

Install

This project need jquery, ecto, and phoenix.

Change database setting in **05-coders-choice-finalAssignment\joyfun\config\dev.exs** to your configuration.

```
cd 05-coders-choice\joyfunweb
```

```
cd assets && npm install
```

```
npm install jquery --save
```

```
cd 05-coders-choice\joyfunweb
```

```
mix deps.get
```

```
mix deps.compile
```

```
mix ecto.create
```

```
mix ecto.migrate
```

```
mix phx.server
```

I am not sure whether need install npm and jquery manually, maybe these steps are optional.

Introduction to different parts

Joyfun

This part is used to manipulate database. This part will create a table to keep users' information. Also, this part support user register and login.

Joyfunserver

This part is used to offer different rooms for different users.

For example, user A and user B may join in room 0 meanwhile user C and user D may join in room 1.

This part can keep real time information for different rooms and support creating room, joining user and removing user.

I use a genserver to represent one room and use a supervisor with `:simple_one_for_one` to manage different genservers.

Joyfunweb

This part is the core of this project.

It implements an online real-time multiplayer painting and chatting app.

User can join to an existing room or create a new room, then painting and chatting with others. The picture drawn by users will be shared among person who joining the same room.

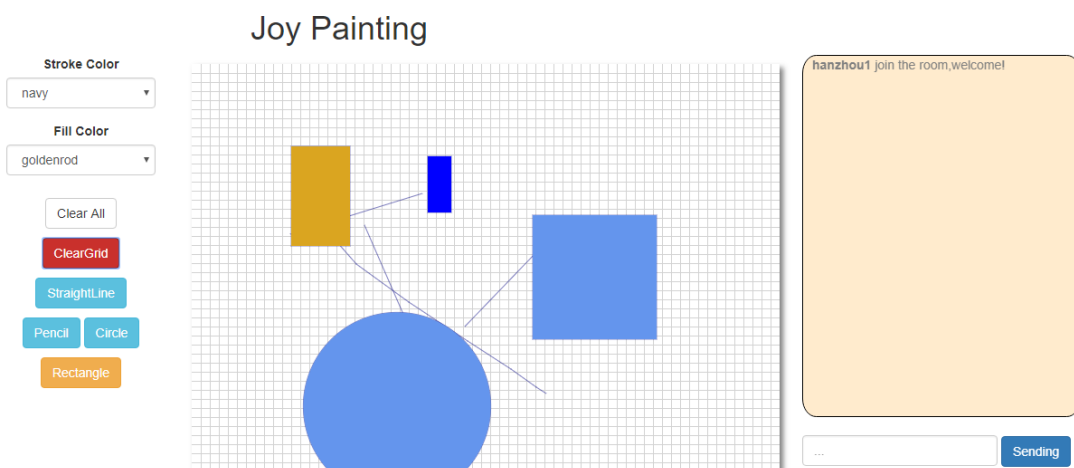
Introduction to some core files

page/painting.js

This javascript will set up a channel to server. It will monitor users' events and send them to server, then server will broadcast those events to users who joining the same room (Because those users setup channel with the same topic). Finally, the JS will response to these events.

I use an array to keep different event, every item in this array is a command, JS will generate different shapes according to different commands

Screen Shots



Reference

To insure page specific javascript, I reference

<https://blog.diacode.com/page-specific-javascript-in-phoenix-framework-pt-1>.

