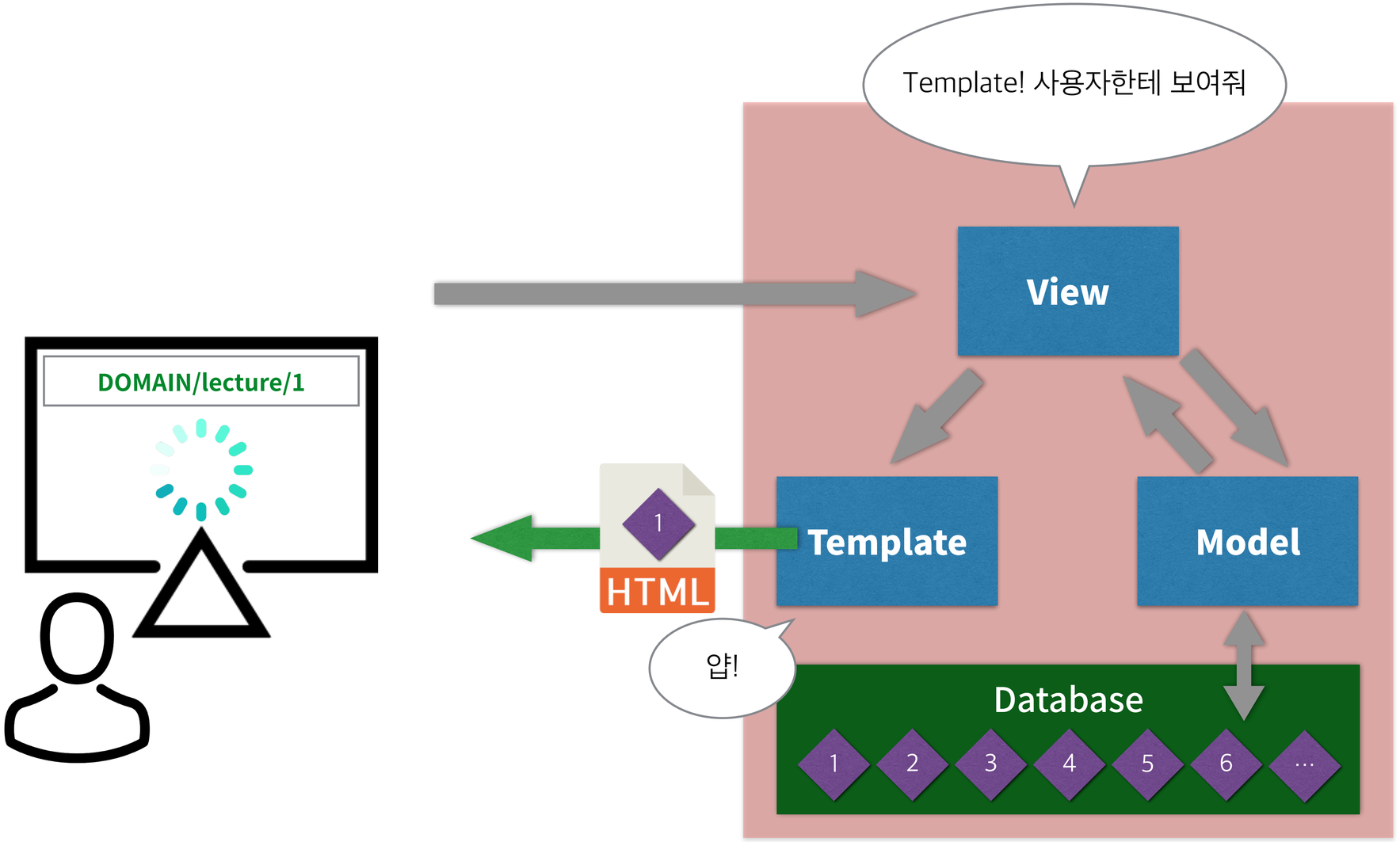
DOMAIN/lecture/1
Template! 사용자한테 보여줘
View
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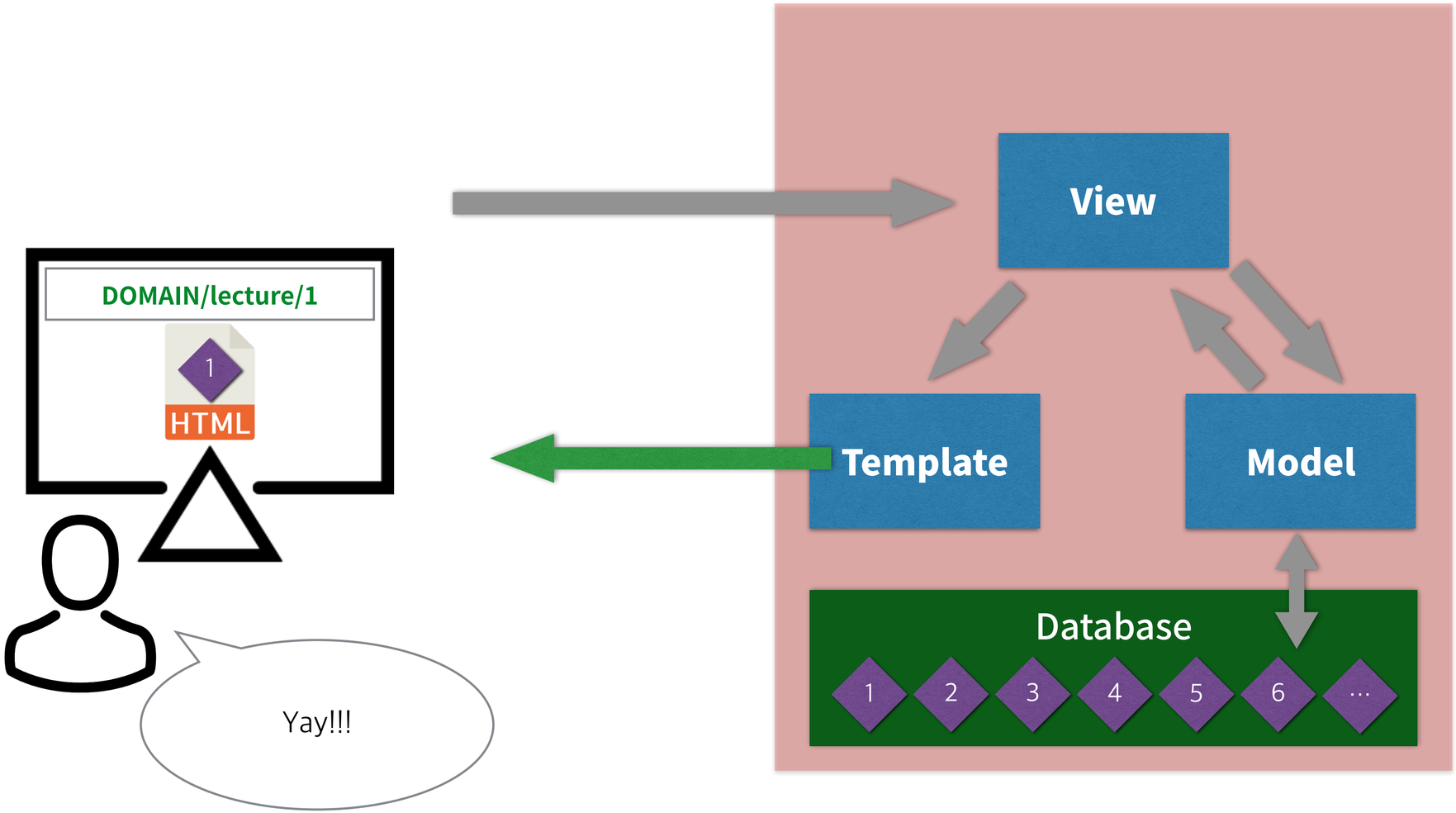
View
Template
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Database
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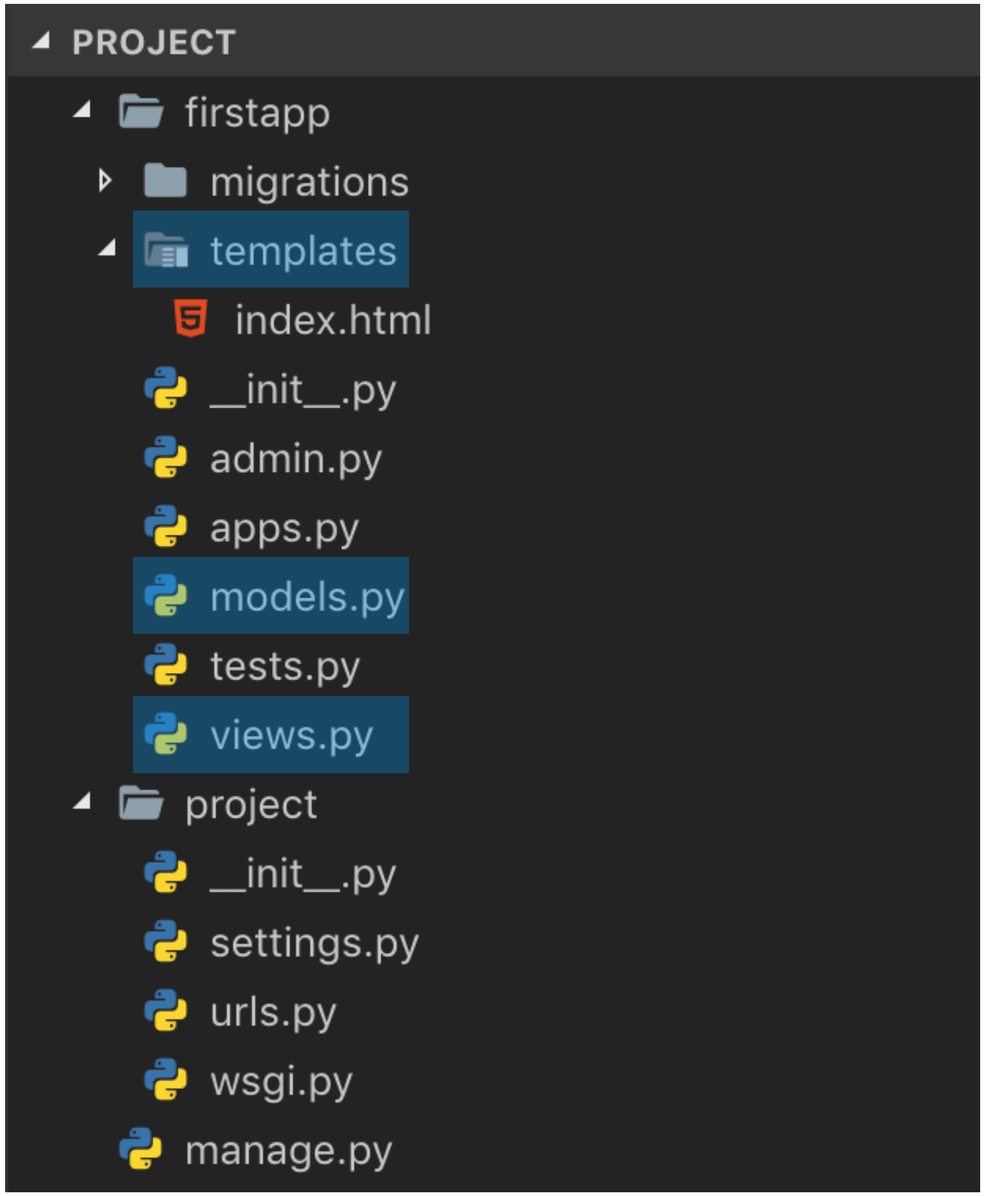
…
DOMAIN/lecture/1
1
HTML
Yay!!!

MTV

Model	Template	View
M	**T**	**V**
데이터 관리 (DB 동작)	사용자가 보는 화면 (인터페이스)	중간 관리자 (상호 동작)

First django App



Hello, Django!

1. 패키지 설치

```
$ pip install django
```

2. 프로젝트 생성

```
$ django-admin startproject project
```

3. app 생성

```
$ python manage.py startapp firstapp
```