CRUD

It refers to creating or deleting data.
It is an acronym for create, read, update and delete.
Active record (Rails model) has methods for each of these actions.

Create

Add the data directly into the database:

```
user = User.create(name: "David", occupation: "Code Artist")
```

Creates the object but you need to use save to add it to the database:

```
user = User.new
user.name = "David"
user.occupation = "Code Artist"
```

```
user = User.new do |u|
  u.name = "David"
  u.occupation = "Code Artist"
end
```

There is a method to validate in the models, but we will only really know if the record can be saved into the database when trying to save it.

Read

Read

- Common methods
  - .all
  - .find_by(attr_name: "value")
  - .where
  - .find(:id)

<u>Reference is returned by where</u>
we will have methods like update and update_all
With references you can use methods that affects methods as update_all, delete_all, etc.

```
Stock.where(last_price: nil).update_all(last_price: 5
```

You can get an Active object using for example .first on a where result.

Active record
You can add validations and other methods.

Update

```
user = User.find_by(name: 'David')
user.name = 'Dave'
user.save
```

```
user = User.find_by(name: 'David')
user.update(name: 'Dave')
```

Delete

Delete

```
user = User.find_by(name: 'David')
user.destroy
```

```
# find and delete all users named David
User.destroy_by(name: 'David')

# delete all users
User.destroy_all
```