



MODELS

Model, View and Controller

Objectives

At the end of this lesson, you will learn the following:

1. What is **Model**?
2. How is **Model** being used in Rails?



What is Model?



To sum up MVC ..

MODEL

- Involves in the database.

VIEW

- involves the user interfaces

CONTROLLER

- handles the user requests.



Let us focus on Models



Model

- manages data between the rest of the application and the database.
- You can define how a single entity behaves (本体の動作)
- includes data validation, before/after save, etc.



Database Migration

`rake db:migrate`



What can Rails Migration do?

- `create_table(name, options)`
- `drop_table(name)`
- `rename_table(old_name, new_name)`
- `add_column(table_name, column_name, type, options)`
- `rename_column(table_name, column_name, new_column_name)`
- `change_column(table_name, column_name, type, options)`
- `remove_column(table_name, column_name)`
- `add_index(table_name, column_name, index_type)`
- `remove_index(table_name, column_name)`



Migration supports basic Data Types

- **string** – for small data types such as a title.
- **text** – for longer pieces of textual data, such as the description.
- **integer** – for whole numbers.
- **float** – for decimals.
- **datetime and timestamp** – store the date and time into a column.
- **date and time** – store either the date only or time only.
- **binary** – for storing data such as images, audio, or movies.
- **Boolean** – for storing true or false values.



Active Record



Rails Active Record is ...

- Object/Relational Mapping (ORM) layer supplied in Rails
- Follows the standard ORM model, which is as follows -
 - tables map to classes,
 - rows map to objects and
 - columns map to object attributes.

At this point, we have discussed:

- ~~1. What is **View**?~~
- ~~2. How is **View** being used in Rails?~~



- End of slides