Object Oriented WEB Programming Using Ruby

Day 12: 5/July/2018

Share Drawings

Find latest slides from…

https://github.com/webdbhosei/SugChat

Now our lecture materials had been moved to github.com

Coffee script and ruby

Definition of Functions:

```
helloWorld = ->
   alert 'Hello,World’
#引数
test = (name) ->
   alert "my name is #{name}"
```

Javascript vs. Coffee Script

1. Defining variable, no need to write ”var”
2. No need to write semicolons(;)
3. No need to write (brackets)
4. Instead of writing {}, use indentation to write block
5. Comments are # for //, ### for /**/

Picking up mouse events

In app/assets/javascripts/pictures.coffee

At line number 32: canvas.mousedown

At line number 42: canvas.mousemove

At line number 53: canvas.mouseup

At line number 60: canvas.mouseout

To pick up mouse position and call App.room.speak(position), at line 40, 51, 59, 66

Sharing mouse events

In app/channels/room_channels,

Function speak(position) is defined.

```
def speak(position)
  ActionCable.server.broadcast
 "room_channel", room: position
end
```

Data are broadcasted to “room_channel”

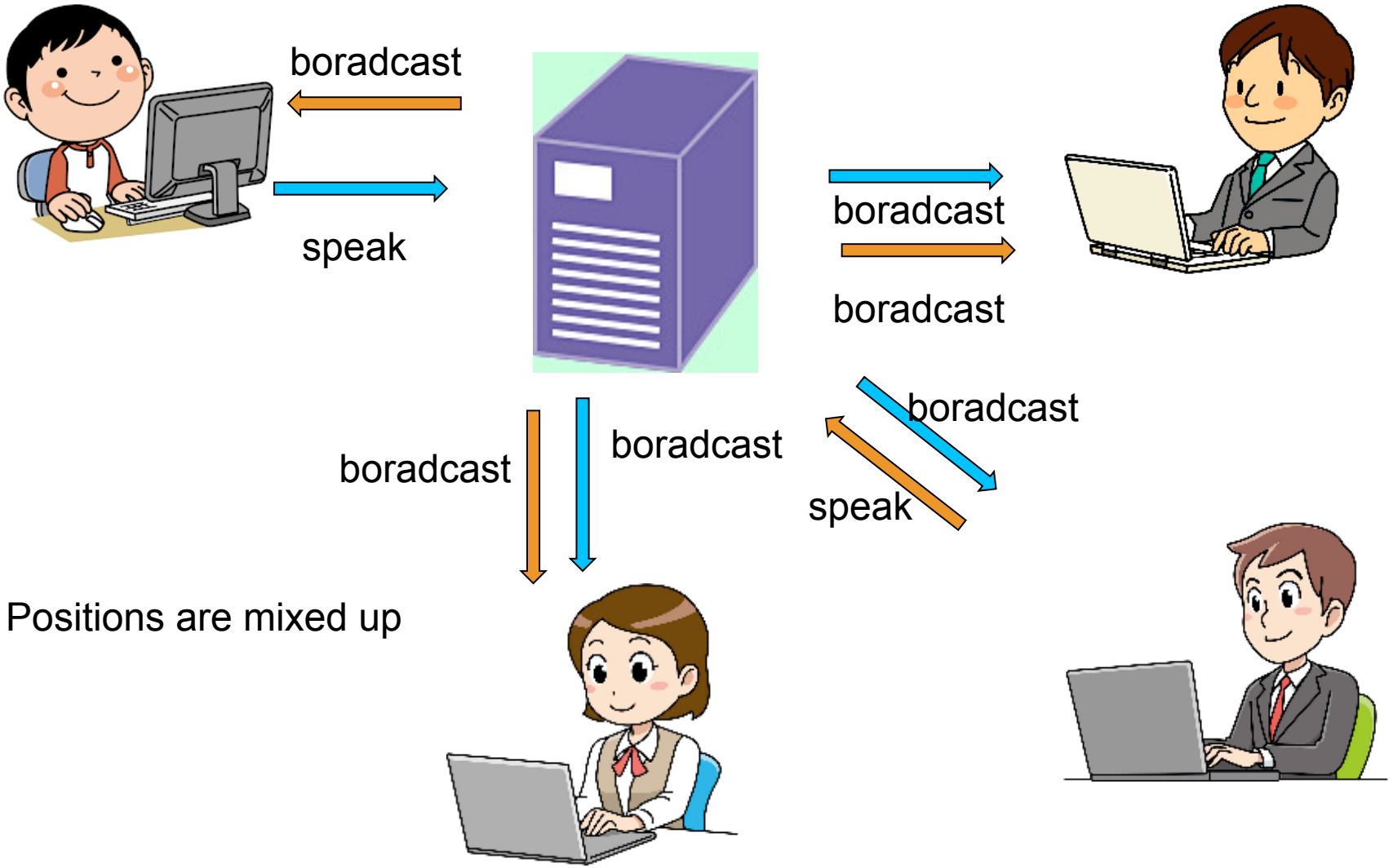
Receiving “remote_drawings”

In app/assets/javascripts/channels/room.coffee

At line 23, App.room is defined, and defining some remote “receiving” information.

```
received: (data) ->    # function re-define
  switch data.room.position.act    # switch
    when ‘down’, ‘move’, ‘up’, ‘out’
```

Chat Design Now



Positions are mixed up

Change the design of 'speak'

In app/channels/room_channels,

save the "down" and "move" positions, and when "up" is sent, make "Stroke" information, and "speak" the strokes.

We can not draw simultaneously now, but we can fix this problem.

Current “Position”

position = { prex: ctx.prevPos.x, prey: ctx.prevPos.y, act: 'down'}, at line 39,

position = { prex: ctx.prevPos.x, prey: ctx.prevPos.y, nposx: nowPos.x, nposy: nowPos.y, act: 'move' }, at line 50,

position = {prex: ctx.prevPos.x, prey: ctx.prevPos.y, act: 'up'}, at line 58,

position = {act: 'out'}, at line 60

Redesign of “Stroke” table

XY-Sequence: String

like, “x1,y1,x2,y2,x3,y3..,xn,yn”

Color: RGB String

at line 23:color = "rgb(#{red.val()}, #{green.val()},#{blue.val()})”

Owner: current_user: integer

Chat_room_id: integer

Picture_number: integer ← undefined, yet, Give “New Picture button”

Sorry for the cancelation

rake db:rollback

--- >>> cancel strokes table,

rails destroy scaffold stroke

rails generate model stroke sequence:string
color:string user_id:integer
chat_room_id:integer
picture_number:integer

Relations

ChatRoom has_many :strokes

Strokes belongs_to :chat_room

Strokes belongs_to :user

User has_many :strokes

Strokes

Read the following programs;

app/assets/javascripts/channels/room.coffee
app/assets/javascripts/pictures.coffee
app/views/layouts/_drawings.html.erb
app/channels/room_channel.rb

Now the stored strokes are available, therefore, we can reload the drawing of the past chats.