# Persisting multiple objects at once

# About me



#### Przemysław Szyszka

- Ruby
- Passioned about Elixir

#### Problem

```
defmodule Blog.Post do
   use Ecto.Schema

schema "products" do
   field :title, :string
   field :body, :string

   timestamps()

   has_many :comments, Blog.Comment
   end
end
```

```
defmodule Blog.Comment do
  use Ecto.Schema

schema "comments" do
  field :body, :string

timestamps()

belongs_to :post, Blog.Post
end
end
```

## put\_assoc

```
Repo.insert!(%Post{
    title: "Hello",
    body: "world",
    comments: [
        %Comment{body: "Excellent!"}
    ]
})

post = Ecto.Changeset.change(%Post{}, title: "Hello", body: "world")
comment = Ecto.Changeset.change(%Comment{}, body: "Excellent!")
post_with_comments = Ecto.Changeset.put_assoc(post, :comments, [comment])
Repo.insert!(post_with_comments)
```

#### cast\_assoc

```
defmodule <a href="Blog_Post">Blog_Post</a> do
                                               defmodule Blog.Comment do
  import Ecto.Changeset
                                                 import Ecto.Changeset
  def changeset(struct, params \\ %{}) do
                                                 def changeset(struct, params \\ %{}) do
    struct
                                                    struct
     > cast(params, [:title, :body])
                                                     > cast(params, [:body])
     > validate_required([:title, :body])
                                                     > validate_required([:body])
     > cast_assoc(:comments)
                                                 end
  end
                                               end
end
```

#### cast\_assoc

```
defmodule Blog.Post do
  import Ecto.Changeset

def changeset(struct, params \\ %{}) do
  struct
  |> cast(params, [:title, :body])
  |> validate_required([:title, :body])
  |> cast_assoc(:comments, with: Blog.Comment.my_custom_changeset)
  end
end
```

#### Ecto.Multi

```
iex> Ecto.Multi.new()
%Ecto.Multi{names: #MapSet<[]>, operations: []}
iex> Ecto.Multi.new() |> Repo.transaction()
{:ok, %{}}
```

### Ecto.Multi

```
Ecto.Multi.new()
|> Ecto.Multi.insert(:team, team_changeset)
|> Ecto.Multi.update(:user, user_changeset)
|> Ecto.Multi.delete(:foo, foo_changeset)
|> Repo.transaction
```

### Ecto.Multi

```
Ecto.Multi.new()
|> Ecto.Multi.insert(:post, post_changeset)
|> Ecto.Multi.run(:comment, fn repo, %{post: post} -> repo.insert(comment_changeset)
end)
```

# Questions?