

Alexander Wohlfahrt

Farid Abdalla

Celien donze

Projet Django

03.04.2019

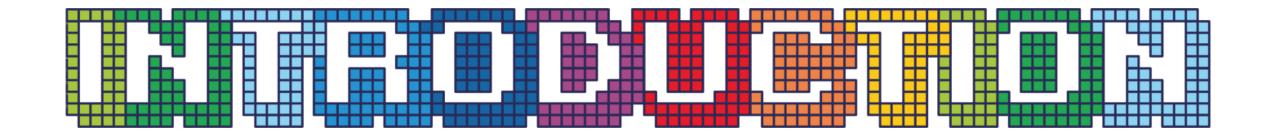
He-arc

David Grunenwald



Sommaire

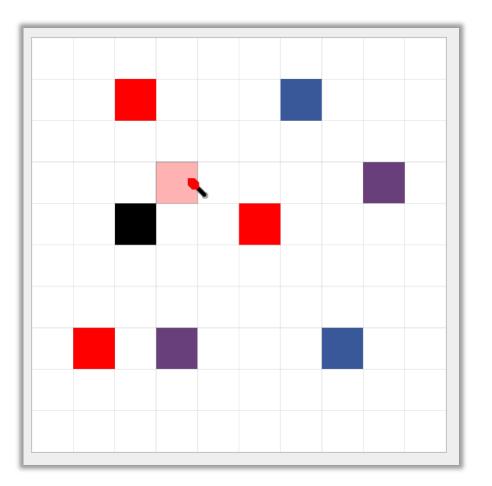
- Introduction
- Démonstration
- Canvas
- Crispy
- Boutique
- Conclusion
- Stripe





resume

- Canvas
- Communauté
- Paiement (Stripe)





inspirations

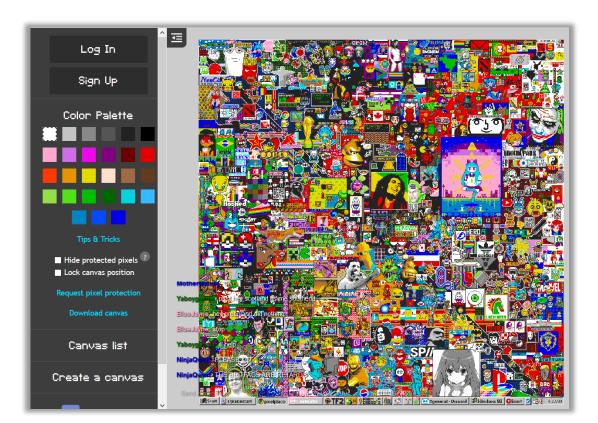
- https://www.reddit.com/r/place/
 1 avril 2017 72 heures
- Beaucoup d'autres clones existent

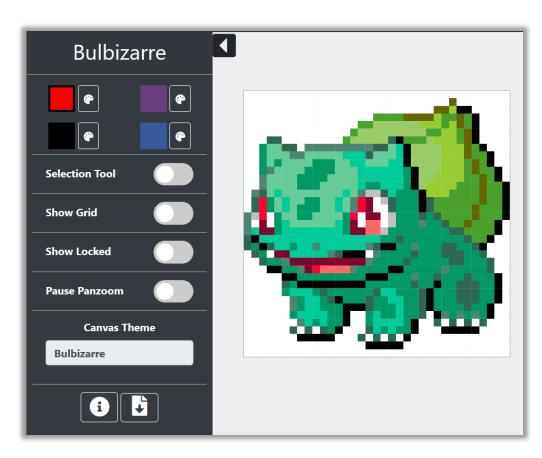




inspirations

• https://pixelplace.io/1 inspiration principale

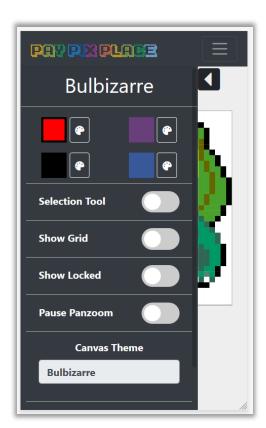




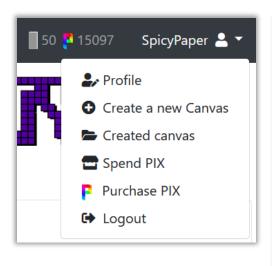


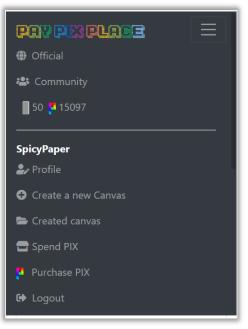
Mobile first

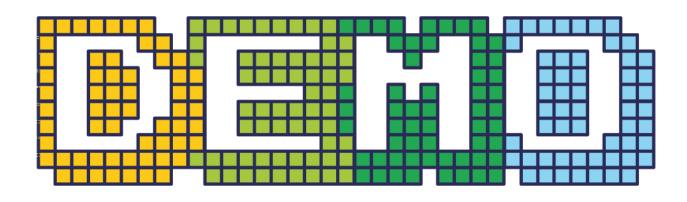
Responsive design



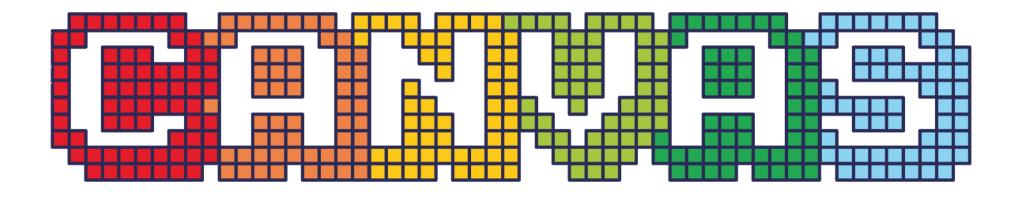








https://paypixplace.srvz-webapp.he-arc.ch/

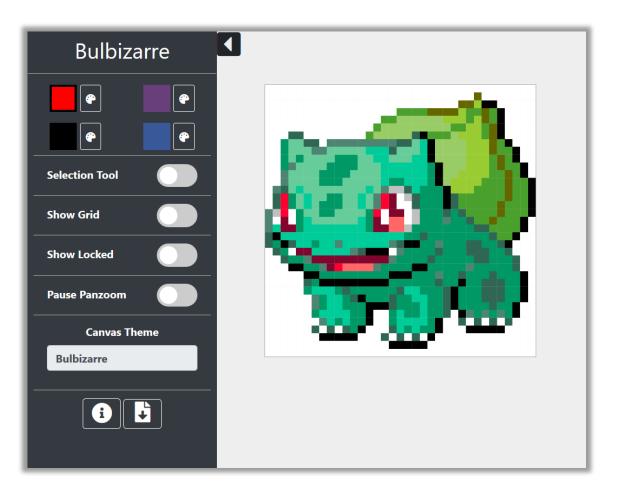




Interface de modification

- Canvas HTML5 4000x4000
- Curseur dynamique
 URI → /cursor/<str:hex>/







Actualisation des donnees

- Toutes les 4 secondes
- AJAX
- Actualise tous les pixels du canvas
- 3 URI par canvas
 - /canvas/<int:id>/ → interface de dessin
 - /canvas/<int:id>/json/ → données du canvas
 - /canvas/<int:id>/img/ → image PNG

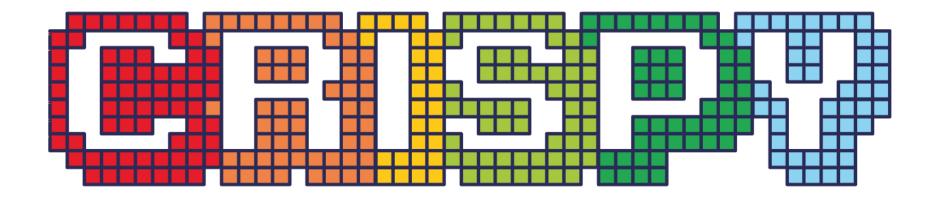


Panzoom

- Très simple à mettre en place
- Desktop + Mobile
- Zoom
- Déplacement du canvas

```
panzoomInstance = panzoom(
    canvas,
       maxZoom: 10,
       minZoom: 0.05,
        smoothScroll: false,
        zoomDoubleClickSpeed:
);
panzoomInstance.zoomAbs(
   0, // initial x position
   0, // initial y position
```

• Source : https://github.com/anvaka/panzoom





Resume

```
pip install --upgrade django-crispy-forms
INSTALLED\_APPS = (
    'crispy_forms',
                      CRISPY TEMPLATE PACK = 'bootstrap4'
{% load crispy_forms_tags %}
<form method="post">
   {{ my_formset | crispy }}
</form>
```

Source : https://django-crispy-forms.readthedocs.io/en/latest/



Exemple

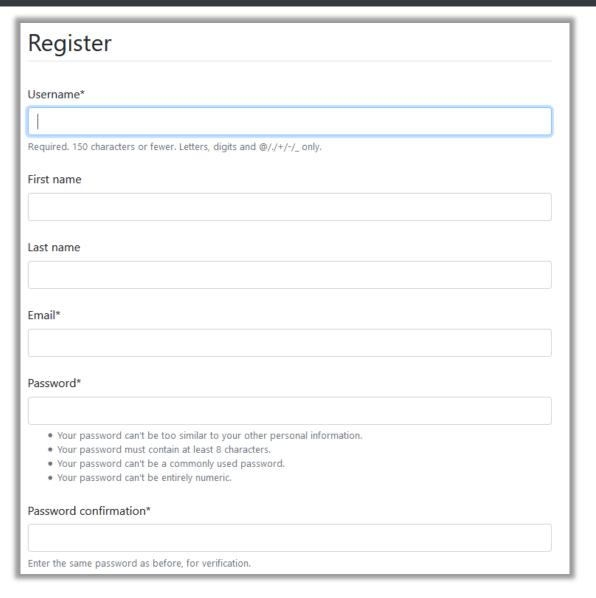
• {{ form }}

Register
Username:
Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only. First name:
Last name: Email:
Password:
Your password can't be too similar to your other personal information.
 Your password must contain at least 8 characters.
 Your password can't be a commonly used password.
Your password can't be entirely numeric.
Password confirmation:
Enter the same password as before, for verification.



Exemple

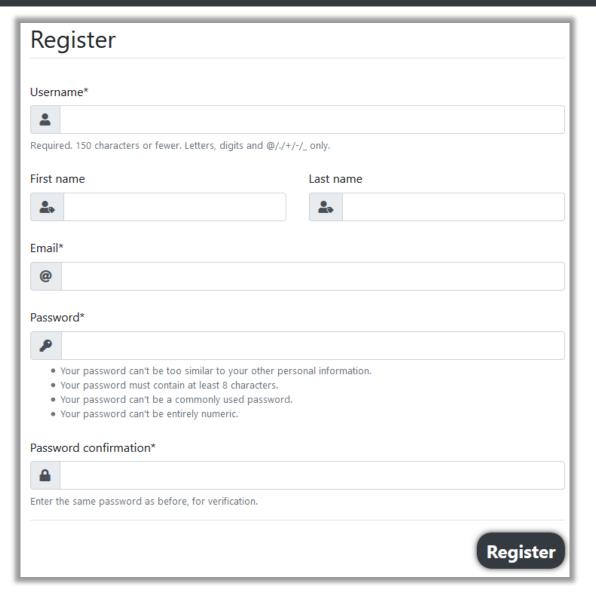
- {% load crispy_forms_tags %}
- {{ form | crispy }}

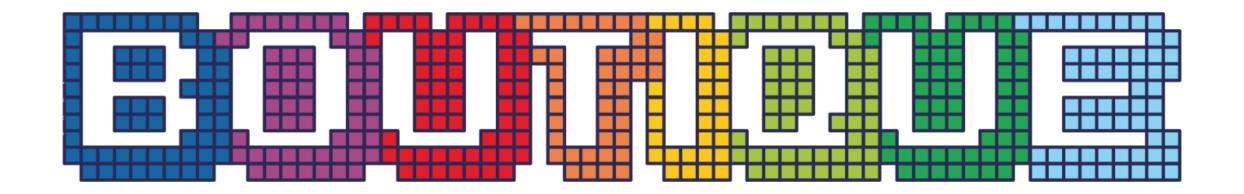




Exemple

- {% load crispy_forms_tags %}
- {% crispy form %}
- Personnalisation







Boutique

- Accessible partout sur le site
- Modal Bootstrap
- Bootstrap-color-picker





securite

- Vérification du solde
- Fonctionne avec des ID
 - → Impossible de tromper le serveur
- Impossible d'acheter deux fois la même couleur
- URI pour acheter /buy/<int:id>/



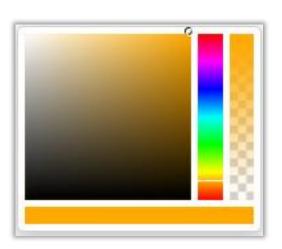
plugins

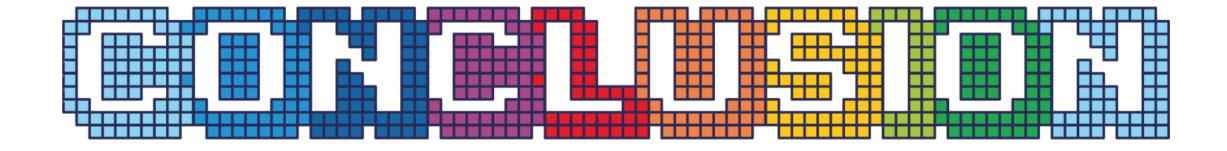


- Bootstrap Colorpicker
- Officiel: https://github.com/farbelous/bootstrap-colorpicker
- Exemples : https://farbelous.io/bootstrap-colorpicker/v2/
- CDN: https://cdnjs.com/libraries/bootstrap-colorpicker

- Notify.js
- Source : https://notifyjs.jpillora.com/

```
$.notify("I'm over here !");
```







Problemes rencontres

- Mouvement et zoom du canvas
 - → Panzoom



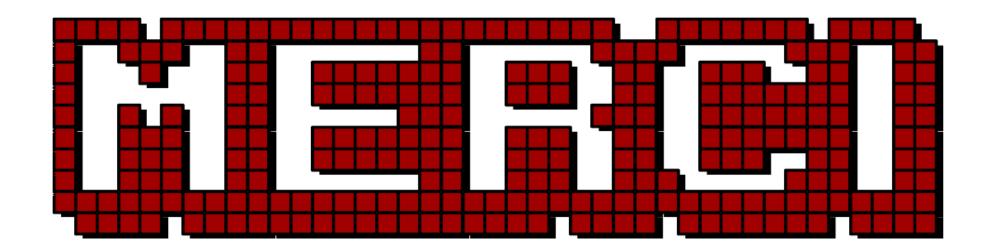
Ameliorations possibles

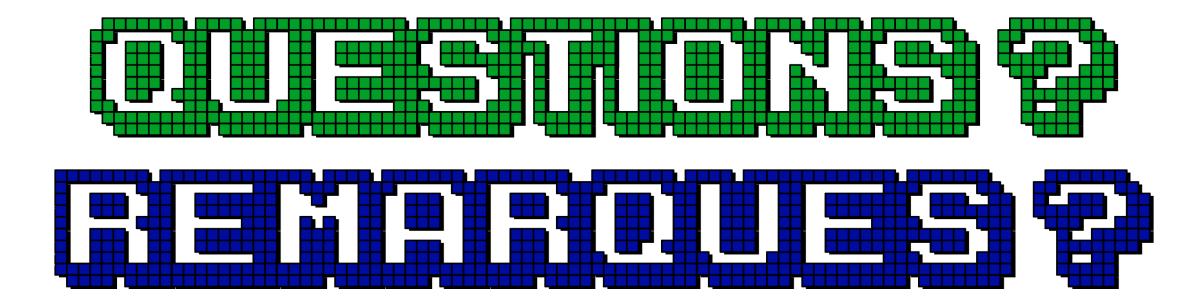
- Optimiser les échanges pour le dessin
 - Websocket
 - Canvas beaucoup plus grand
- Sélection de pixels par zone
 - Dessin
 - Verrouillage
- Chat
 - Par canvas
 - Publique



Mot de la fin

- Projet fonctionnel et aucun bug connu
- Fonctionnalités minimums et visées réalisées
 - → sauf canvas privés
- Fonctionnalités supplémentaires réalisées
 - → sauf pack couleurs par canvas



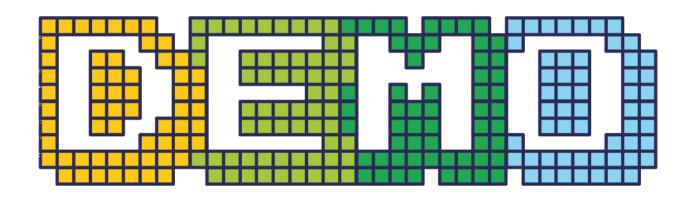






resume

- API de paiement par carte bancaire
- Disponible en
 - Ruby
 - Python
 - Php
 - Java
 - •
- Utilisé par Amazon, Wish, Twitch...
- Tarifs 2.9% + 0.30 Fr



https://github.com/HE-Arc/TutoStripe



Installation

- Ruby: gem install stripe
- Python : pip install stripe
- Php: composer require stripe/stripe-php
- Java (maven):

 dependency>
 groupId>com.stripe</groupId>
 artifactId>stripe-java</artifactId>
 version>8.1.0
 dependency>
- Java (gradle): compile "com.stripe:stripe-java:8.1.0"



Cote client - de base

```
<form action="your-server-side-code" method="POST">
      <script
        src="https://checkout.stripe.com/checkout.js" class="stripe-button"
        data-key="pk_test_TYooMQauvdEDq54NiTphI7jx"
        data-amount="999"
 5
        data-name="Stripe.com"
6
        data-description="Example charge"
        data-image="https://stripe.com/img/documentation/checkout/marketplace.png"
8
        data-locale="auto"
9
        data-zip-code="true">
10
11
      </script>
12
    </form>
```

Pay with Card



Cote client - personnalise

```
<script src="https://checkout.stripe.com/checkout.js"></script>
     <button id="customButton">Purchase</button>
     <script>
                                                       document.getElementById('customButton').addEventListener('click', function(e) {
    var handler = StripeCheckout.configure({
                                                  17
                                                         // Open Checkout with further options:
      key: 'pk_test_TYooMQauvdEDq54NiTphI7jx',
                                                         handler.open({
                                                  18
      image: 'https://stripe.com/img/documentat 19
                                                           name: 'Stripe.com',
 8
                                                  20
                                                           description: '2 widgets',
      locale: 'auto',
 9
                                                  21
                                                           zipCode: true,
      token: function(token) {
10
                                                           amount: 2000
        // You can access the token ID with `to
11
                                                         });
        // Get the token ID to your server-side
12
                                                         e.preventDefault();
                                                  24
13
                                                  25
                                                       });
    });
14
                                                  26
15
                                                       // Close Checkout on page navigation:
                                                       window.addEventListener('popstate', function() {
                                                         handler.close();
                                                  29
                                                  30
                                                       });
                                                       </script>
```



Token

```
THE TOKEN OBJECT
  "id": "tok 1EKQBF2eZvKYlo2CQ8iOzLVk",
  "object": "token",
  "card": {
    "id": "card 1EKQBF2eZvKYlo2CGgg1nNtL",
    "object": "card",
    "address city": null,
    "address country": null,
    "address line1": null,
    "address_line1_check": null,
    "address line2": null,
    "address state": null,
    "address zip": null,
    "address zip check": null,
    "brand": "Visa",
```

```
"country": "US",
  "cvc check": null,
  "dynamic last4": null,
  "exp month": 8,
  "exp year": 2020,
  "fingerprint": "Xt5EWLLDS7FJjR1c",
  "funding": "credit",
  "last4": "4242",
 "metadata": {},
 "name": null,
  "tokenization method": null
"client ip": null,
"created": 1554125285,
"livemode": false,
"type": "card",
"used": false
```



Cote serveur

```
# Set your secret key: remember to change this to your live secret key in production
    # See your keys here: https://dashboard.stripe.com/account/apikeys
    stripe.api_key = "sk_test_4eC39HqLyjWDarjtT1zdp7dc"
 4
    # Token is created using Checkout or Elements!
    # Get the payment token ID submitted by the form:
    token = request.POST['stripeToken'] # Using Django
8
    charge = stripe.Charge.create(
10
        amount=999,
11
        currency='usd',
        description='Example charge',
12
13
        source=token,
14
```



Autres options

- Coupons
- Remboursement
- Abonnement
- Plans



Notre implementation

- Gestion du formulaire en Ajax
- Routes pix/purchase/<int:id>/
 - 1 -> 1 CHF
 - 2 -> 2 CHF
 - 3 -> 5 CHF
 - 4 -> 20 CHF





Retour experience

- Très simple
- Bien documenté
- Très bonne tarification par rapport à l'offre
- Beaucoup d'options
- Vaste proposition de service de paiement

