## class Flight < ApplicationRecord</pre>

has many :passengers

has many :users, :through => :passengers

end

class Passenger < ApplicationRecord</pre>

belongs\_to :flight
belongs to :user

end

This is the "join model"

class User < ApplicationRecord</pre>

has\_many :passengers

has\_many :flights, :through => :passengers

end

- "Authentication" means "identification."
- "Authorization" means "permission."
- HTTP requests for identify a user-specific or sensitive resource must be authorized
- ❖ A browser cookie is an HTTP header that's preserved between requests
- ❖ Cookie values are set by the app during a response, and are subsequently transmitted back to the app with every subsequent browser request.
- ❖ Cookie data can "expire," which just means we trust the browser to delete the header value
- \* 80% case: use the session hash in Rails to read, write, update, and delete cookie data.
- \* Rails will encrypt and decrypt the **session** cookie value automatically
- ❖ You should try to avoid storing user passwords in any format, even if they're hashed.
- \* If you must store a password, use a one-way hash such as the bcrypt algorithm.
- ❖ Do not allow plaintext passwords to exist on disk, ever.
- "Strong parameters" means "untrusted by default".
- Use params.permit(....) and params.require(....) to "whitelist" the params you want to allow
- ❖ If you don't use mass assignment in your controllers, you don't need to worry about this at all
- ❖ Use the "placeholder" SQL syntax for user-provided query parameters

If you must store passwords in your database, use a one-way hash and follow best practices at all times.

Here is a simple 5-Step Recipe:

- 1. Add the **bcrypt** gem to your app (and don't forget to **bundle install**)
- 2. Add a column named **password\_digest** to your User model
- 3. Add has secure password to your User model
- 4. You can still use .password= and .password\_confirmation= as expected
- 5. Call .authenticate() on a User object to validate a given plain-text password.

```
app/models/user.rb

class User < ApplicationRecord

has_secure_password

end
```

```
app/controllers/sessions_controller.rb

class SessionsController < ApplicationController

def create
  user = ... # find the user row

if user.authenticate(params[:password])
  # They have been identified

  session[:user_id] = user.id

  # etc.
  end

end

end
```