Business Case Project << Project II: Tetris>>

Versiegeschiedenis

Versie	Datum	Auteur	Omschrijving
1	17/10/2018	Reinbert, Bryan, Brend, Dennis	Creatie initiële business case

Executive summary

Ons doel is een leerplatform te maken die:

- 1. Sneller toegankelijk is
- Makkelijker te gebruiken
- Betrouwbaarder is

Met opmerkingen [1]: Dit moet ook vervangen worden

Projectomschrijving

Onze game heet ..., wij moeten de game "Tetris" een heropfrissing geven d.m.v. nieuwe gamemodes, heroes en allerlei andere attributen in het spel te steken.

Ons idee van de heroes komt doordat de allereerste versie van tetris in 1984 werd uitgebracht, dacht wij direct om oude characters van vroeger te gebruiken in de game zoals Mario, Donkey kong,

Onze gamemodes bestaan uit:

- Het standaard singleplayer tetris, waarbij het de bedoeling is om zoveel mogelijk rijen te maken zonder dat je de bovengrens raakt.
- Multiplayer tetris, waarbij je tegen 2-4 andere online spelers speelt die de strijd tegen elkaar aangaan om zoveel mogelijk punten te halen, zodat je je heroes kan activeren om het de tegenstanders moeilijk te maken.
- Horizontaal tetris, bij deze gamemode worden de velden 90° gedraaid en komen de blokken van links naar recht ipv van boven naar onder.
- Fifty Blocks, hierbij krijgt iedere speler maximum 50 blokken en moet hij zoveel mogelijk rijen proberen te maken en punten te halen.
- Last man standing, hierbij speel je tegen 2-4 andere online spelers en ga je de strijd aan om zo lang mogelijk te overleven. Door middel van rijen te maken verdien je punten, met deze punten kan je je hero activeren om het spel voor je tegenstanders moeilijker te maken.

Met opmerkingen [2]: Nog een naam verzinnen

Time attack, dit is een race tegen de tijd, hierbij is het de bedoeling om zoveel mogelijk punten te verzamelen binnen een bepaalde tijd.

Met opmerkingen [3]: Nog extra info toevoegen

Analyse van de huidige situatie (=AS-IS situatie)

Op dit moment bestaat er al een paar versies van het "Tetris", waaronder het basis spel, elk andere versie heeft zijn eigen eigenschappen.

Sommige games hebben een tekort aan communicatie met andere spelers, hiervoor zullen wij clans implementeren in onze game.

De mensen van tegenwoordig willen geen normale games meer, ze willen games met speciale dingen in verwerkt, daarom zullen wij heroes implementeren die de ofwel jou kunnen helpen of de tegenstanders het spel moeilijk maken. Daarom zijn er ook verschillende gamemodes verwerkt in onze game zodat de mensen veel meer afwisseling hebben, dan maar 1 game mode die ze na een bepaalde tijd saai zullen vinden.

Met opmerkingen [4]: Nog dingen toevoegen

Stakeholders

Executive stakeholders:

- Investeerders
- Concurrenten
- Media

End users

- Studenten
- gamers
- tieners

Experts

- Developers:
 - 2 Junior developers
 - 2 Senior developers
- Coach

ROI

Kosten (geschatte kostprijs):

```
Loon:
```

```
2 Juniors: 2 x 50 EUR/h
2 Seniors: 2 x 80 EUR/h
Geschatte uren:
7 h/dag
→ 5 d/week
→ 12 weken (3 maand)
→ 4 developers
→ 7 x 5 x 12 = 420 h/pers.
→ 420 x 4 = 1680 h (totale werkuren)
Geschatte kost:
( 420 h x 50 EUR/h ) x 2 = 42000 EUR
( 420 h x 80 EUR/h ) x 2 = 67200 EUR
```

TOTAAL:

42000 + 67200 EUR = 109200 EUR

Andere kosten:

Laptop:

Voorgesteld merk: Lenovo Legion Y520

prijs/toestel: 1250 EUR TOTAAL: 5000 EUR

Computermuis:

4 x 20 EUR = 80 EUR

Servers:

Voorgesteld merk: CyberServe XE5-108E v4

prijs/toestel: 2500 EUR

Gemiddeld aantal users per dag: 1000 Gemiddeld aantal speeltijd: 2 h/dag

Gemiddeld aantal servers/millioen users: 100

Benodigde servers: 1

TOTAAL: 1 x 2500 EUR = 2500 EUR

Network Switch:

300 EUR

Netwerk Bekabeling:

ong. 1 EUR/m ong. 300 m

TOTAAL: 300 EUR

Onderhoud:

200 EUR/maand

Kantoor:

400 EUR/maand

Meubels:

Bureau: 1500 EUR 4 bureaustoelen: 400 EUR 10 stoelen: 500 EUR TOTAAL: 2400 EUR

Energie kosten:

Gemiddeld 1800 EUR/jaar

Internet kosten:

avarage 2500 EUR/maand

Eenmalige kosten:

Totale kost werknemers	109.200,00 EUR
Totaal andere kosten	10.580,00 EUR
Totaal eenmalige kosten	119.780,00 EUR

Jaarlijkse kosten:

Totaal jaarlijkse kosten	39.000,00 EUR
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Kosten (uiteindelijke kostprijs):

. . . .

Uiteindelijke kostprijs:

Totale kost werknemers	Totale kosten	€
Totale kost werknemers	Totaal andere kosten	€
	Totale kost werknemers	€

Opbrengsten:

Opbrengst per gebruiker per jaar (student/lector, ...): 5 euro Verwachte gebruikers software: 500 000 Verwachte opbrengst: 5*70000 = 350 000

382,75862068965517241379310344828

Goals

ID	Omschrijving
G1	Responsive
G2	Betrouwbaar
G3	Efficiënt
G4	Gebruiksvriendelijk
G5	Communicatie tussen leerlingen en docenten bevorderen.

Requirements

1. Functionele vereisten

ID	Omschrijving	Goal
FR1	Cursussen kunnen bekijken	
FR2	Kalender	
FR3	Bestanden kunnen downloaden/uploaden	
FR4		

2. Niet functionele vereisten

ID	Omschrijving	Goal
NF1	Responsive	G1
NF2	Betrouwbaar	G2
NF3		

Risico's

ID	Omschrijving	Mitigation
R1	Er zijn vele goede concurrenten	Uniek en beter leerplatform
R2	Niet bekend in de markt	Investeren in reclame

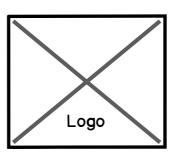
Risk Management

ID	Omschrijving	Impact	Waarschij nlijkheid	Risicoprof iel	Actie	Actie - te ondernem en stappen
R01	Hacken van de server	Hoog	Laag	Major	Eliminate	
R02	Stroomuitval	Hoog	Laag	Major	Eliminate	Servers op verschillen de locaties, maken van back-ups
R03	Geen heldere planning en deadline	Hoog	Laag	Major		
R04	Onvoldoende communicatie en acceptatie van voorgestelde functionaliteiten	Hoog	Laag	Major		
R05	Het ontbreken van duidelijke resultaten	Laag	Laag	Minor		
R06	Onvoldoende afbakening van de grenzen (doelen) van het project	Laag	Laag	Minor		
R07	Onvoldoende inhoudelijke en technische kennis bij de ontwikkelaars	Hoog	Laag	Major		
R08	Onderbelichting van het belang van testen	Hoog	Hoog	Kritiek		

Wireframes







Username

Tetrismaster

Password

Register

Log in

Log in

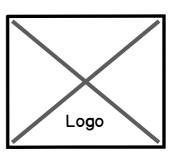
Register





https://localhost:26/tetris/register





Username

Tetrismaster

Password

Register







New user: "Tetrismaster" has been registered.

OK

Username

Tetrismaster

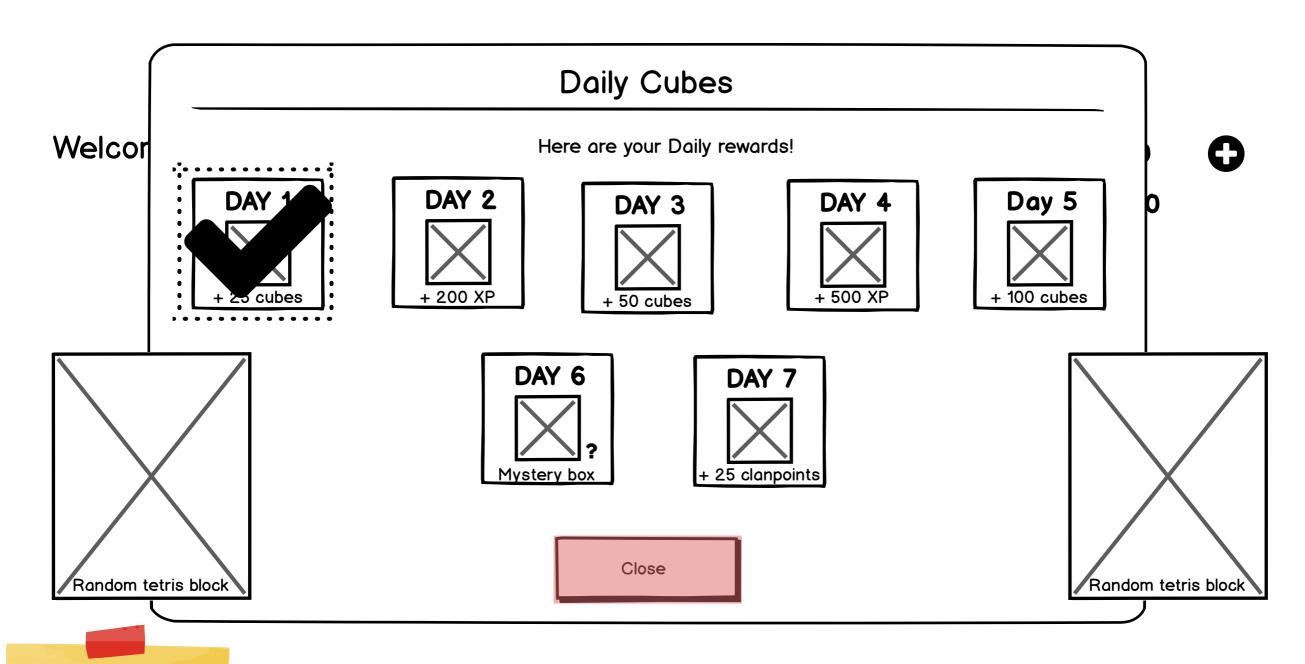
Password

Register



https://localhost:26/tetris/main_menu





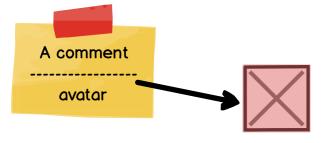
A comment

Day1 (the dots is a hover)

Logout







Welcome Tetrismaster

LVL: 5

200/500 XP

BelgiumTetris Leader

A comment The photos next to the cubes are photos of a cube

Cubes: 500

Clanpoints: 30

Choose gamemode

Clan

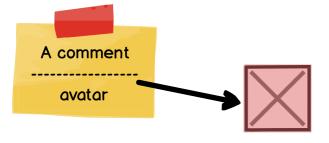
Shop

High Score

Logout







Welcome Tetrismaster

LVL: 5



XP

Choose gamemode

Clan

Shop

High Score

A comment The photos next to the cubes are photos of a cube

Cubes: 500



Logout



https://localhost:26/tetris/change_avatar



A comment

Only the first avatar works



Tetrismaster

LVL: 5

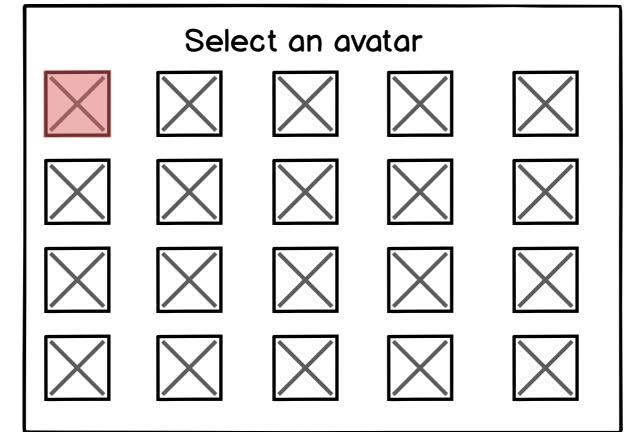
200/500

XP

BelgiumTetris Leader

X

Clanpoints: 30



Back

Save



https://localhost:26/tetris/change_avatar





Tetrismaster

LVL: 5

200/500

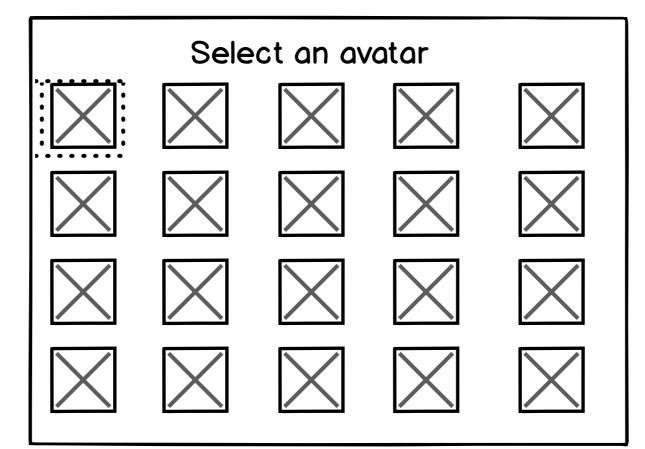
XP

BelgiumTetris Leader

X

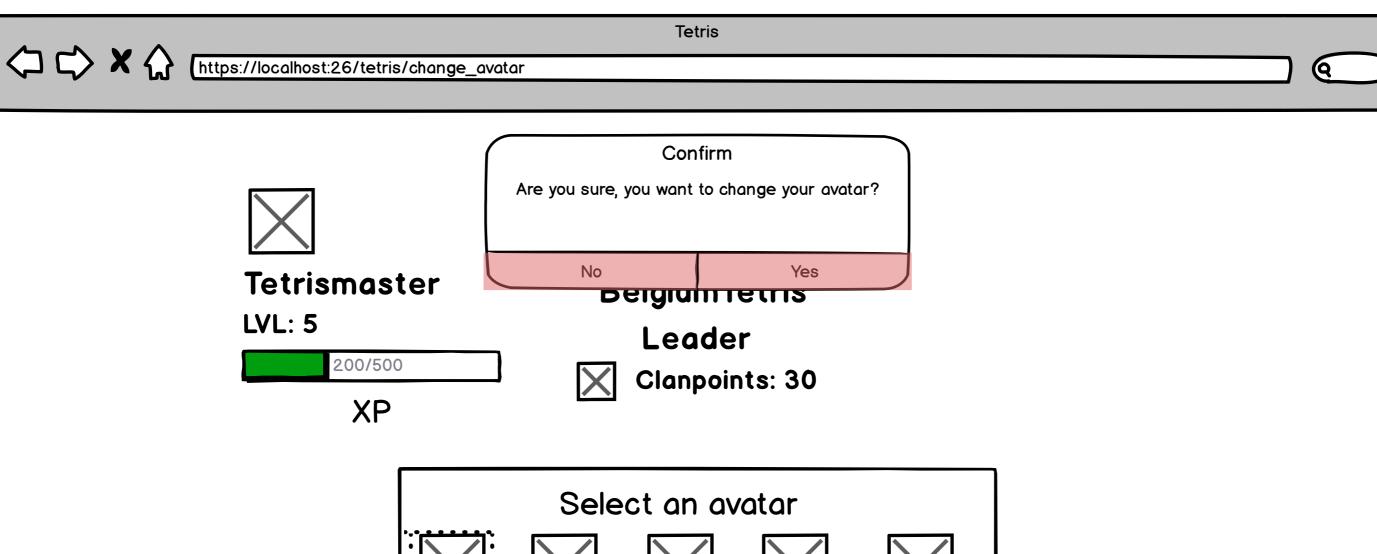
Clanpoints: 30

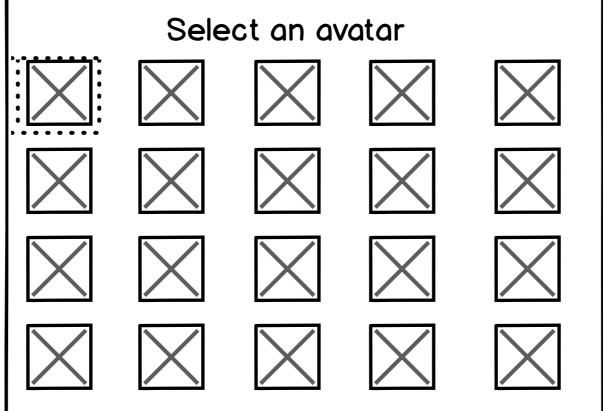




Back

Save



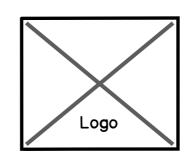


Save



A comment

"Mario's skin" shows how you can buy a product if you have enough cubes. "Luigi" shows how you try to buy something but do not have enough cubes.



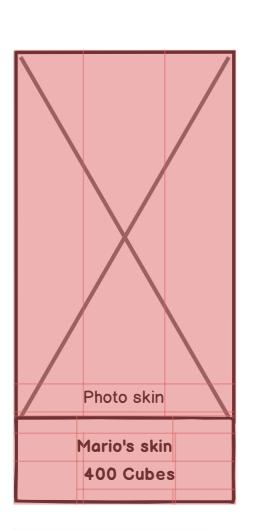
A comment

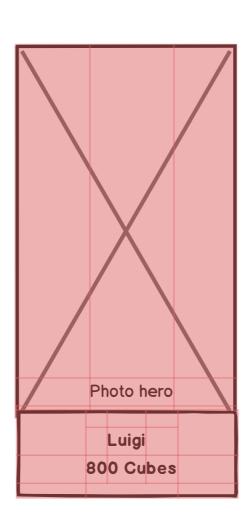
The photos next to the cubes are photos of a cube

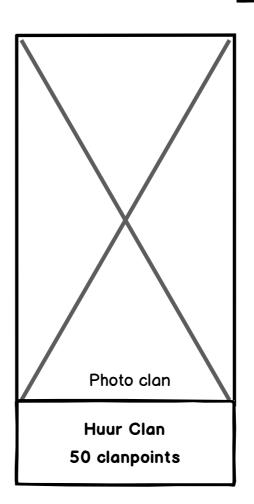
Cubes: 500

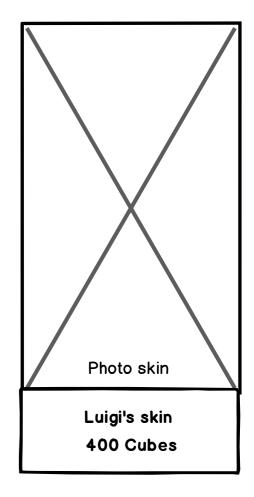


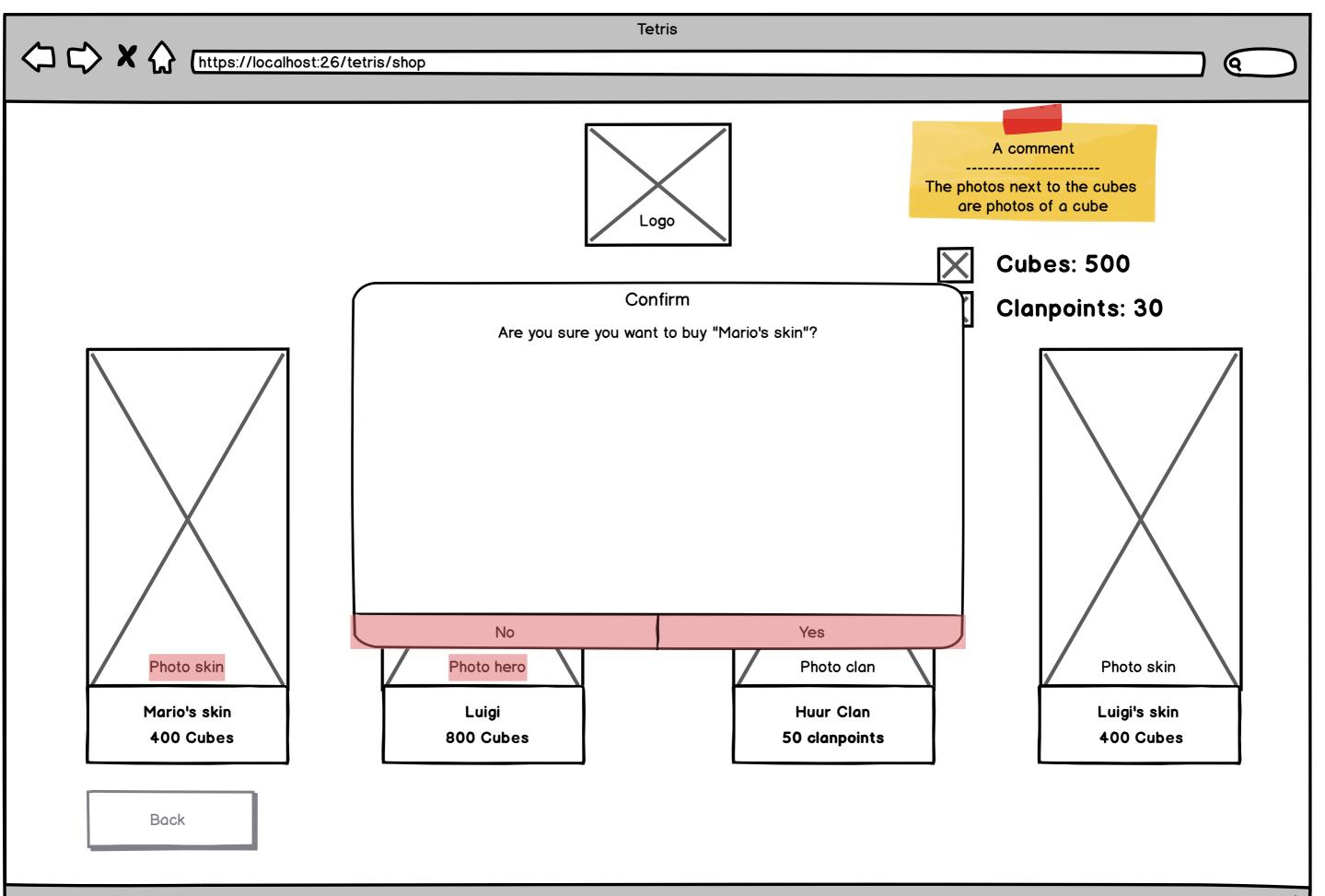
Clanpoints: 30

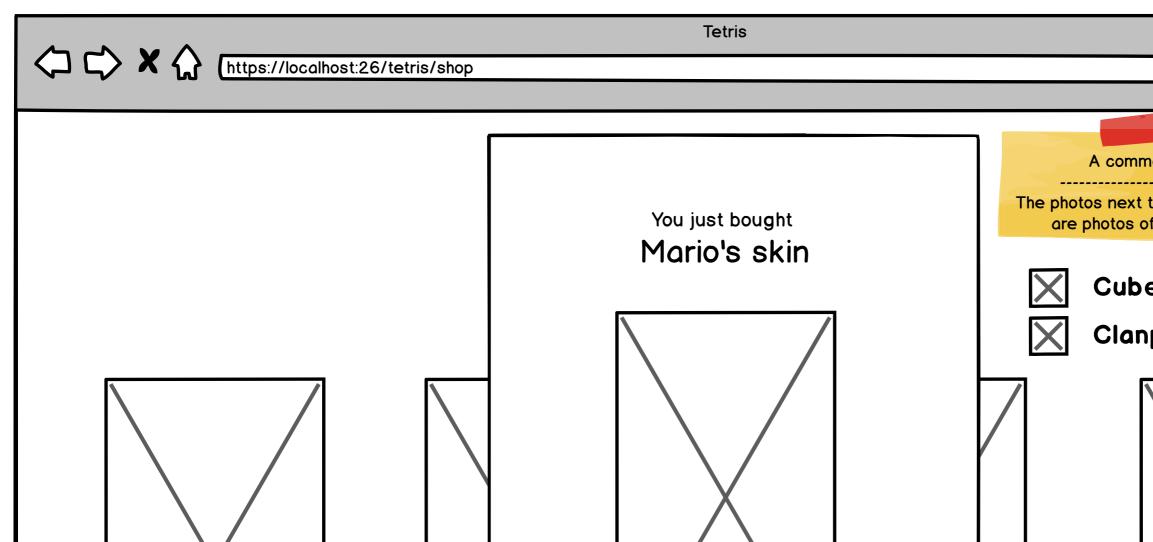










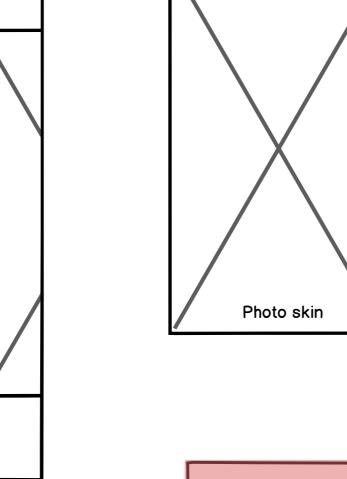


The photos next to the cubes are photos of a cube

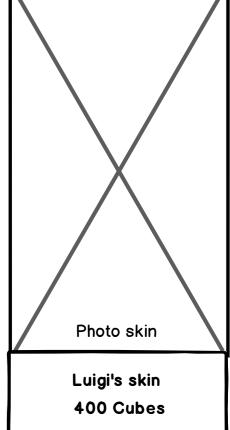
Cubes: 500

Clanpoints: 30





✓ Confirm

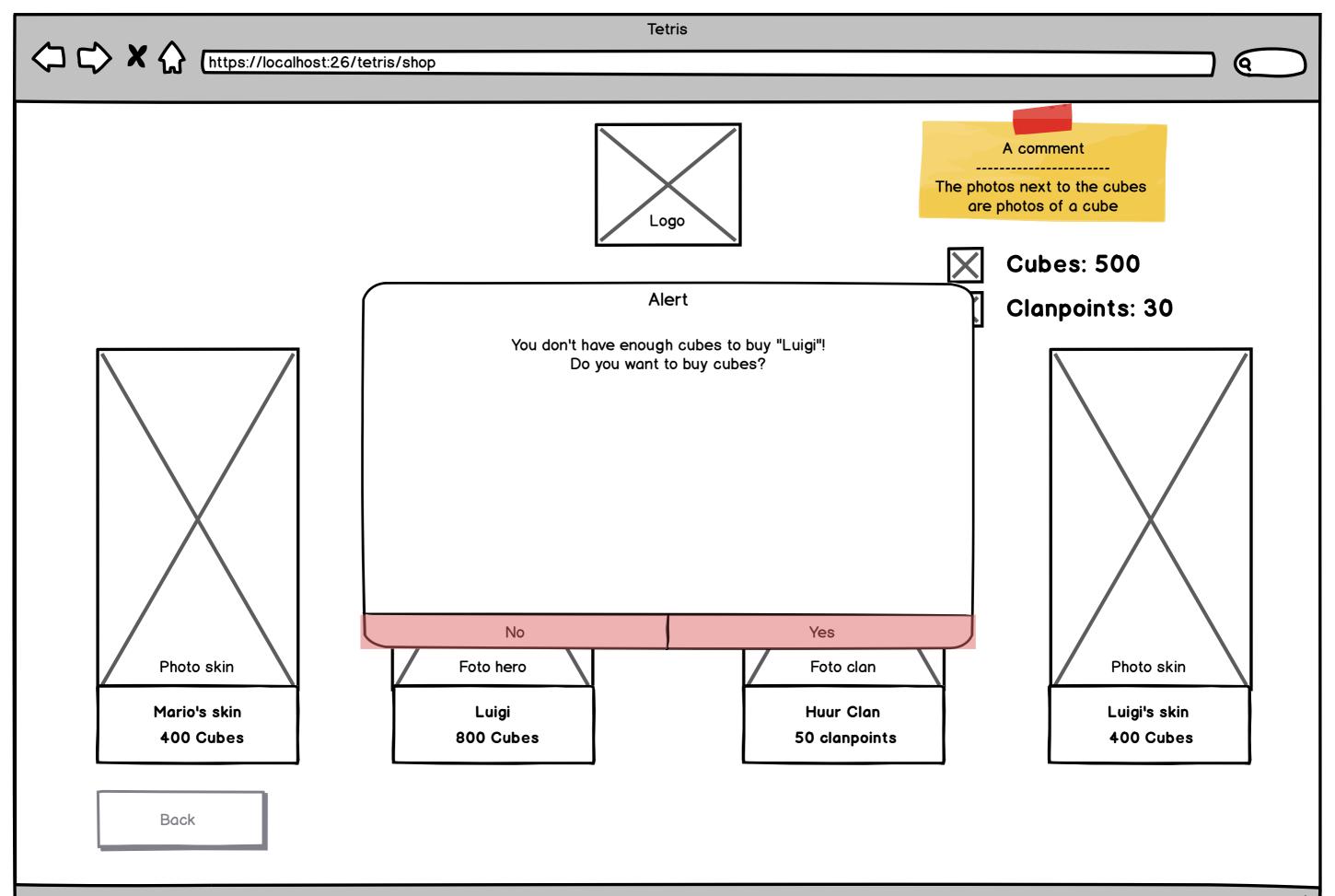


Back

Photo skin

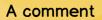
Mario's skin

400 Cubes



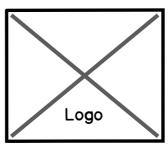






Only the first photo works on the wireframe

It's hoverd when you go over the picture



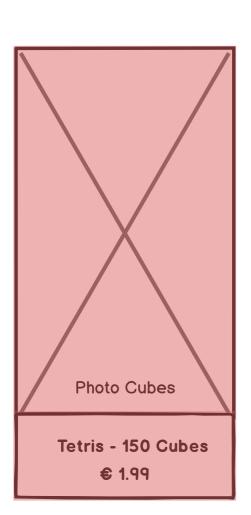
Store

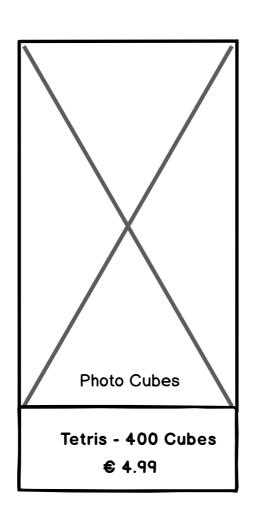
A comment

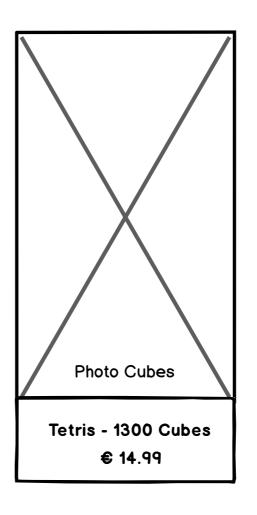
The photos next to the cubes are photos of a cube

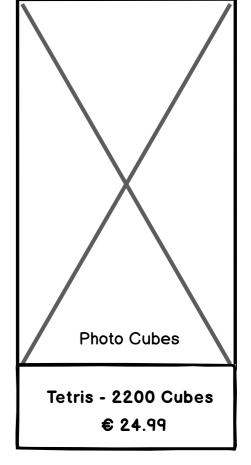


Cubes: 500













https://localhost:26/tetris/payment_method



PAYMENT METHOD

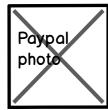
Choose a payment method



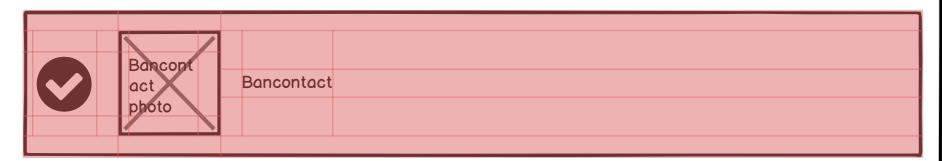


Credit Card

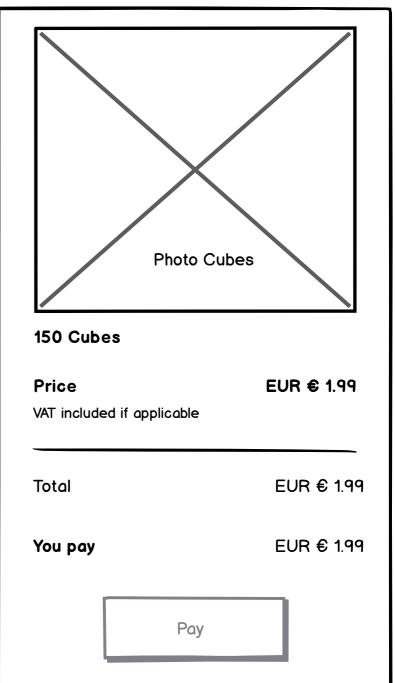




PayPal







Need help? Contact Us





https://localhost:26/tetris/payment_method



PAYMENT METHOD

Choose a payment method





Credit Card





PayPal



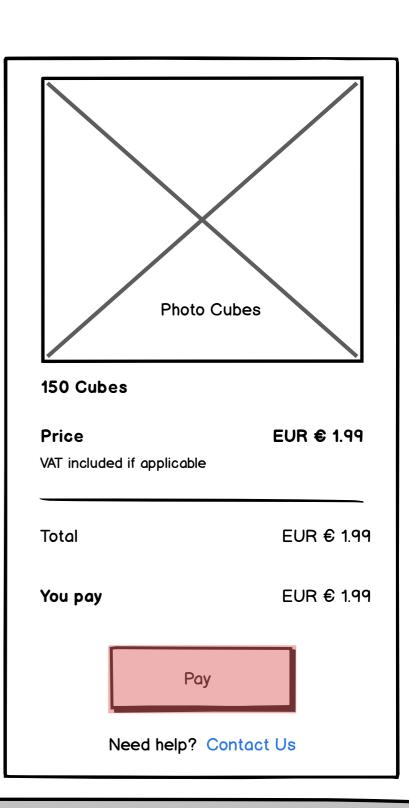


Bancontact



When you have selected a method, the "pay" button is enabled









Payment by Bancontact

Click "continue" and you will be redirected to the payment system.

Total: € 1.99

Continue

Order Summary

SubTotal

150 Cubes € 1.99

€ 1.99

TOTAL € 1.99









Welcome.

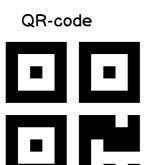
Choose your country and bank.

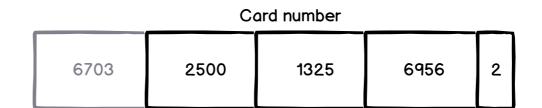
Belgium	▼
Belgium Netherland United Kingdom	
Q Bank name, bank code, IBAN or BIC.	
BNP Paribas Fortis/Hello Bank!	>
KBC/CDC	>
Belfius	>





BNP Paribas Fortis/Hello bank!





Customer number: 52462 25381

Next





Complete login

- 1. Insert your card into the card reader and press M1
- 2. Enter 4282 1255 and press OK
- 3. Enter your PIN and press OK

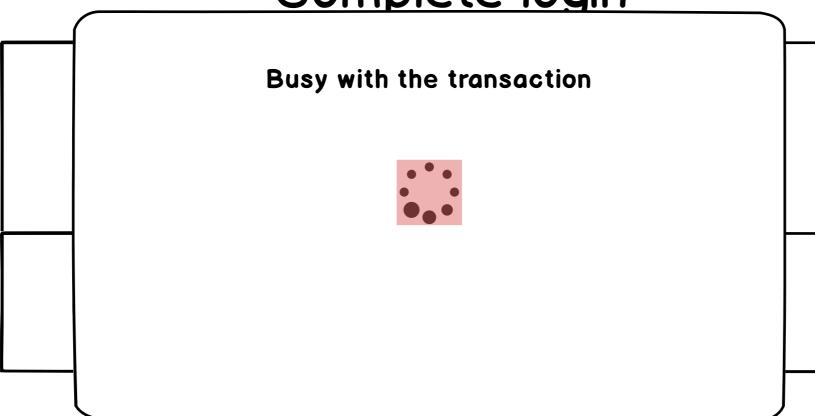
E-signature: 2598 4635

Next





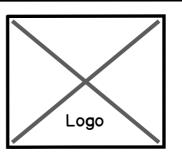
Complete login



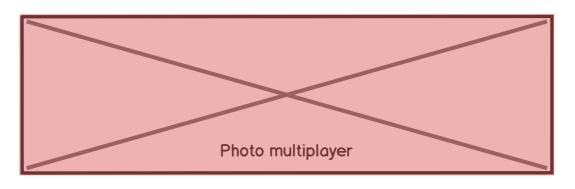
Next



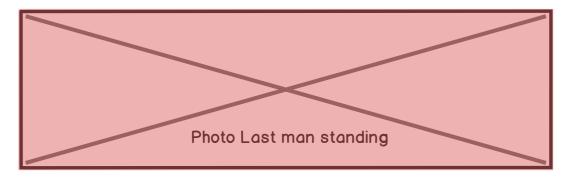




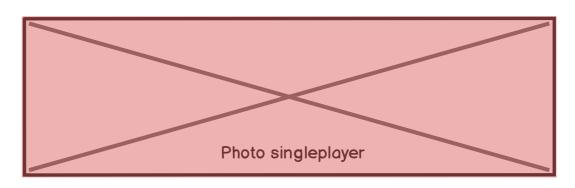
Choose a gamemode



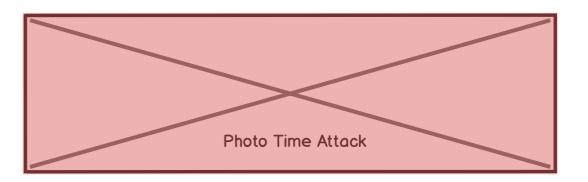
Multiplayer



Last man standing



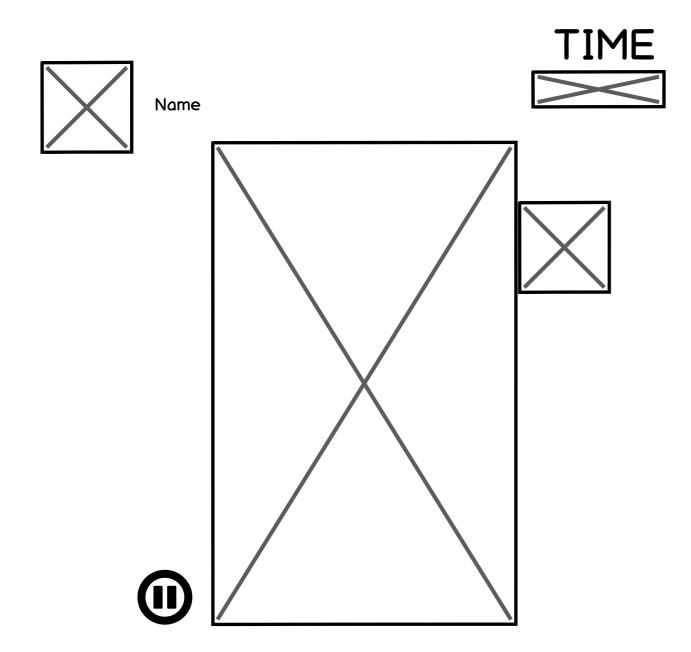
Singleplayer



Time Attack

https://localhost:26/tetris/game/singleplayer



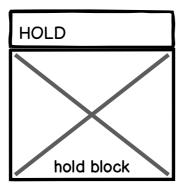


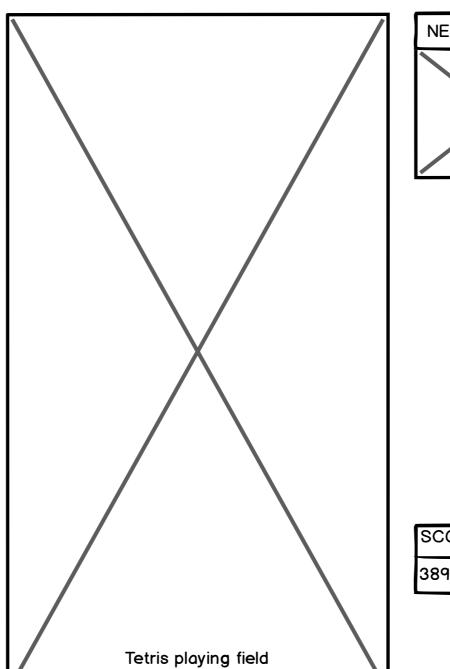


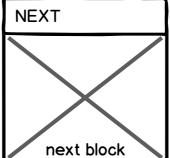
https://localhost:26/tetris/game/RWbZ2T4CRMmALBpUMdmzoQ==/1/singleplayer



Tetrismaster







SCORE 3898

LEVEL

Pause

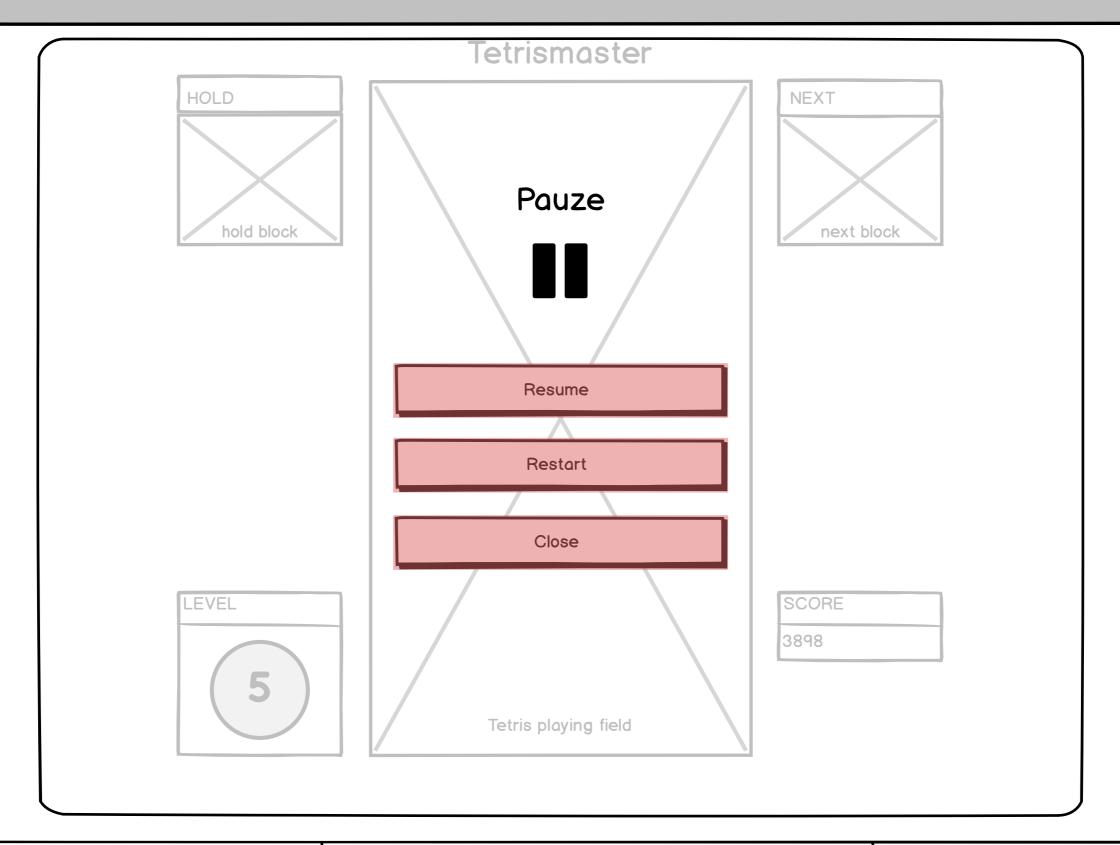
00:01:12

Solo



https://localhost:26/tetris/game/RWbZ2T4CRMmALBpUMdmzoQ==/1/singleplayer

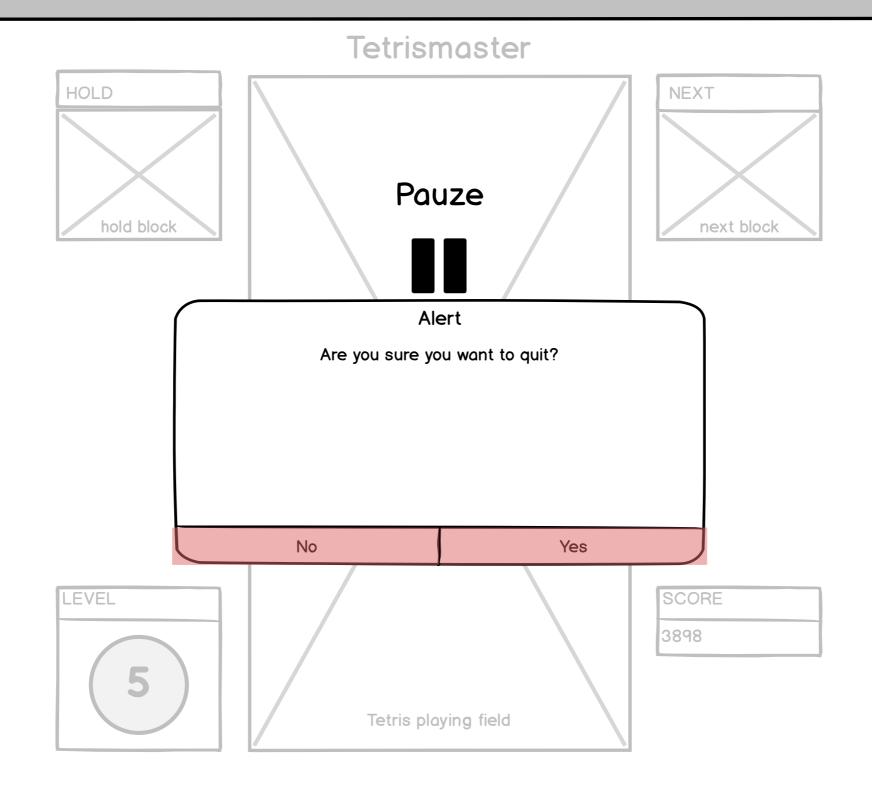
















https://localhost:26/tetris/choose_menu



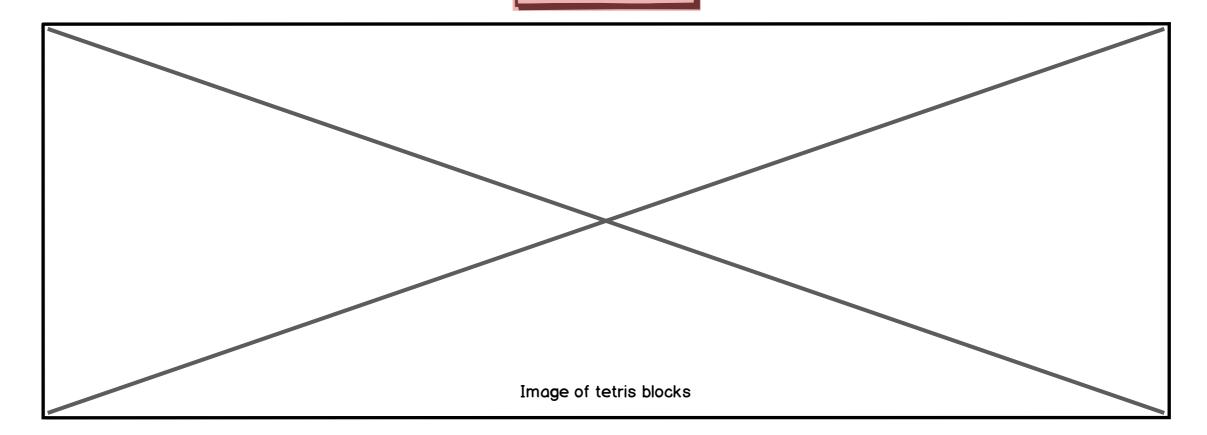
Choose an option

Multiplayer

Play with friends (not ranked)

Find Opponents (ranked)

Back









https://localhost:26/tetris/game/RWbZ2T4CRMmALBpUMdmzoQ==/1/

Leave game

Play game

Multiplayer

Player List

Name

Score

Tetrismaster

Theshadow3008

BinaryFour

IDontKnowMoreNames

Score

A comment

The owner of the session has a cubes behind his name

Chat

Theshadow3008: Hello everbody

BinaryFour: Lets go

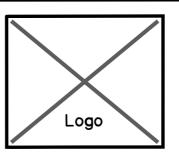
 $IDontKnowMoreNames: Lets \ go \ losers$

> Hahaha





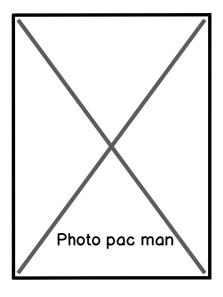




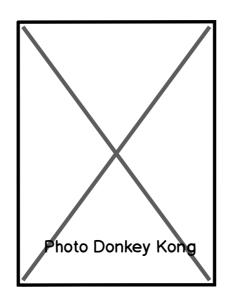
Choose a hero

COMMENTAAR

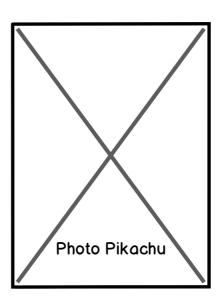
- -> When selecting a hero, a hover comes around the hero
- -> When a hero is selected, you can only click the "Play Game" button



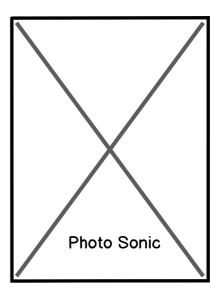
Pac man



Donkey Kong



Pikachu



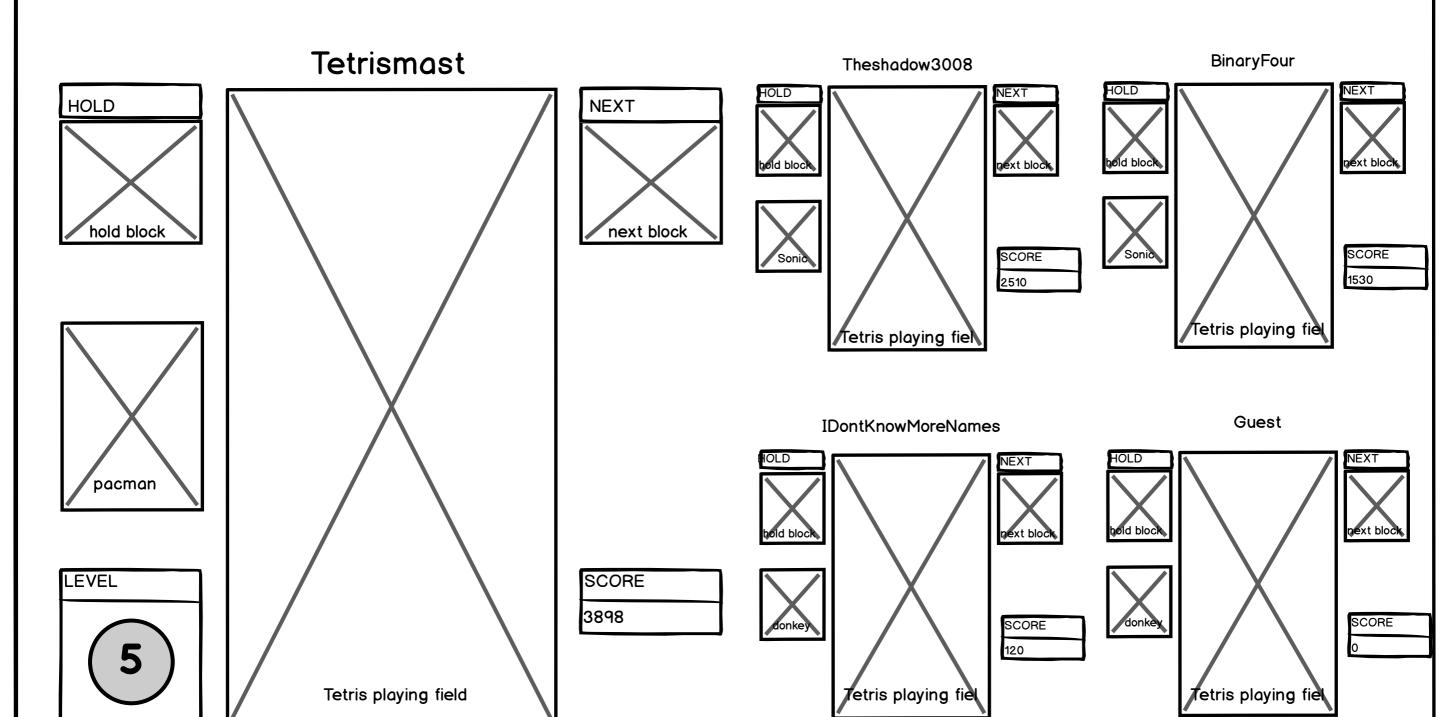
Sonic

Back

Play Game







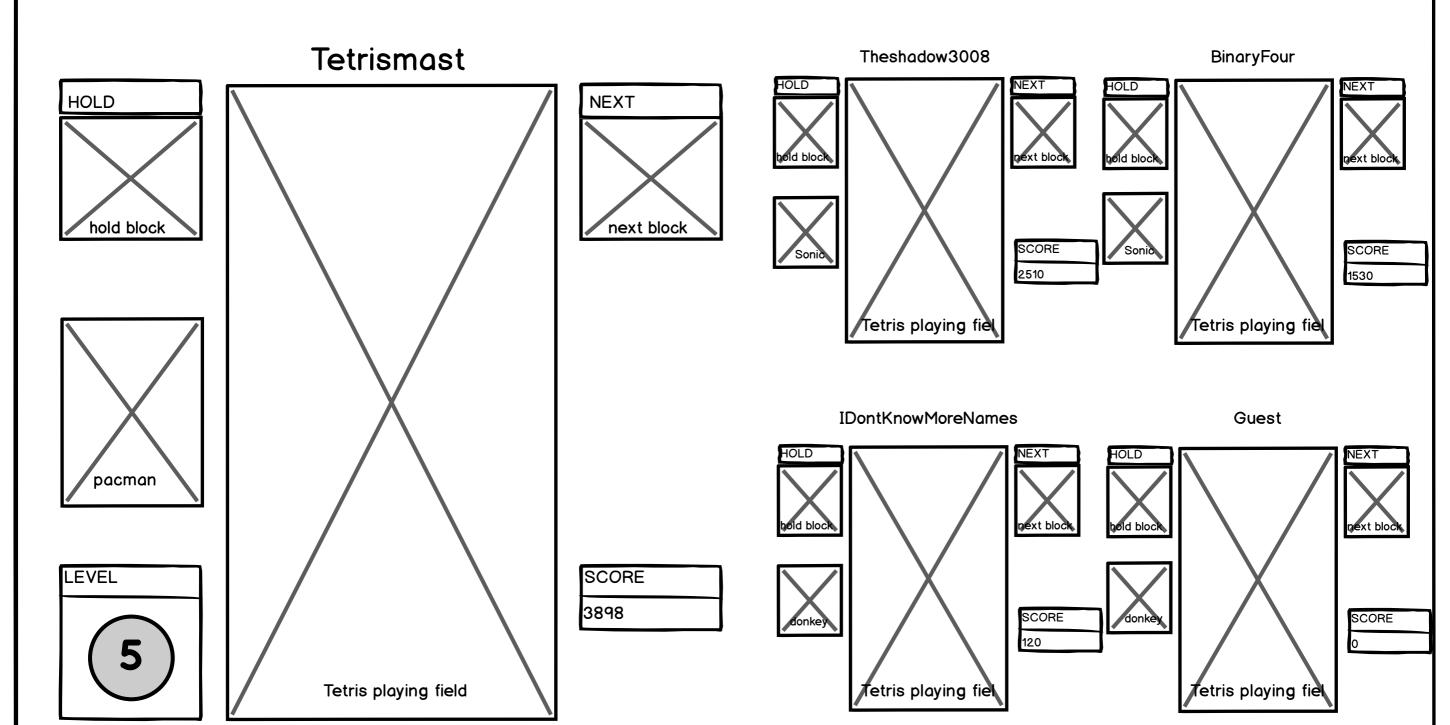
Pause

00:10:59

Multiplayer







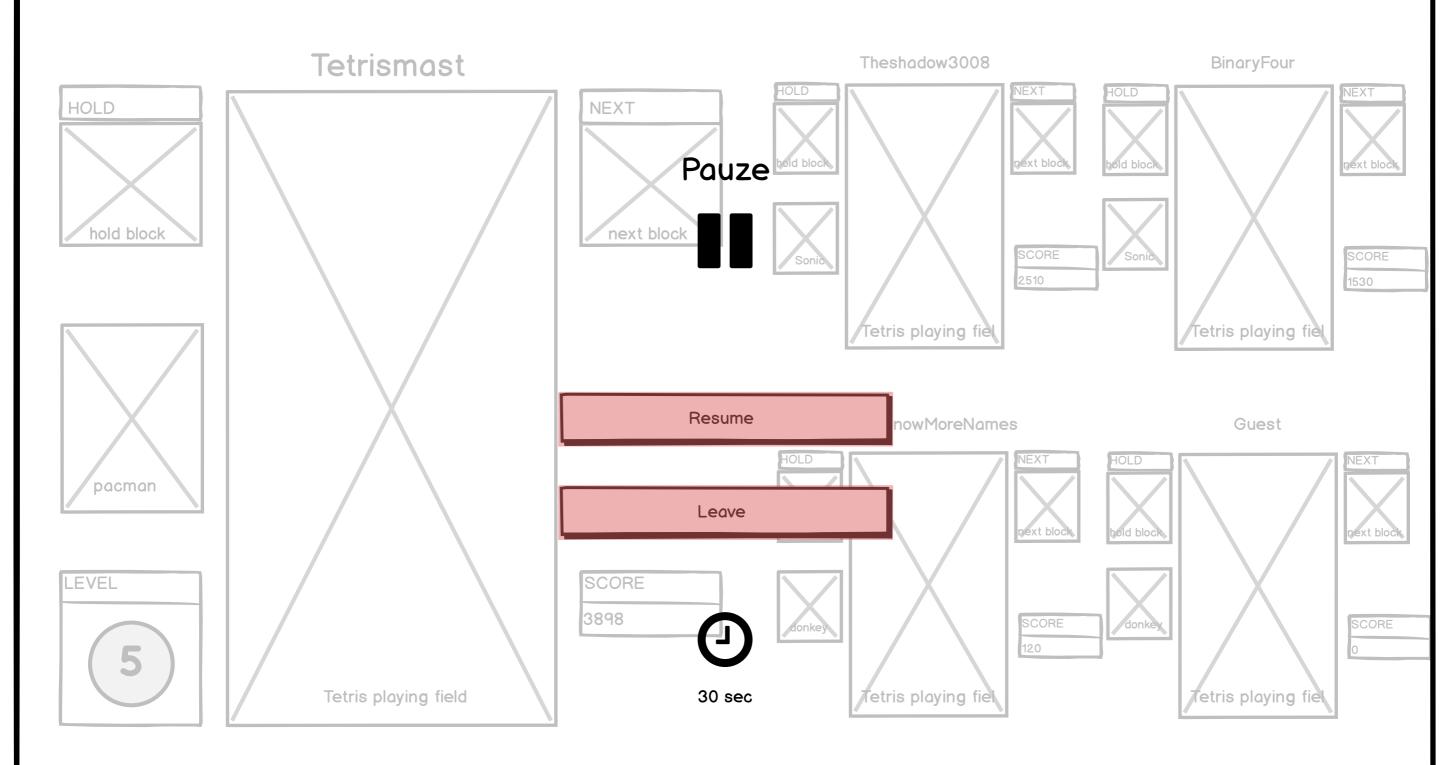
A pause has been requested by Tetrismaster. If you agree, press pause.

2/4

Pause 00:10:59 Multiplayer







A pause has been requested by Tetrismaster. If you agree, press pause.

2/4

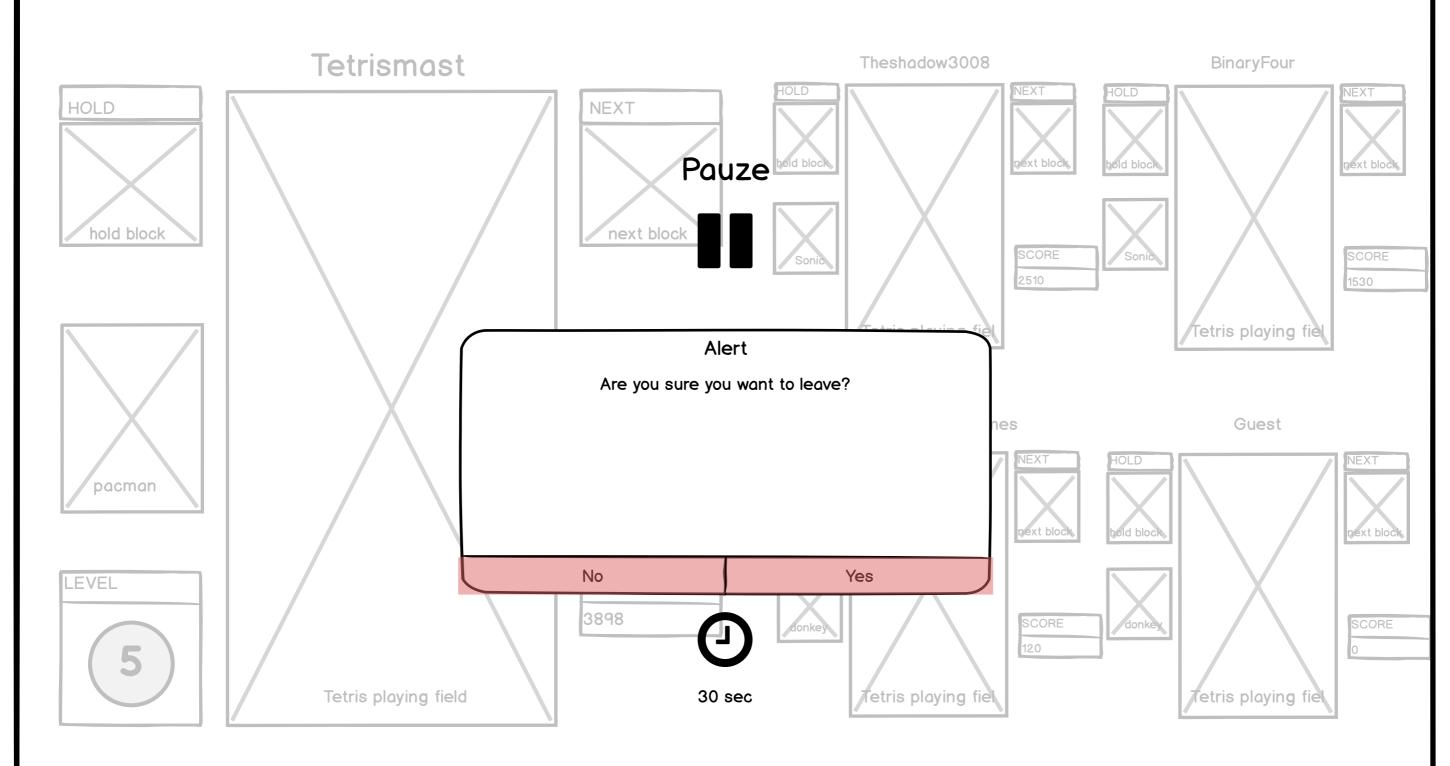
Pause

00:10:59

Multiplayer







A pause has been requested by Tetrismaster. If you agree, press pause.

2/4

Pause

00:10:59

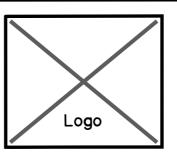
Multiplayer





https://localhost:26/tetris/game/RWbZ2T4CRMmALBp25sezzoQ==/6/hero

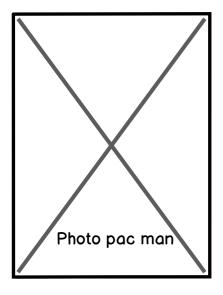




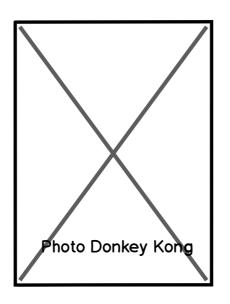
Choose a hero

COMMENTAAR

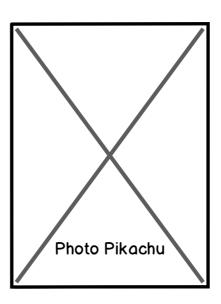
- -> When selecting a hero, a hover comes around the hero
- -> When a hero is selected, you can only click the "Play Game" button



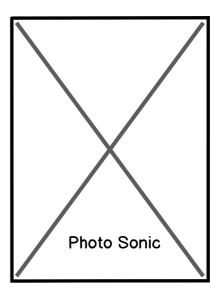
Pac man



Donkey Kong



Pikachu



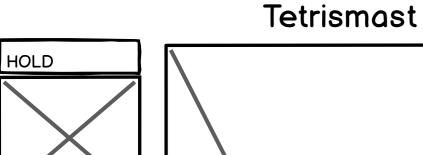
Sonic

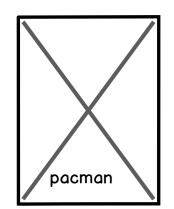
Back

Play Game

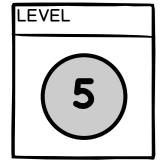


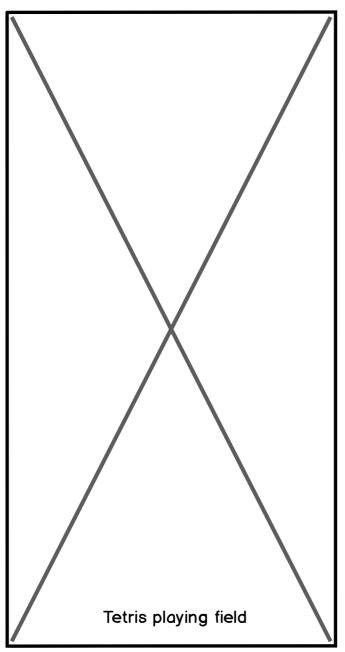


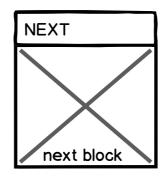


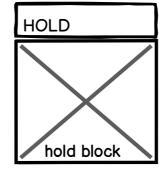


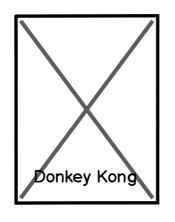
hold block

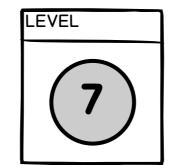




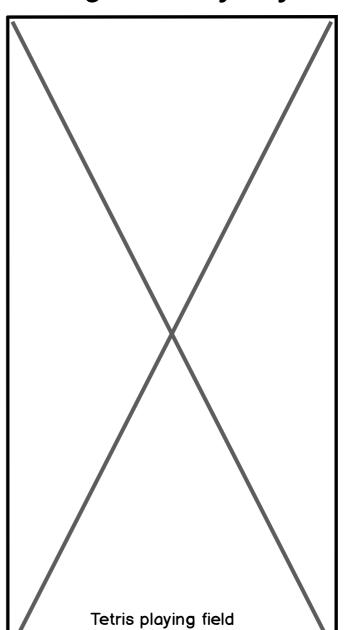


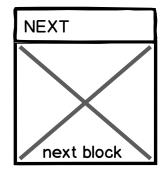






EnglandIsMyCity





SCORE 2564

Pause

00:10:49

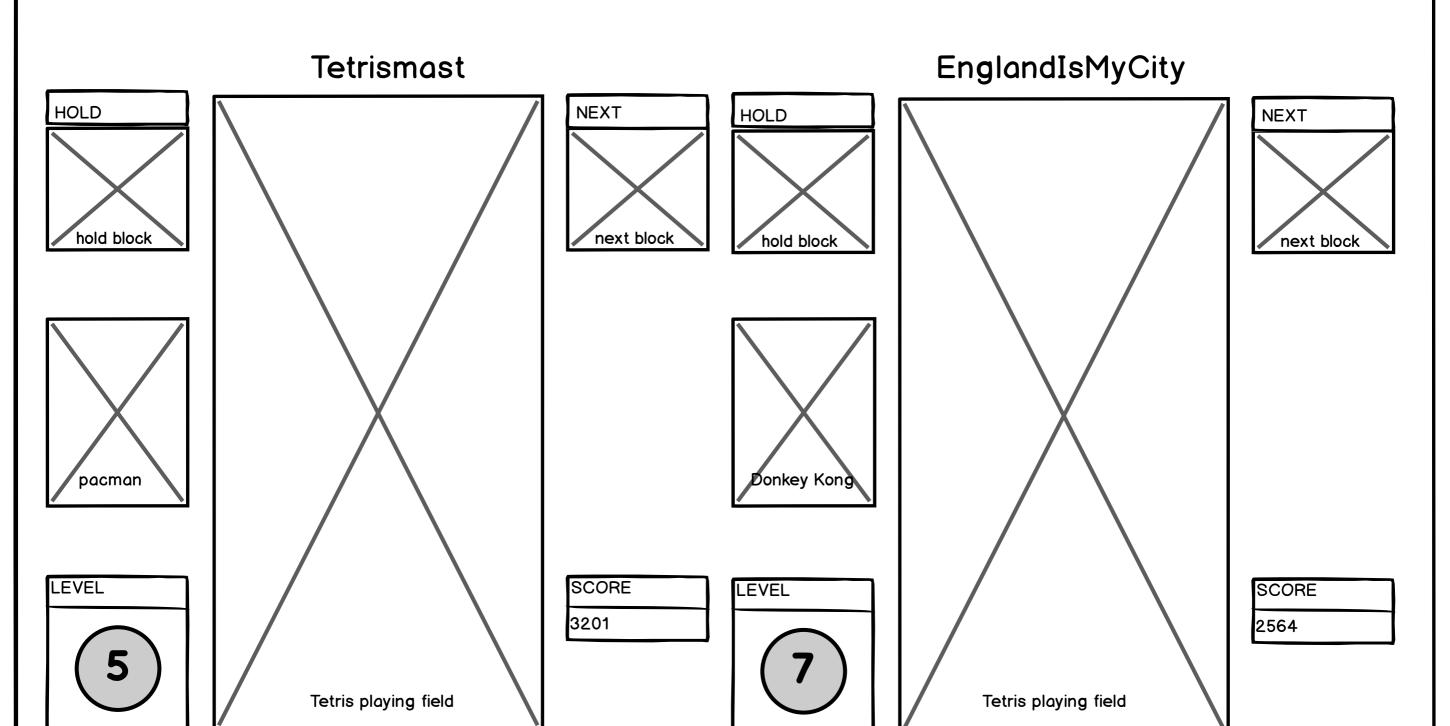
SCORE

3201

Multiplayer







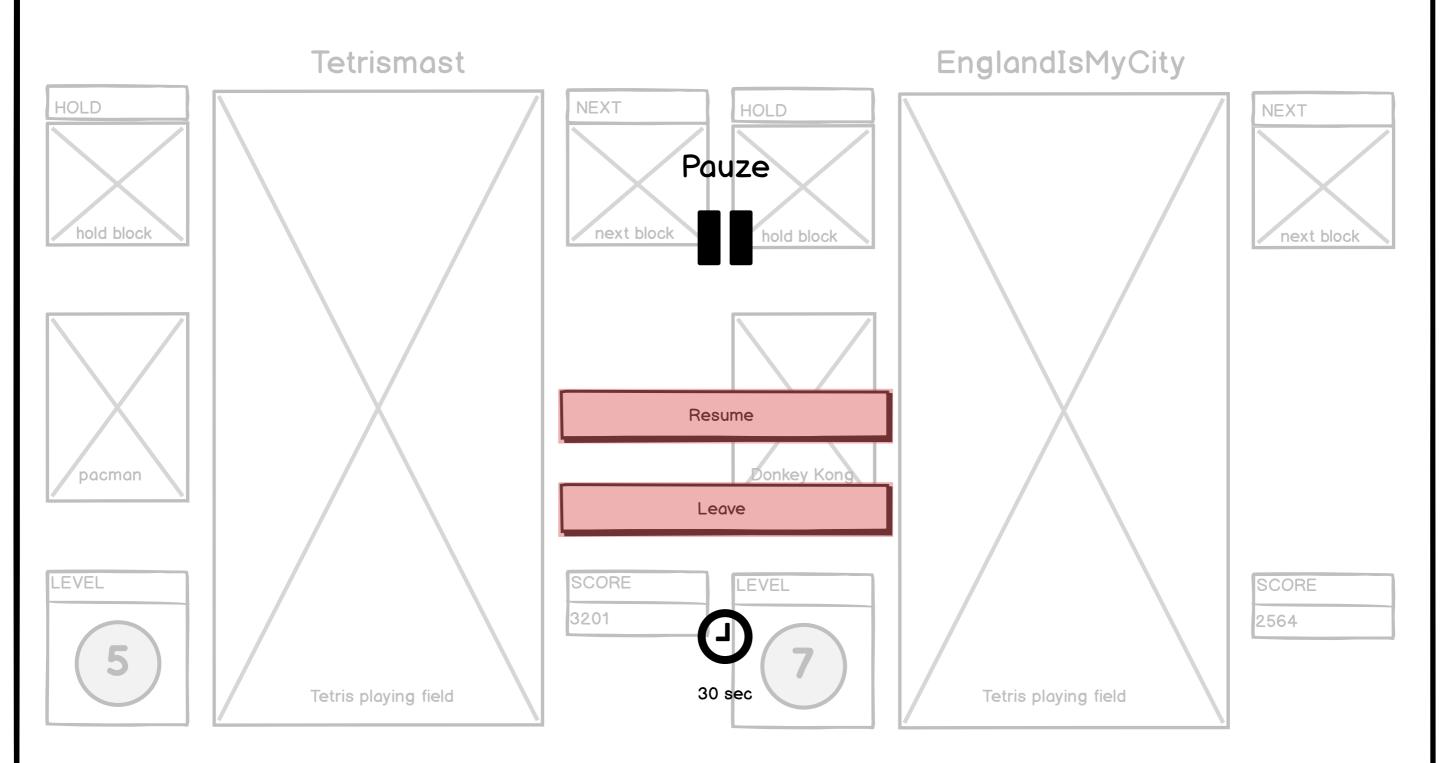
A pause has been requested by Tetrismaster. If you agree, press pause.

1/2

Pause 00:08:39 Multiplayer







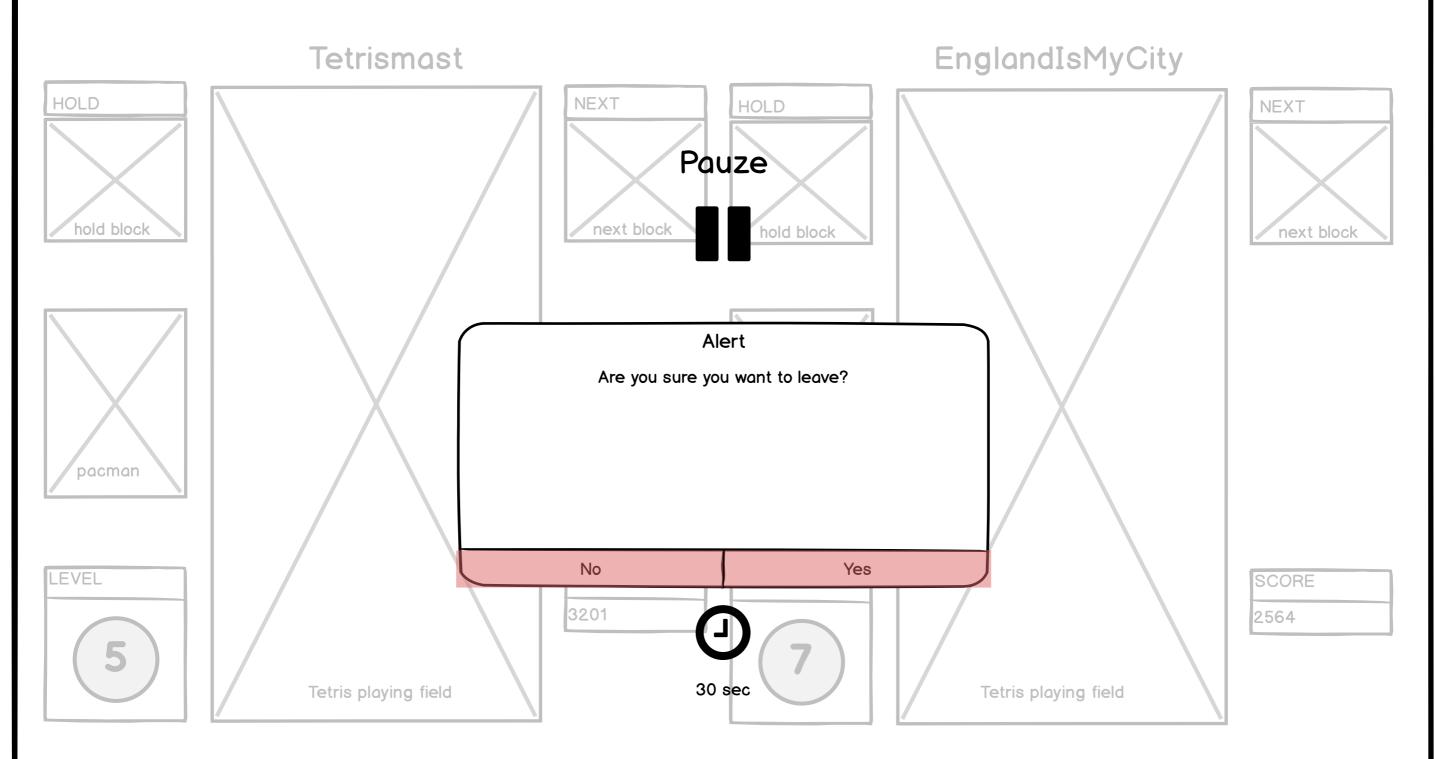
A pause has been requested by Tetrismaster. If you agree, press pause.

1/2

Pause 00:08:39 Multiplayer







A pause has been requested by Tetrismaster. If you agree, press pause.

1/2

Pause

00:08:39

Multiplayer



https://localhost:26/tetris/choose_menu



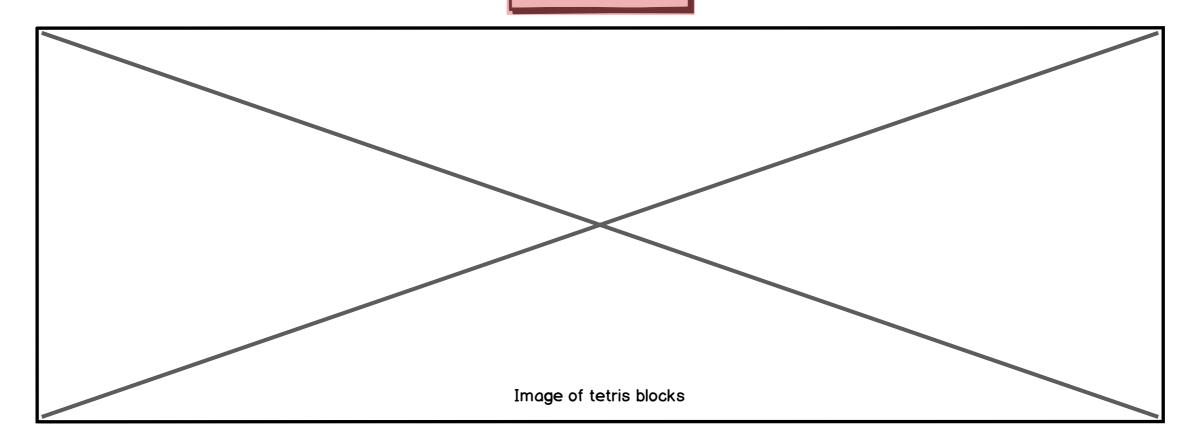
Choose an option

Last Man Standing

Play with friends (not ranked)

Find Opponents (ranked)

Back





https://localhost:26/tetris/game/0440mljZSWeZ0qXliGAqFg==/2/





https://localhost:26/tetris/game/0440mljZSWeZ0qXliGAqFg==/2/

Leave game

Play game

> Hahaha

Last Man Standing

Player List

Name Score

Tetrismaster -
Theshadow3008 -
BinaryFour -
IDontKnowMoreNames - -

A comment

The owner of the session has a cubes behind his name

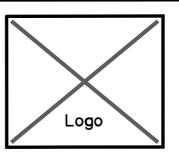
Chat

Theshadow3008: Hello everbody
BinaryFour: Lets go
IDontKnowMoreNames: Lets go losers



https://localhost:26/tetris/0440mljZSWeZ0qXliGAqFg==/2/hero

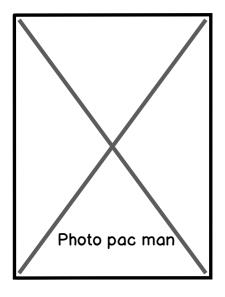




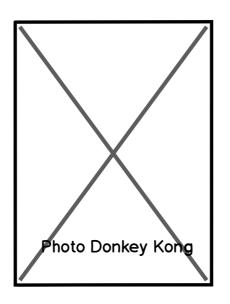
Choose a hero



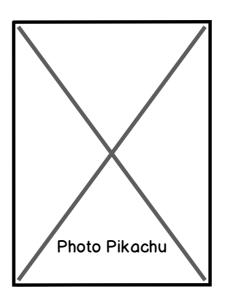
- -> When selecting a hero, a hover comes around the hero
- -> When a hero is selected, you can only click the "Play Game" button



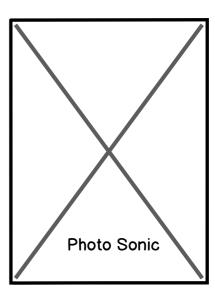
Pac man



Donkey Kong



Pikachu



Sonic

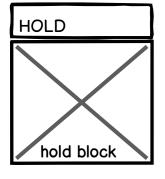
Back

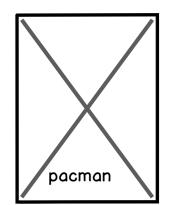
Play Game

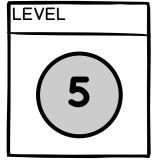


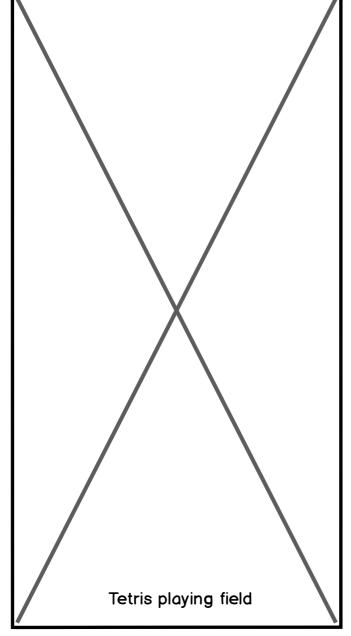


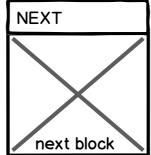








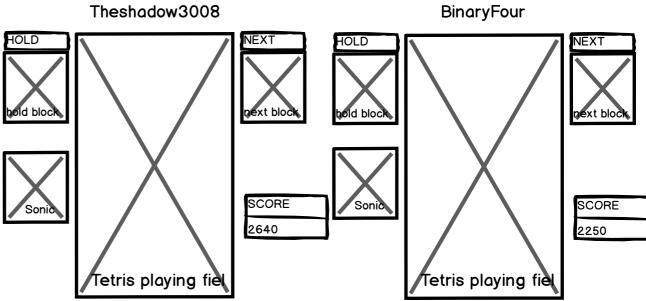


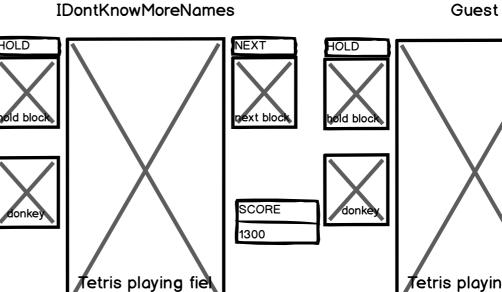


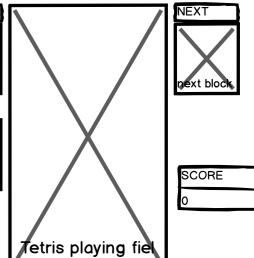
SCORE

2506









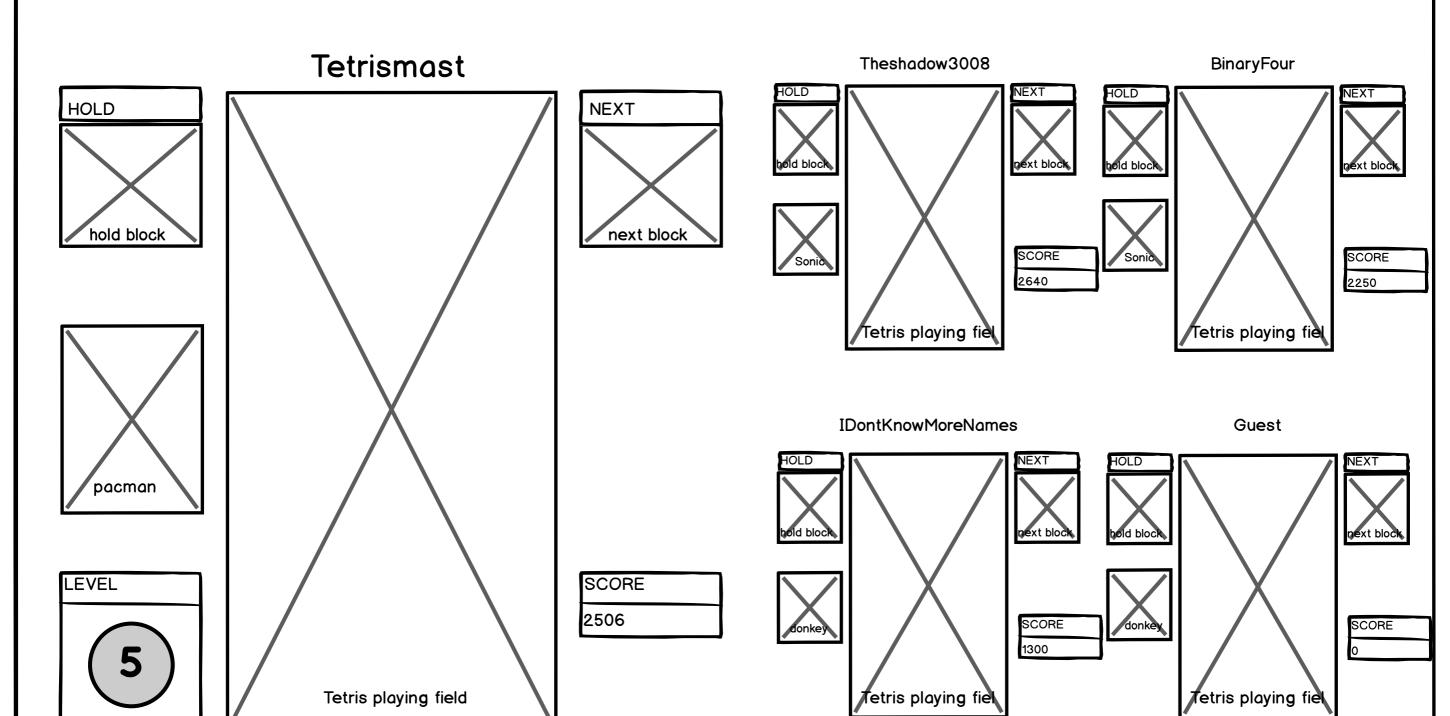
Pause

00:22:01

Last Man Standing







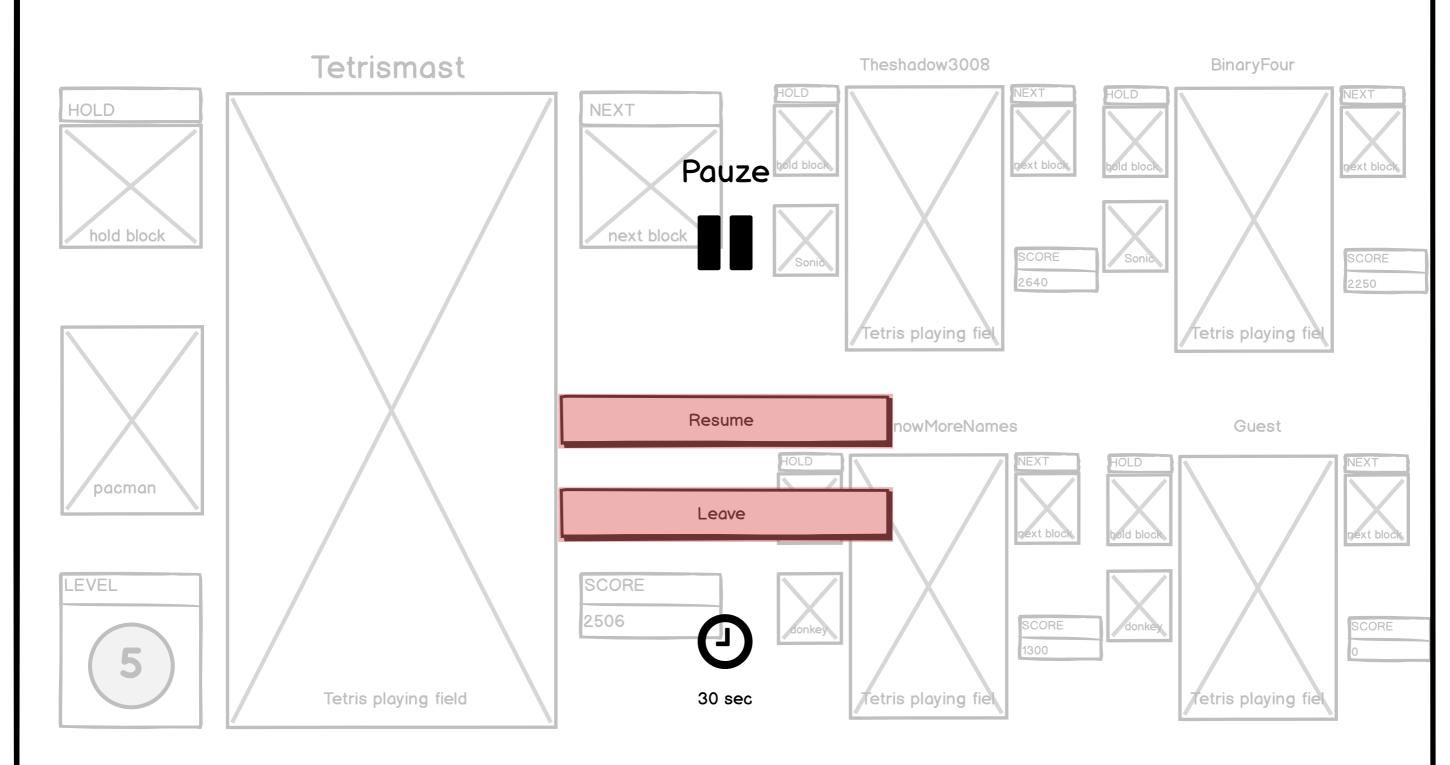
A pause has been requested by Tetrismaster. If you agree, press pause.

2/4

Pause 00:22:01 Last Man Standing







A pause has been requested by Tetrismaster. If you agree, press pause.

2/4

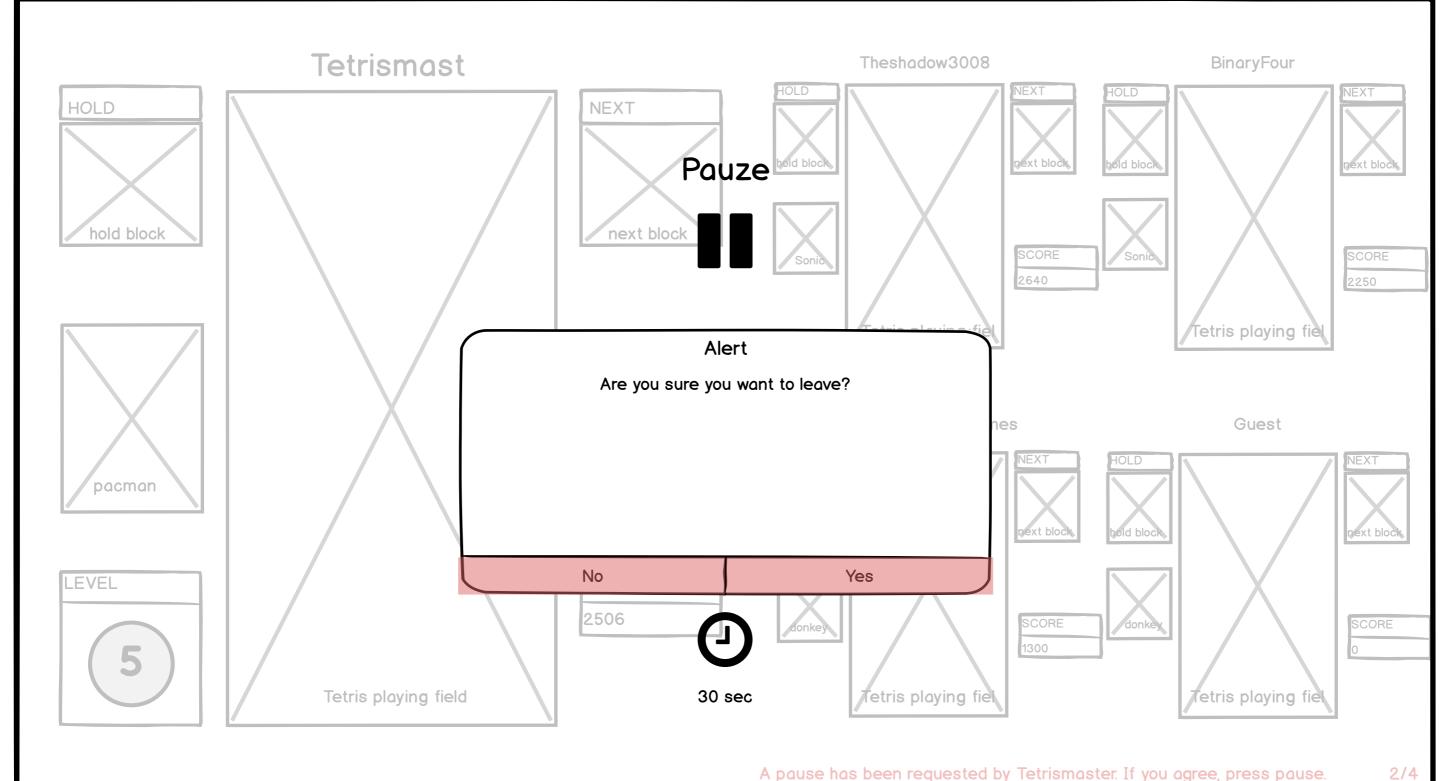
Pause

00:22:01

Last Man Standing







A pause has been requested by Tetrismaster. If you agree, press pause.

00:22:01 Last Man Standing Pause

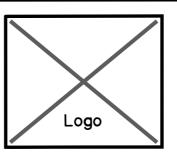






https://localhost:26/tetris/game/RWbZ54565DFD2T4CKDKLBp25oQ==/9/hero

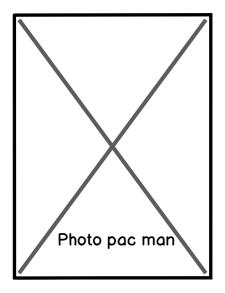




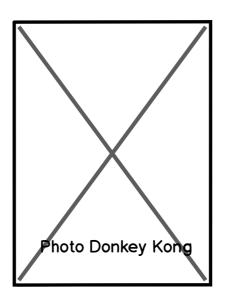
Choose a hero



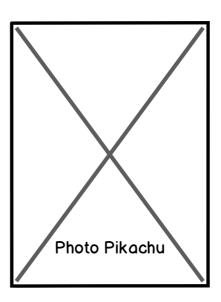
- -> When selecting a hero, a hover comes around the hero
- -> When a hero is selected, you can only click the "Play Game" button



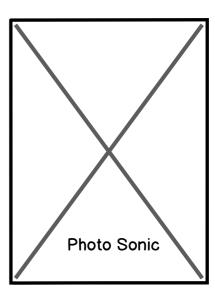




Donkey Kong



Pikachu



Sonic

Back

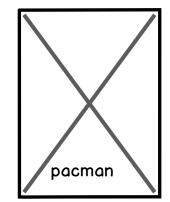
Play Game

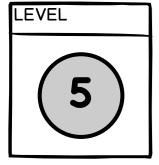


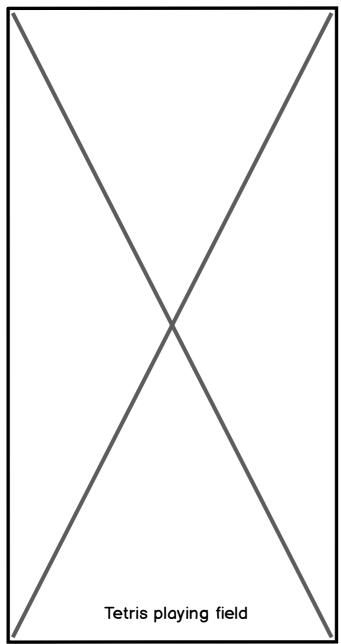


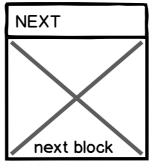


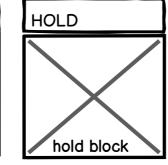
HOLD
hold block

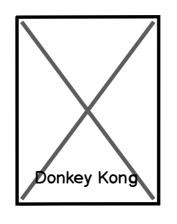


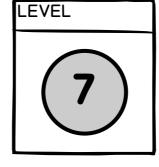




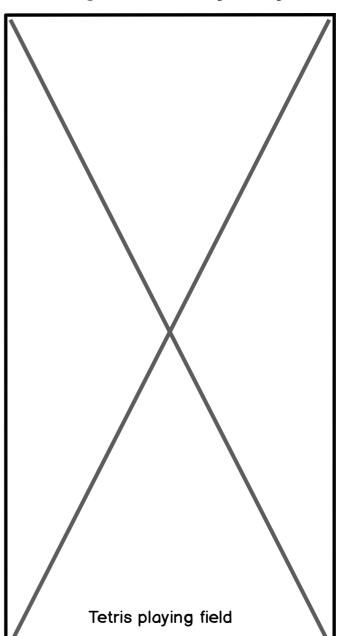


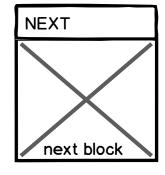






EnglandIsMyCity





SCORE 2564

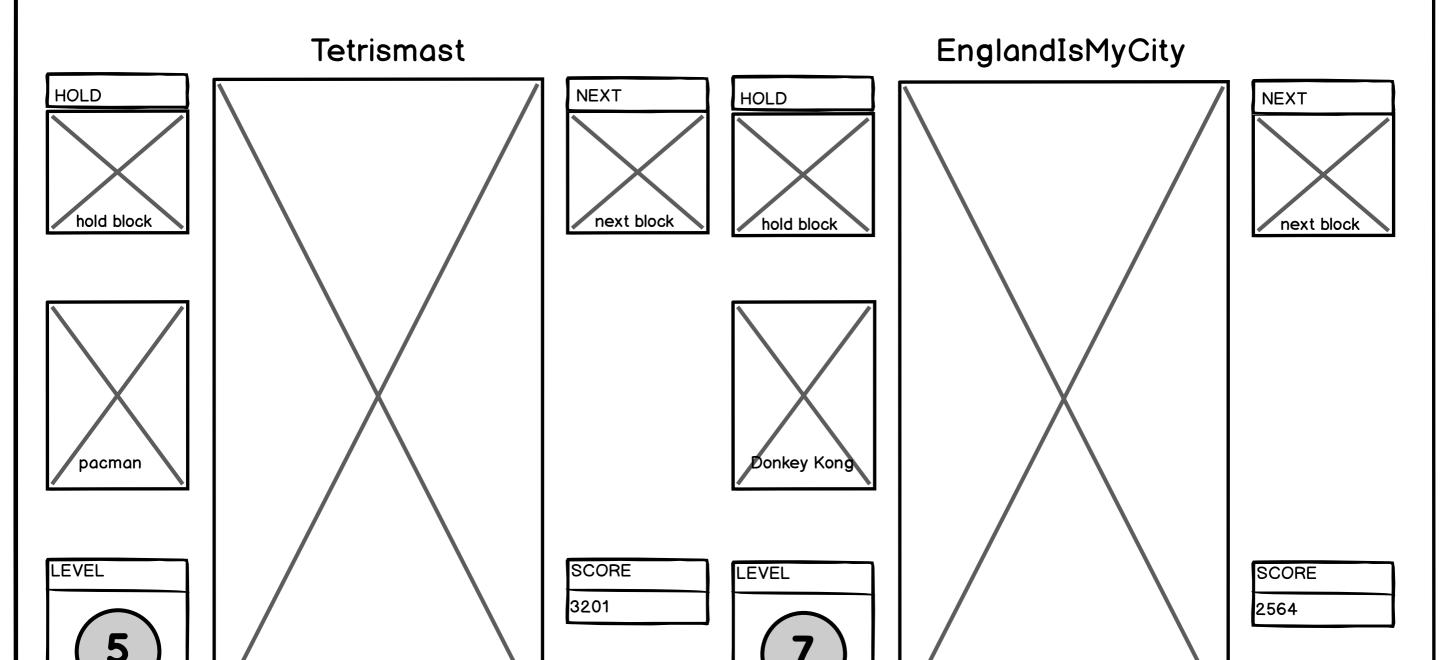
Pause 00:10:49 Last Man Standing

SCORE

3201







A pause has been requested by Tetrismaster. If you agree, press pause.

Tetris playing field

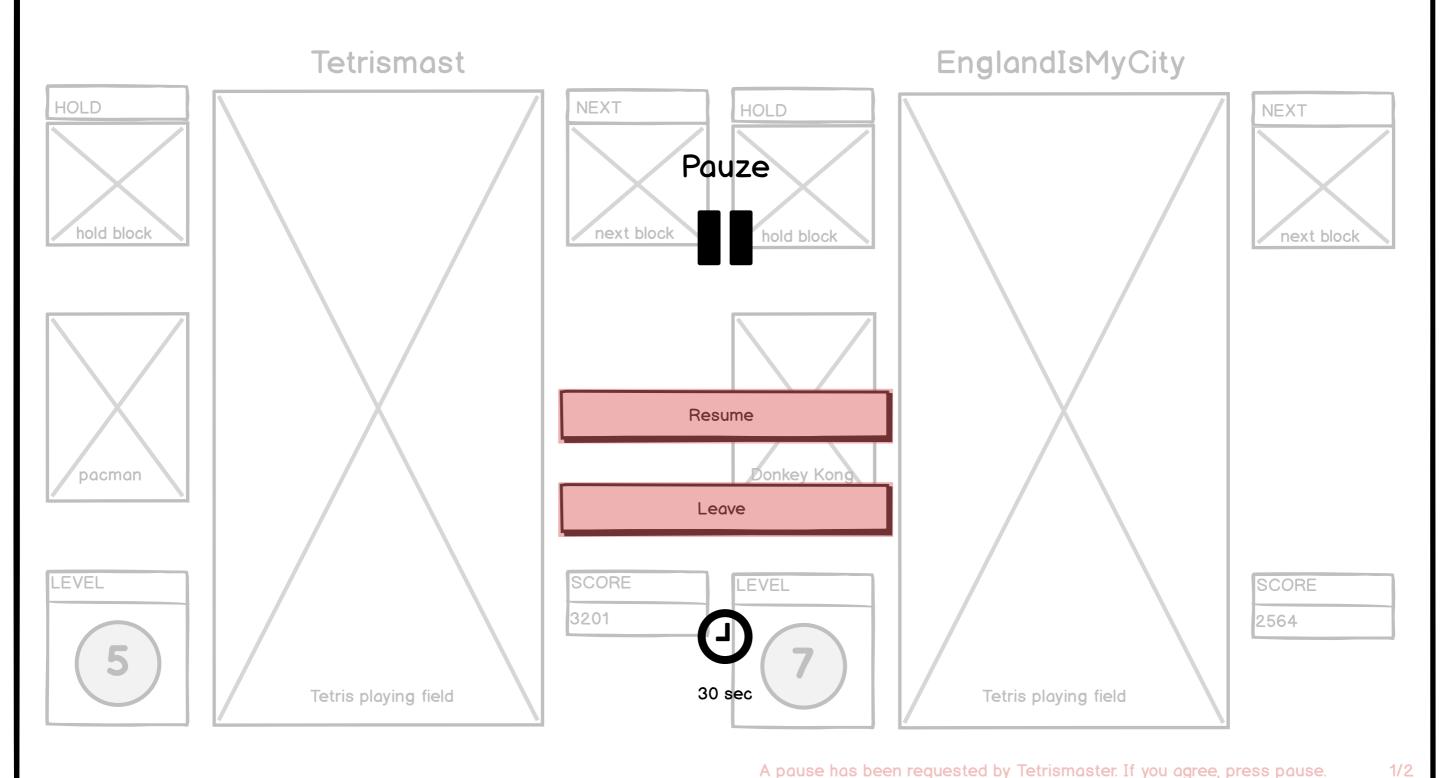
1/2

Pause	00:08:39	Last Man Standing
-------	----------	-------------------

Tetris playing field





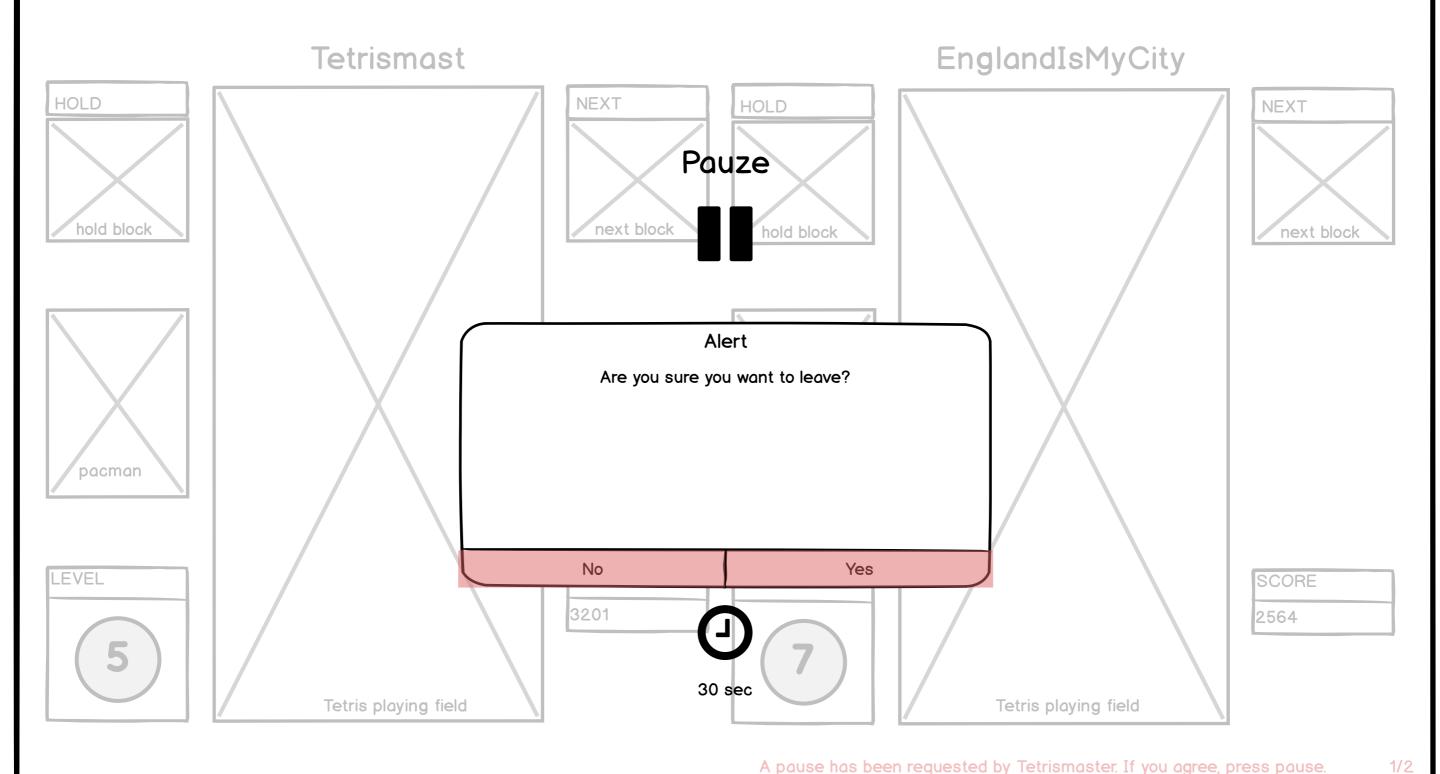


A pause has been requested by Tetrismaster. If you agree, press pause.

Last Man Standing







A pause has been requested by Tetrismaster. If you agree, press pause.

00:08:39 Last Man Standing Pause



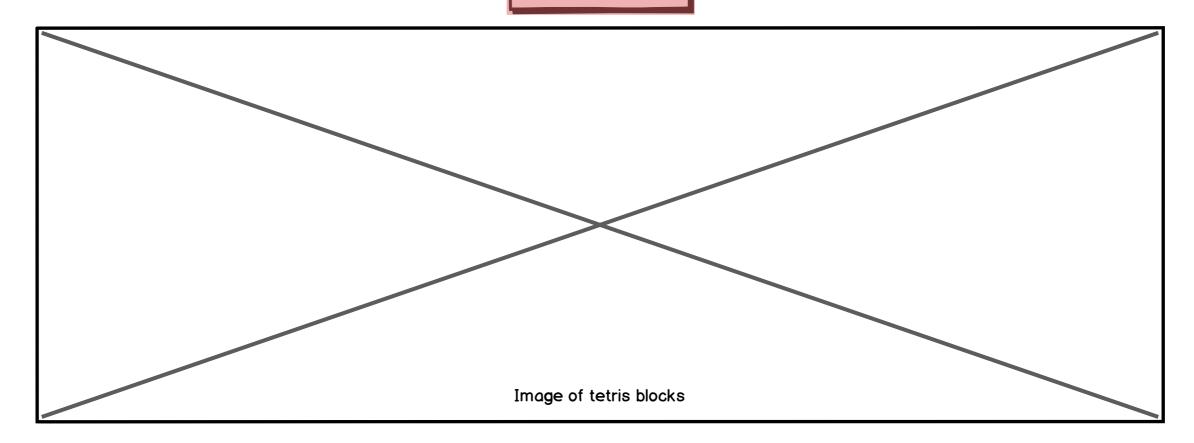


Choose an option Time Attack

Play with friends

Find Opponents

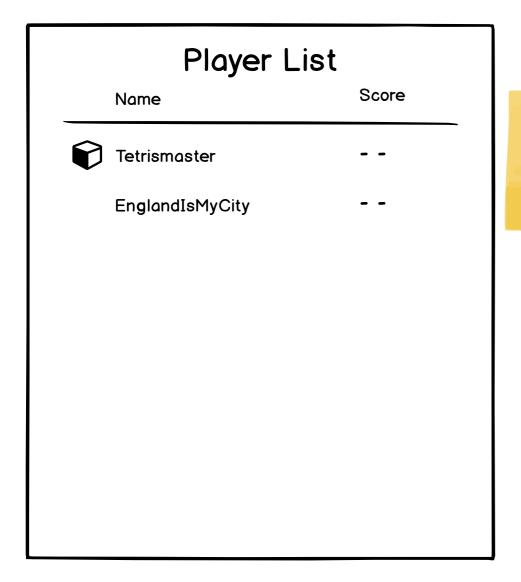
Back





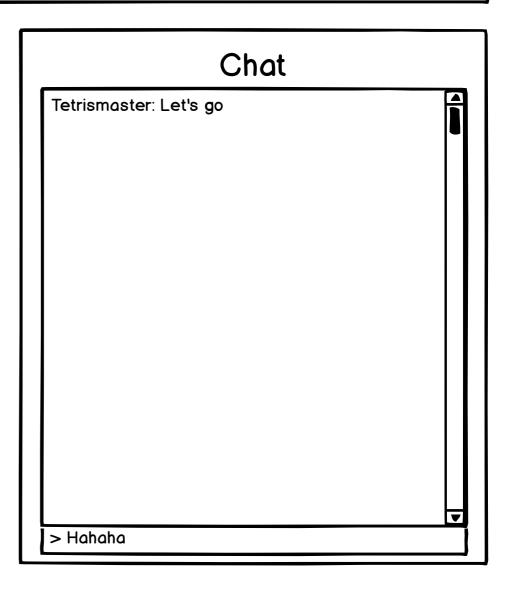






A comment

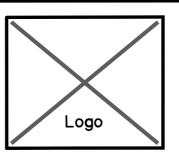
Eigenaar van de sessie heeft een cubes achter zijn naam





https://localhost:26/tetris/HF4zChG3R42wwJevJY14YQ==/3/hero

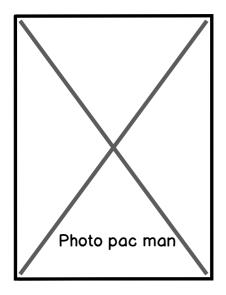




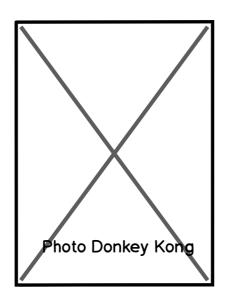
Choose a hero

COMMENTAAR

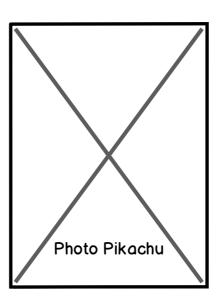
- -> When selecting a hero, a hover comes around the hero
- -> When a hero is selected, you can only click the "Play Game" button



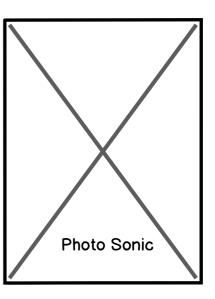
Pac man



Donkey Kong



Pikachu



Sonic

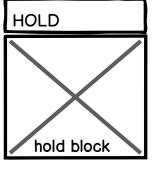
Back

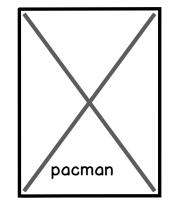
Play Game

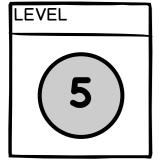


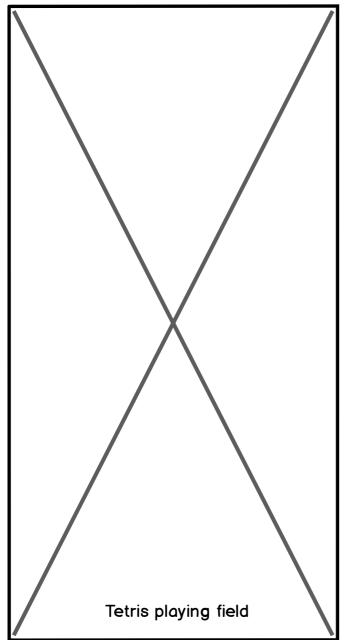


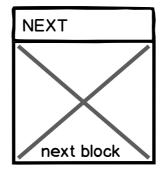


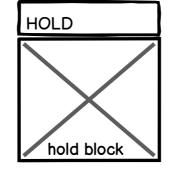


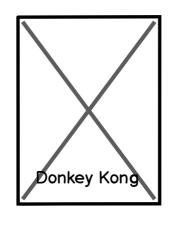


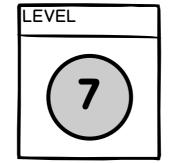




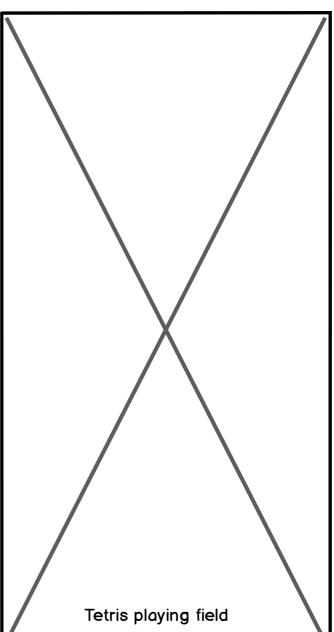


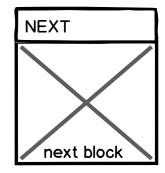






EnglandIsMyCity





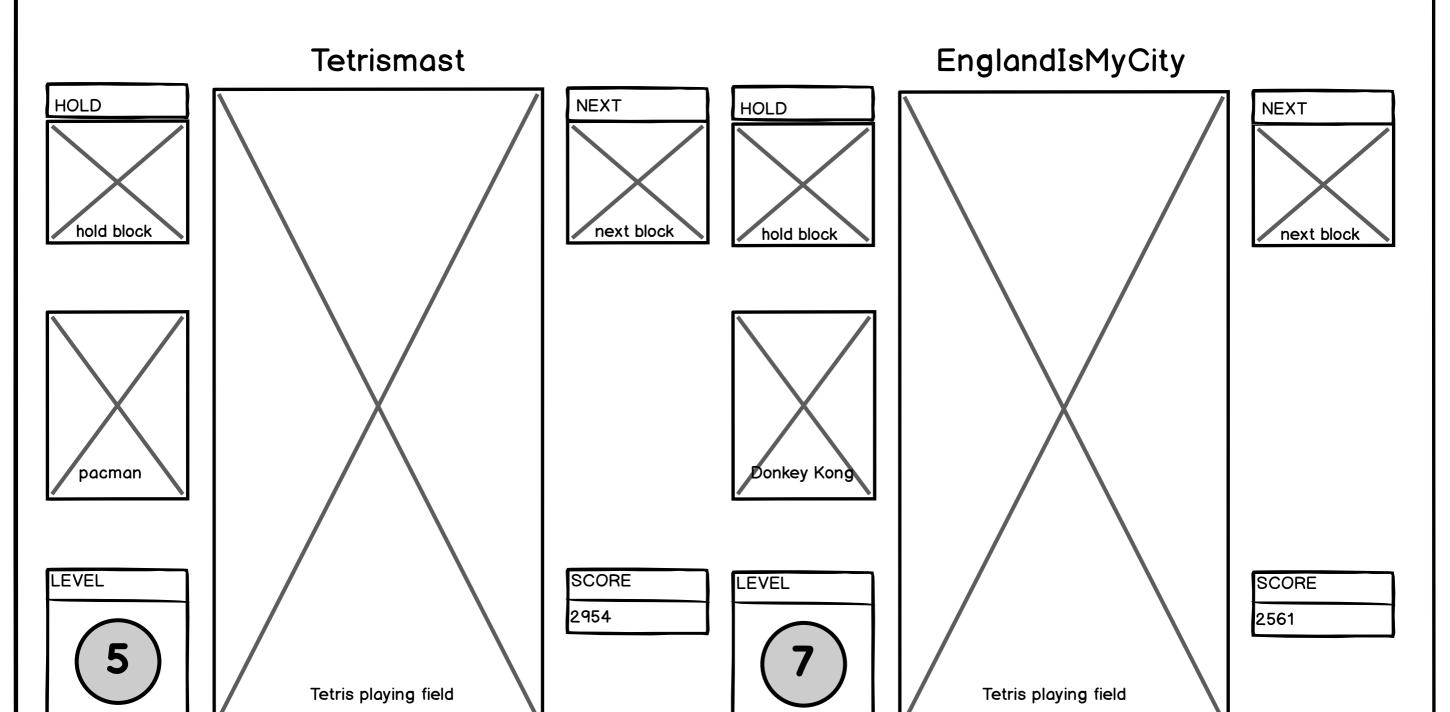
SCORE 2561

SCORE

2954







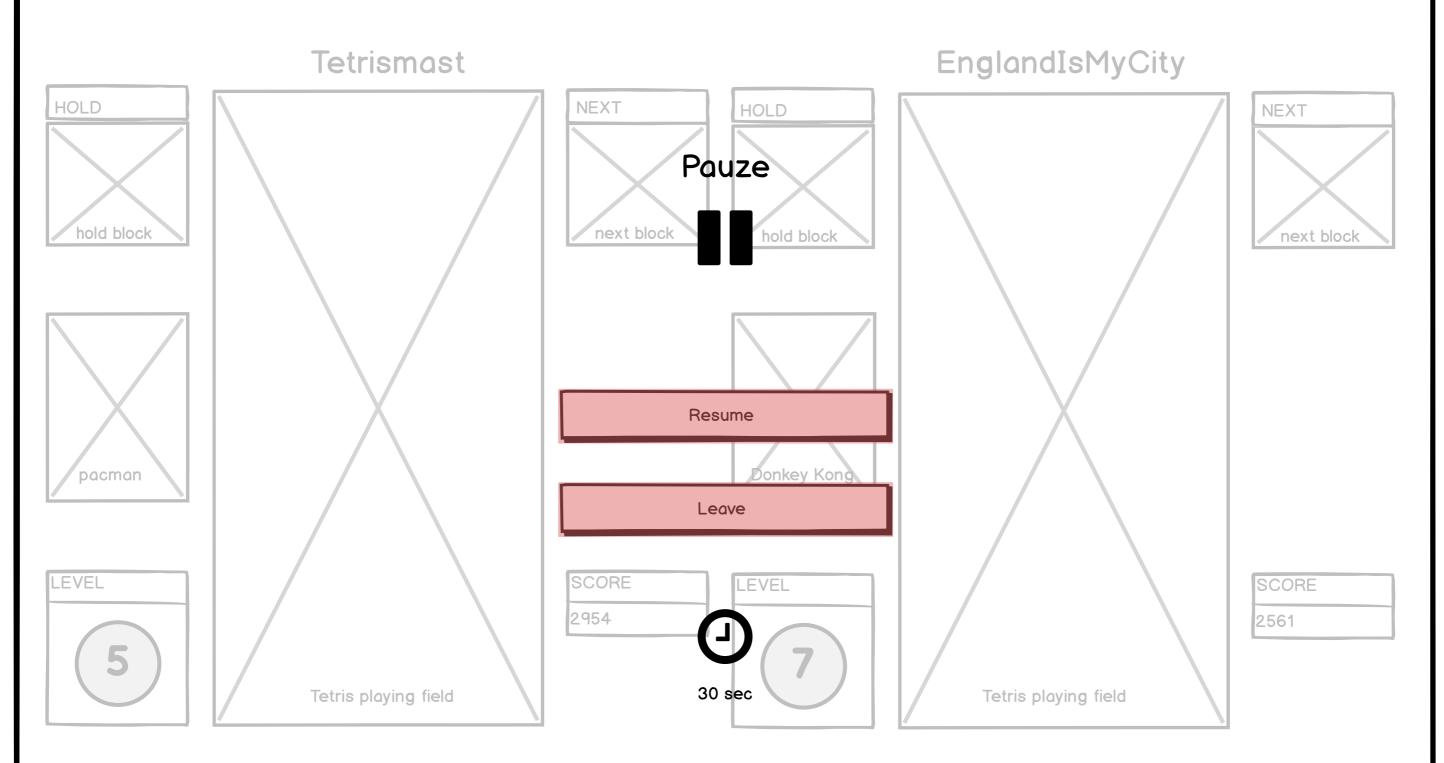
A pause has been requested by Tetrismaster. If you agree, press pause.

1/2

Pause 00:08:39 Time Attack







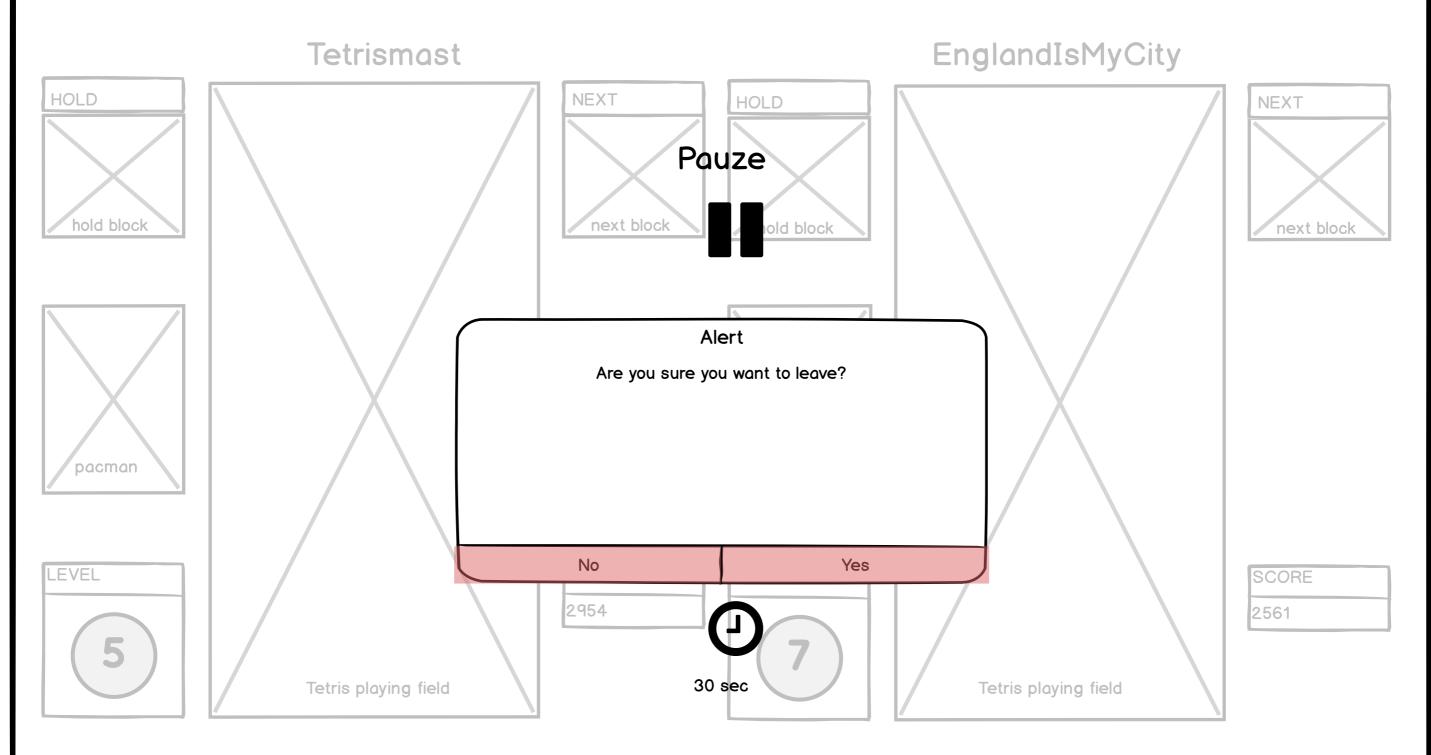
A pause has been requested by Tetrismaster. If you agree, press pause.

1/2

Pause 00:08:39 Time Attack







A pause has been requested by Tetrismaster. If you agree, press pause.

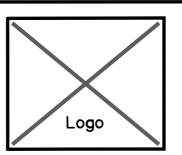
1/2

Pause 00:08:39 Time Attack



https://localhost:26/tetris/high_scores





Q vb: Tetrisboy

High scores

▼

Singleplayer

TrelloGuy 3252266 SharkForce 3235212 PattyMayo 3232001 YTBoy 3220125

Multiplayer

ProjectX	2604525	ā
Alowa	2501230	
FranseBauer	2406852	

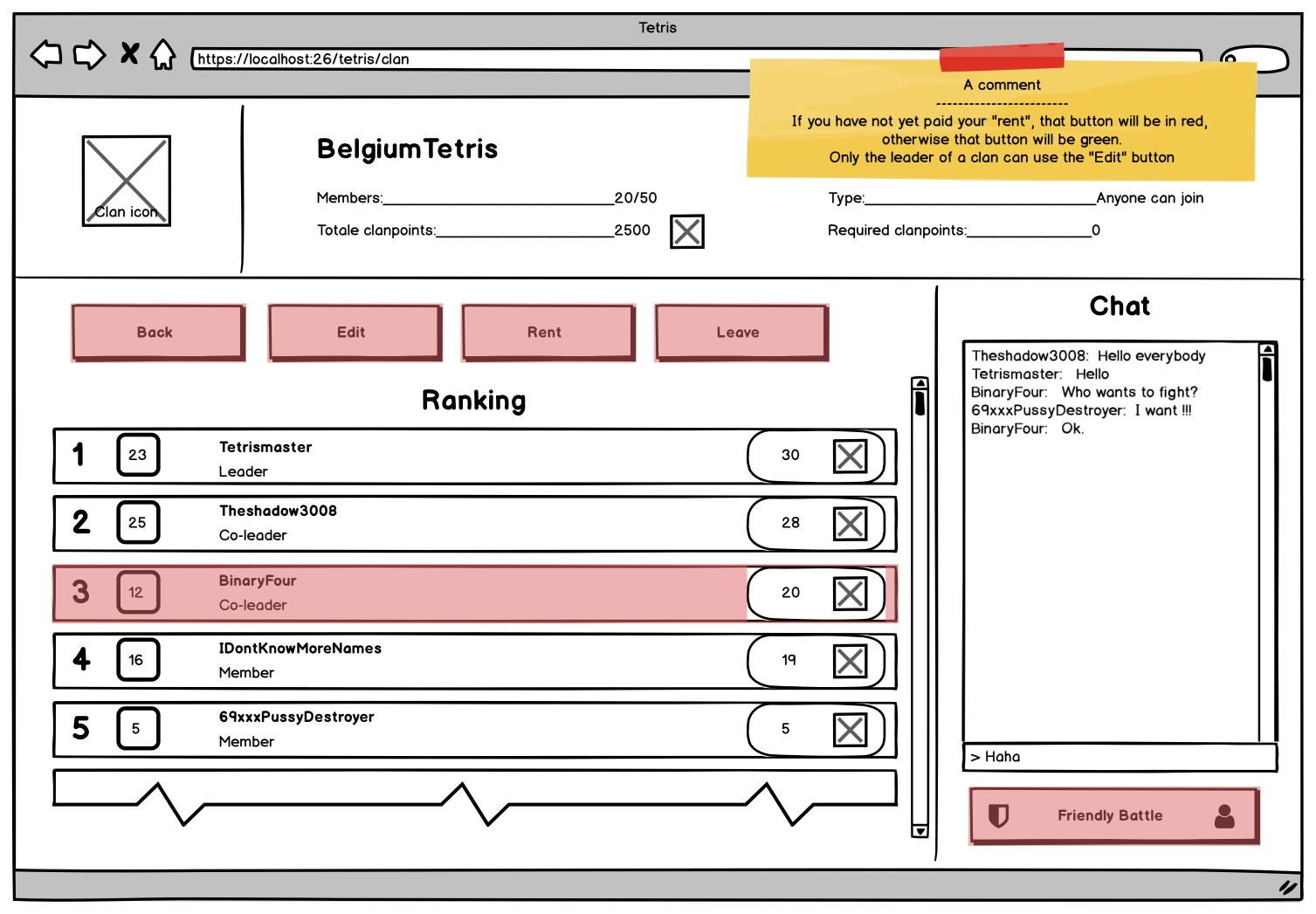
Time Attack

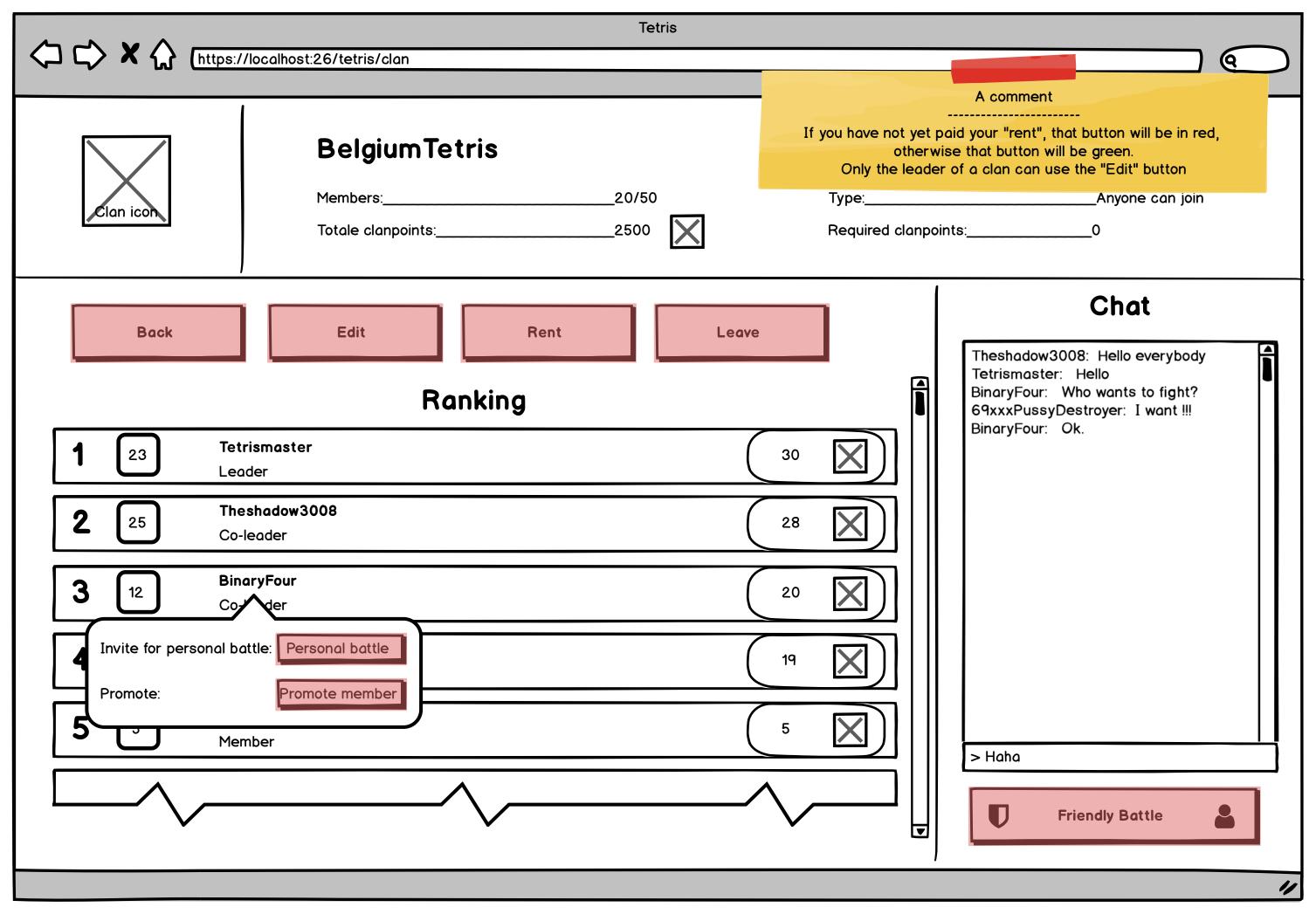
DeBauwer 3251125	A			
DeBauwer 3	251225	251125	125001	
DeBauwer	32	3	31	
כ	tyMayo	DeBauwer	ce_woman	

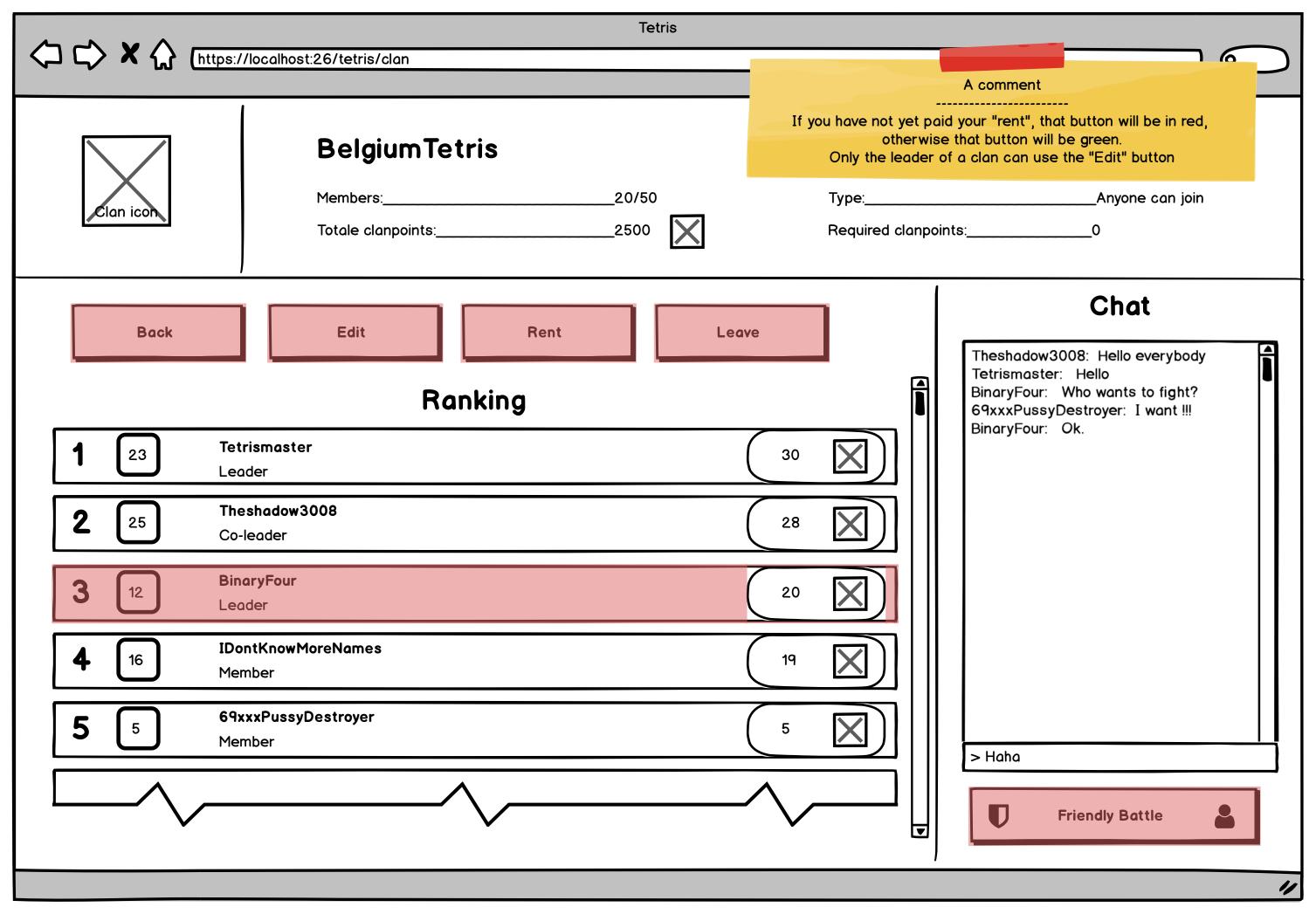
Last Man Standing

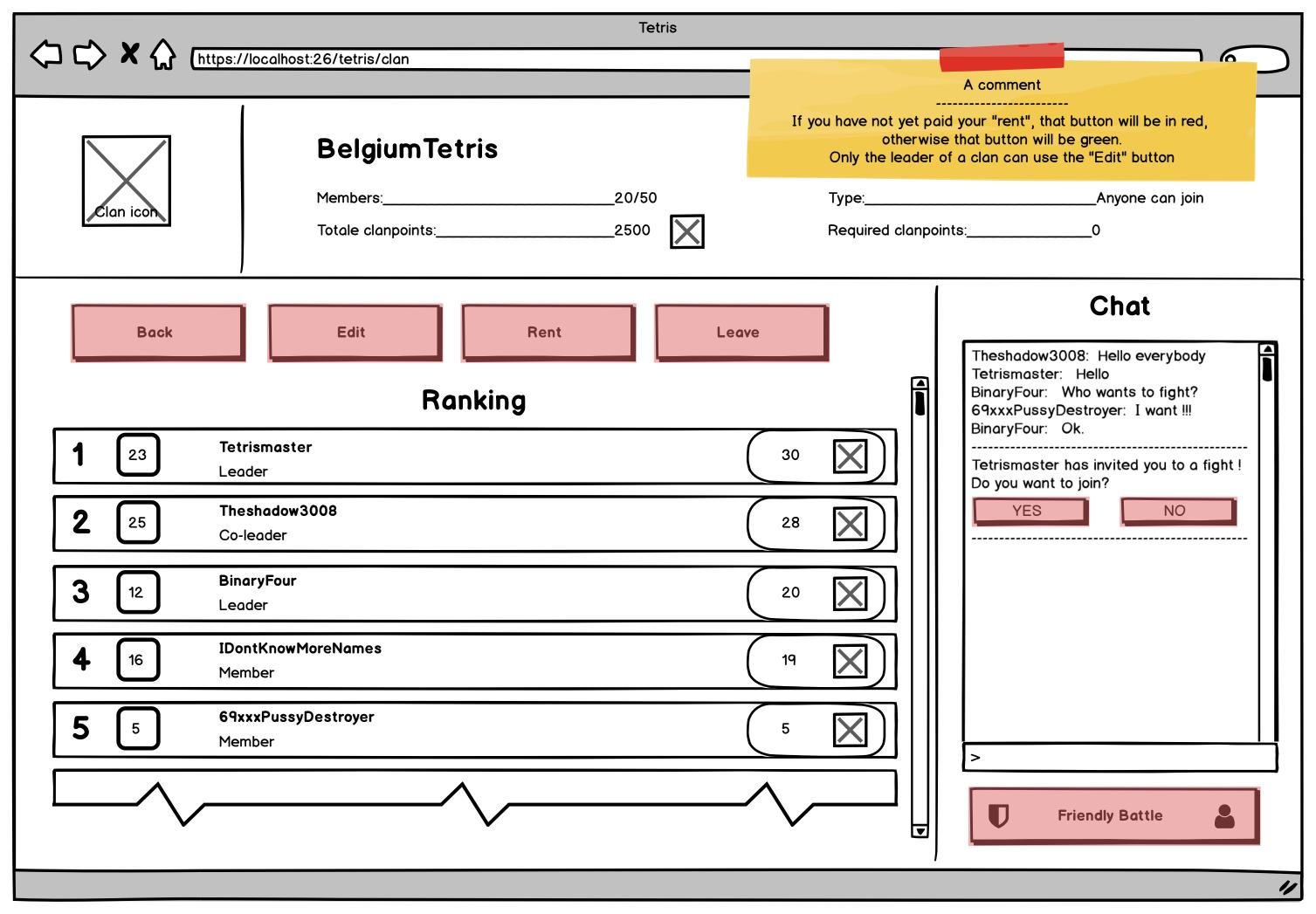
Tetrismaster	3654258	
FNAF_FOXY_4	3515425	
MouseOver	3515258	
		▼

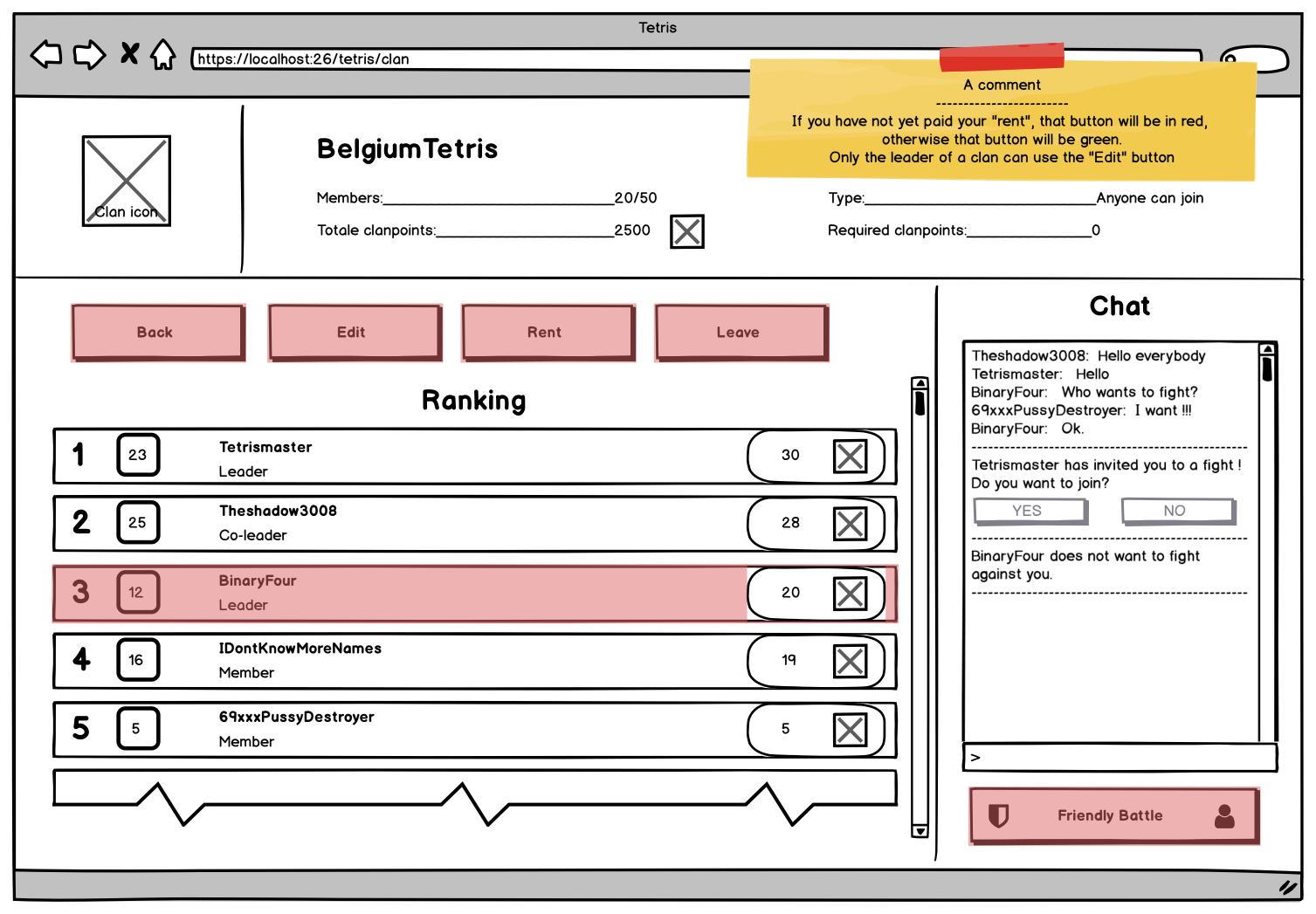
Back





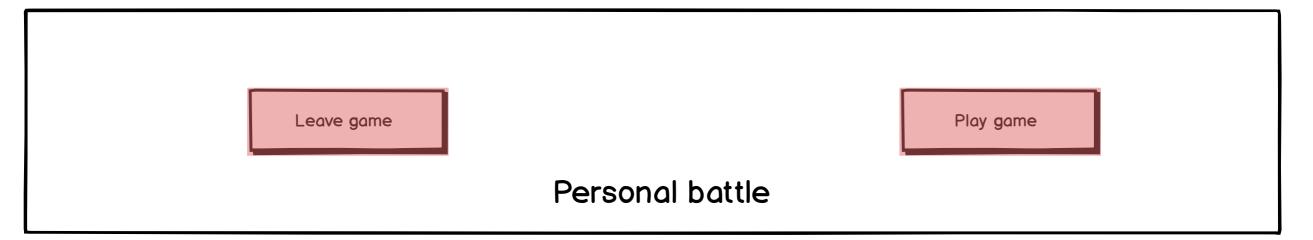


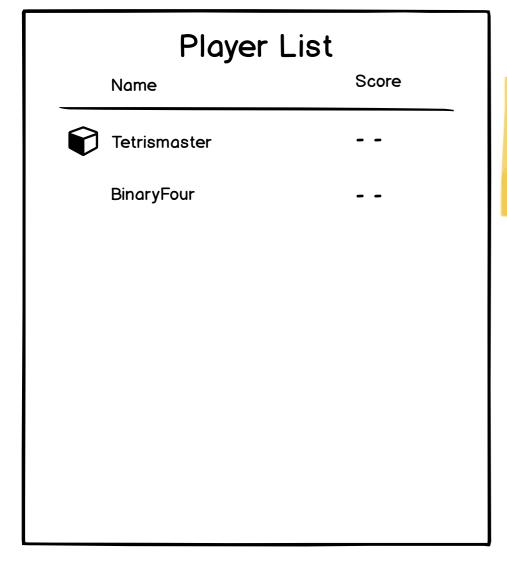


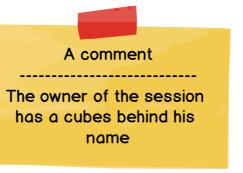


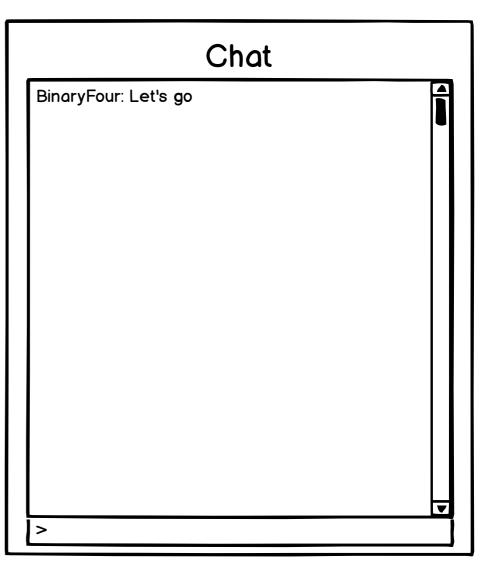








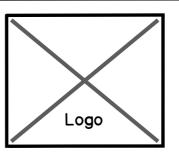








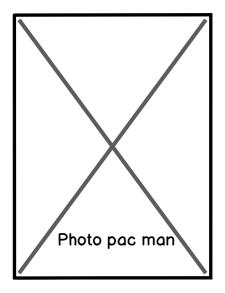




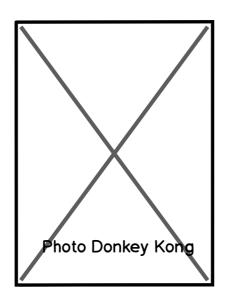
Choose a hero

COMMENTAAR

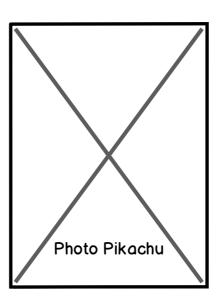
- -> When selecting a hero, a hover comes around the hero
- -> When a hero is selected, you can only click the "Play Game" button



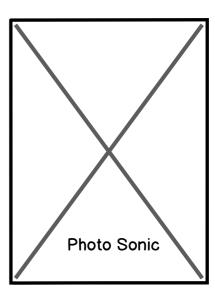




Donkey Kong



Pikachu



Sonic

Back

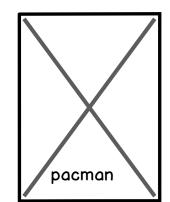
Play Game

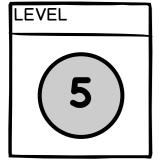


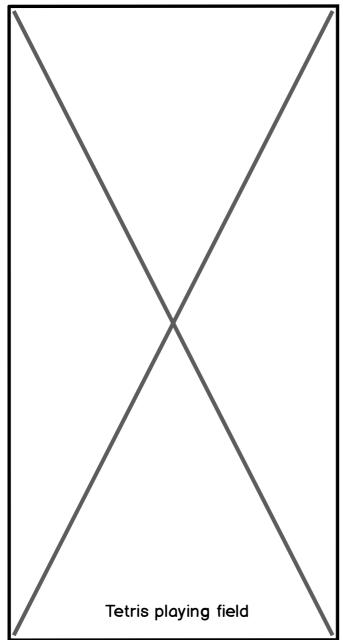


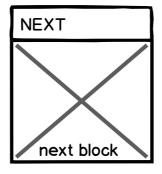


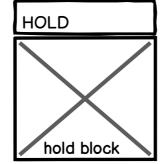
HOLD hold block

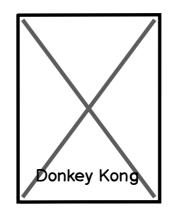


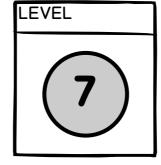




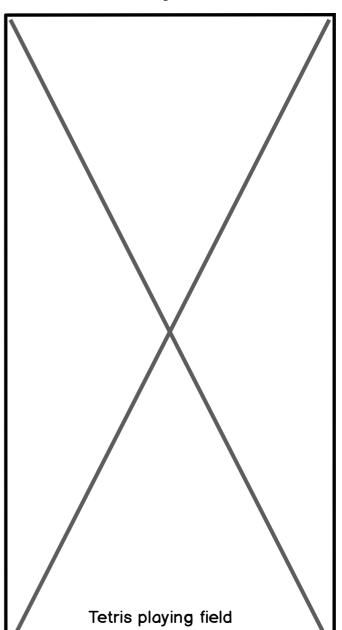


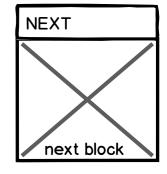






BinaryFour





SCORE

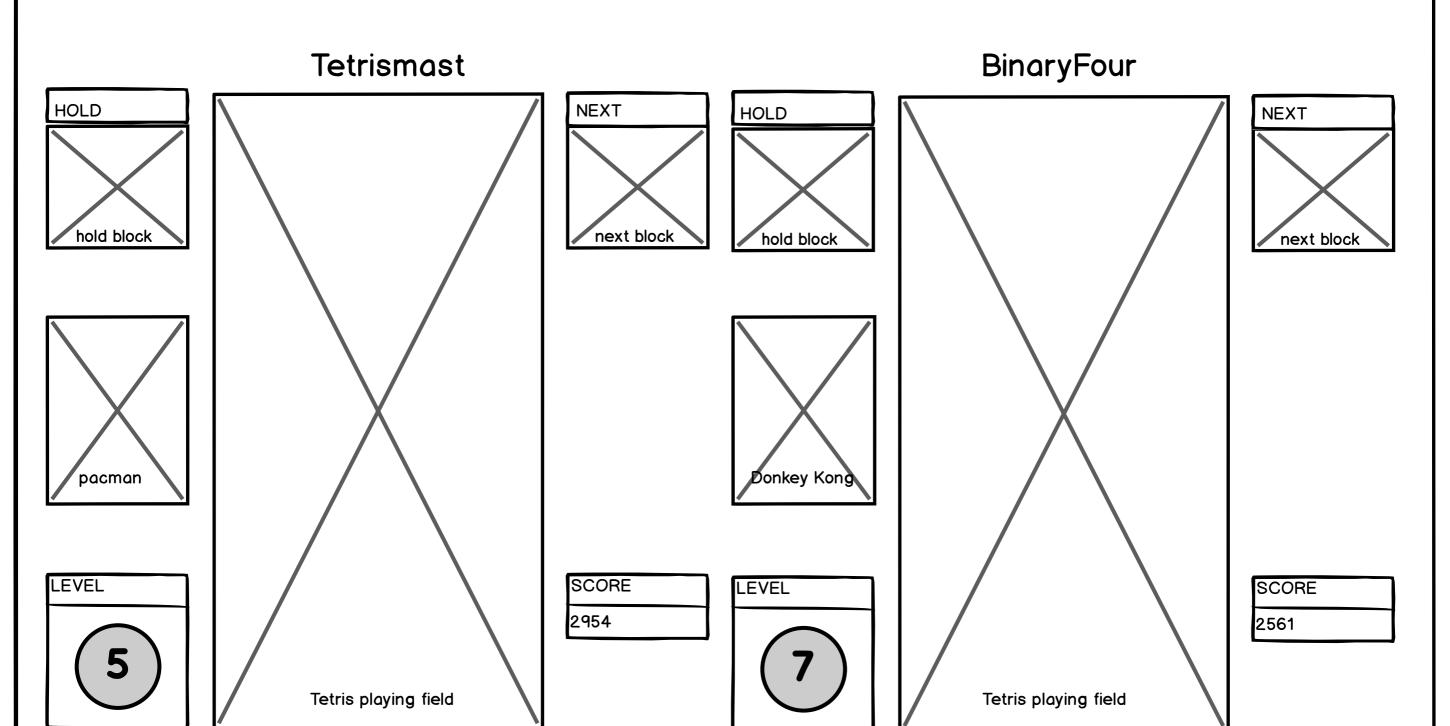
2561

SCORE

2954







A pause has been requested by Tetrismaster. If you agree, press pause.

1/2

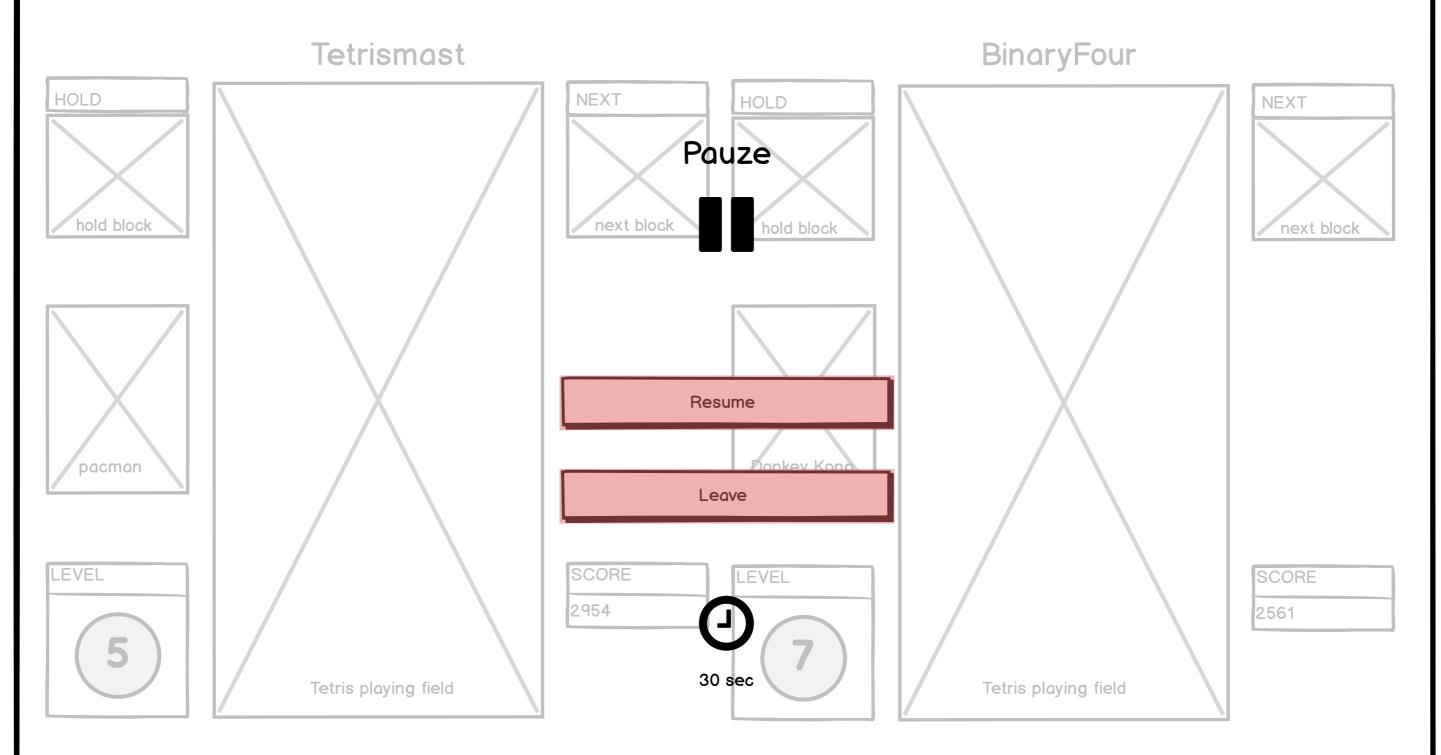
Pause

00:08:39

Friendly Battle







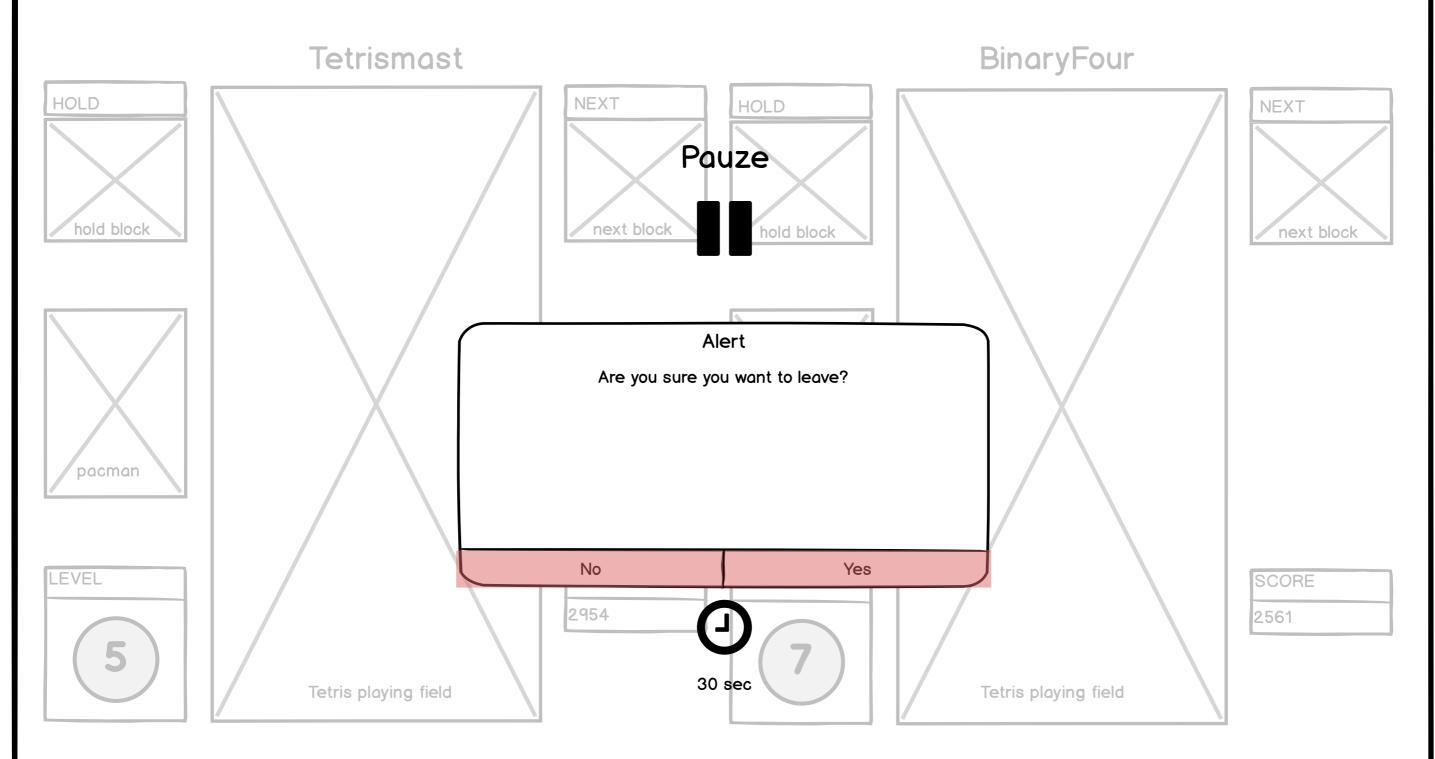
A pause has been requested by Tetrismaster. If you agree, press pause.

1/2

Pause 00:08:39 Friendly Battle







A pause has been requested by Tetrismaster. If you agree, press pause.

1/2

Pause 00:08:39 Friendly Battle



Edit Clan

Clan name:

BelgiumTetris

Clan icon:



Clan type:

Minimum Clanpoints to join:

Anyone can join

(

0

>

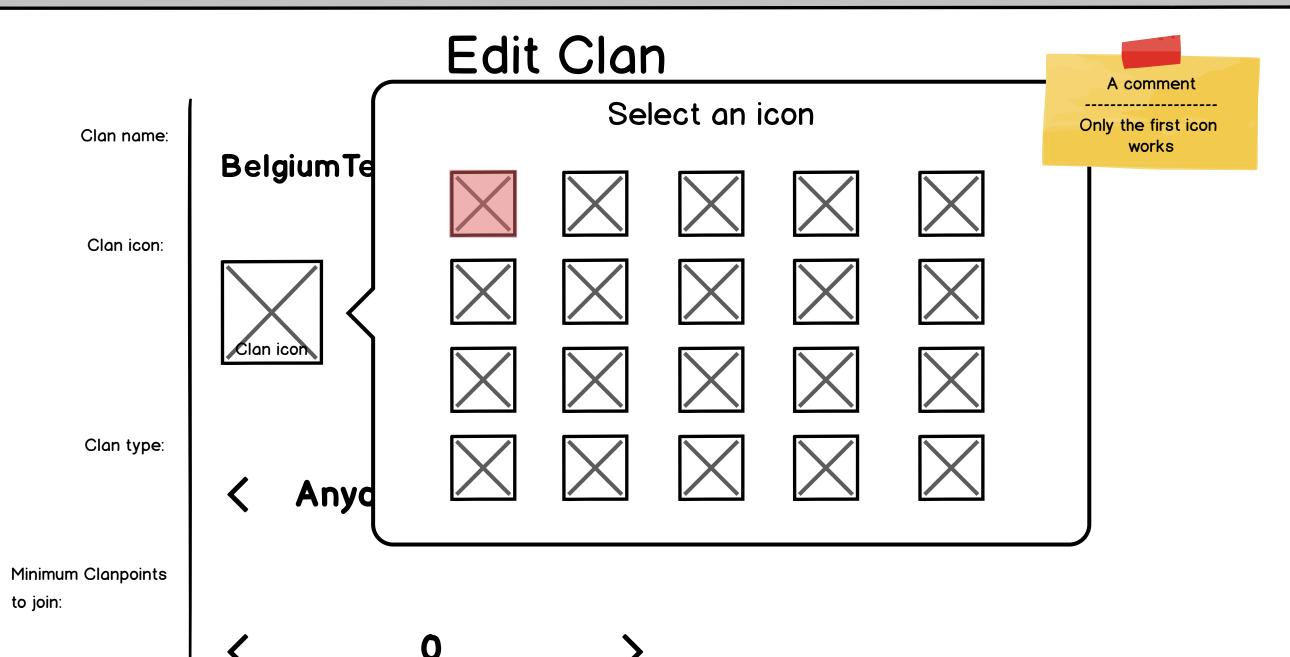
Back

A comment

clan type: consists of => anyone can join, invite only and closed

Save





Back

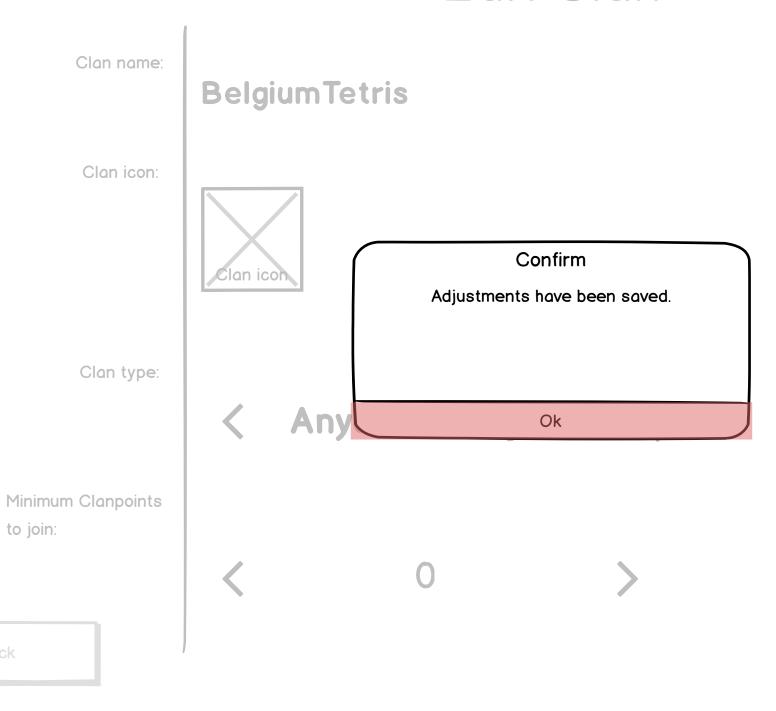
Save



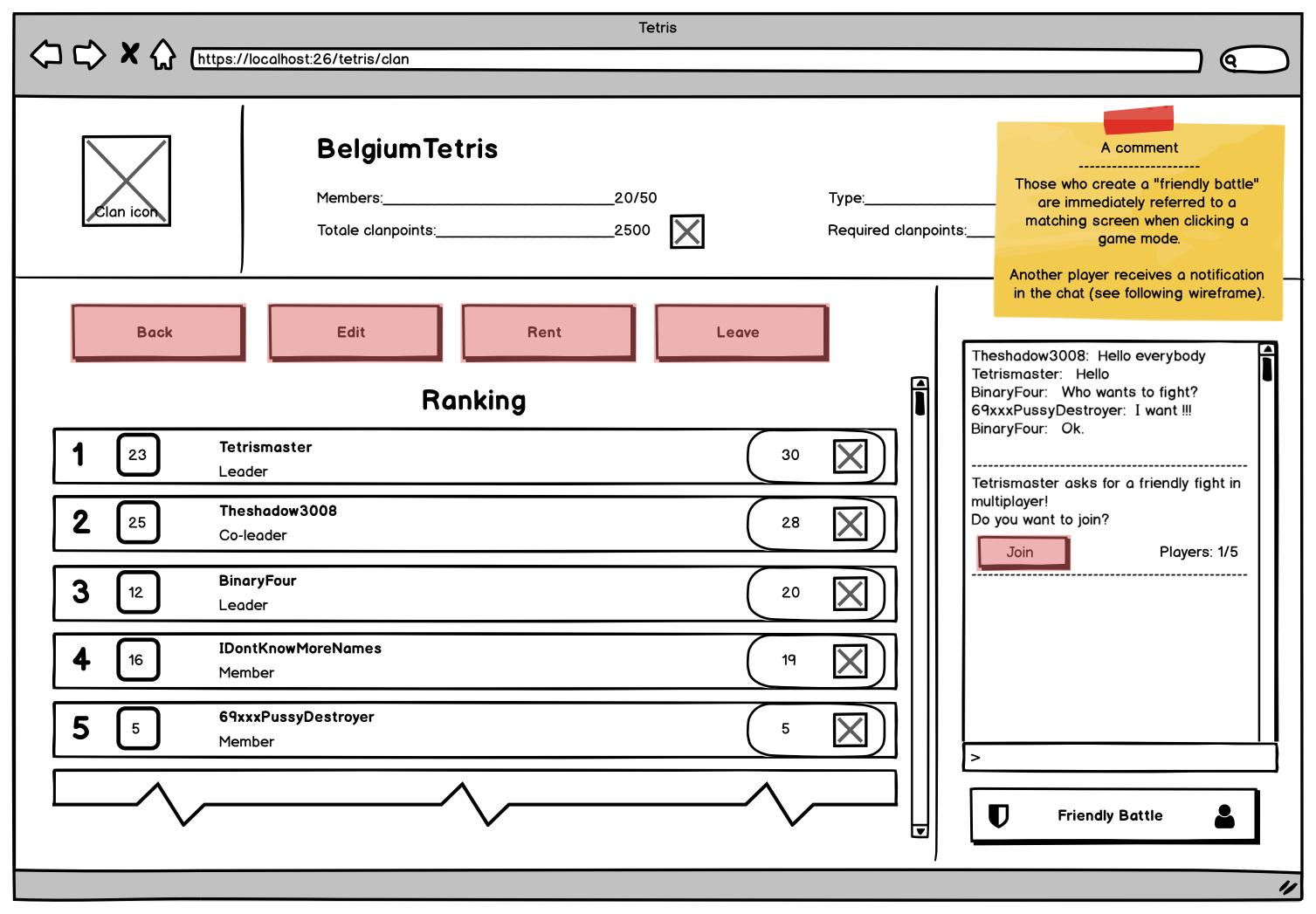
Back



Edit Clan



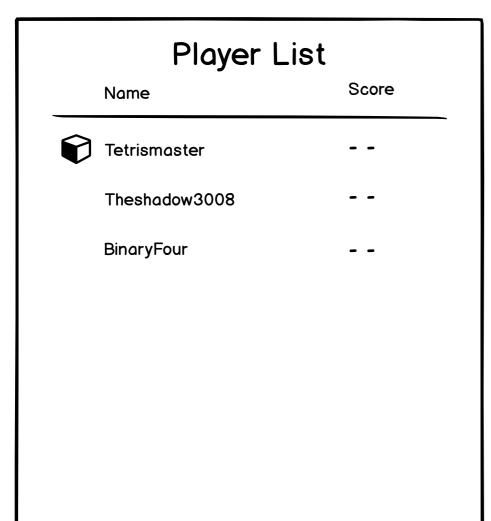
Save



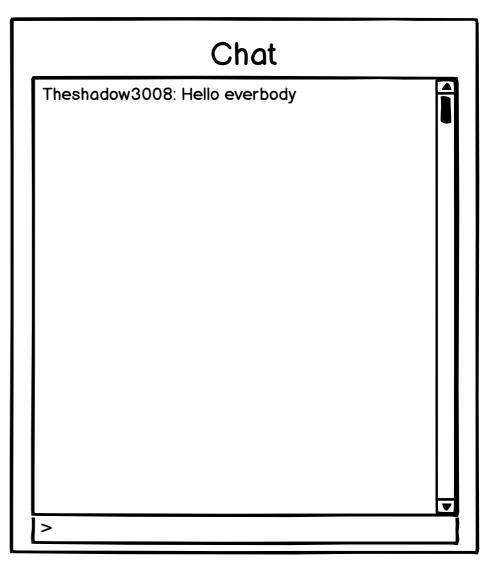








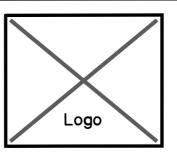
The owner of the session has a cubes behind his name







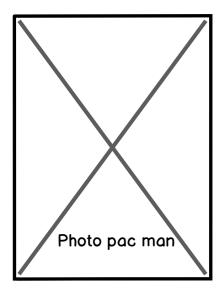




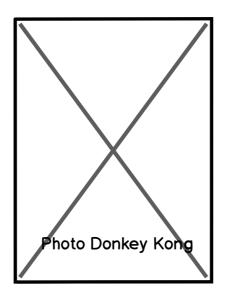
Choose a hero

COMMENTAAR

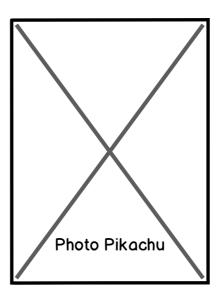
- -> When selecting a hero, a hover comes around the hero
- -> When a hero is selected, you can only click the "Play Game" button



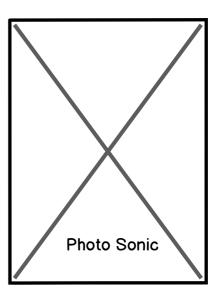
Pac man



Donkey Kong



Pikachu



Sonic

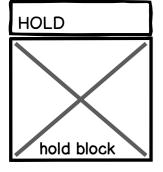
Back

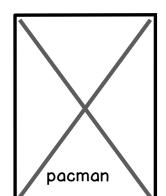
Play Game

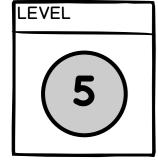


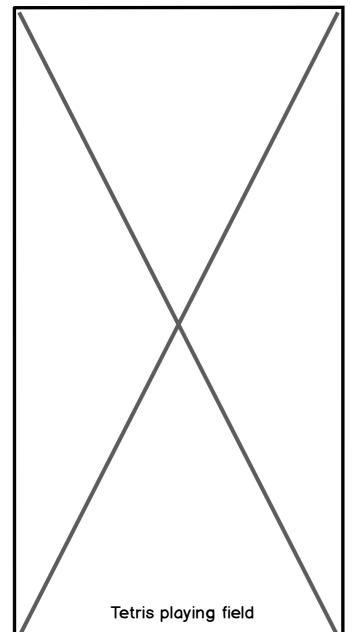


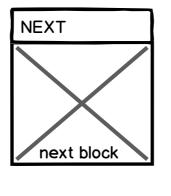


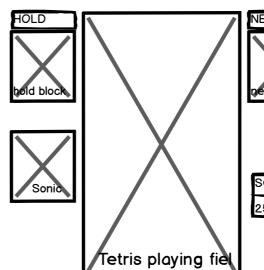




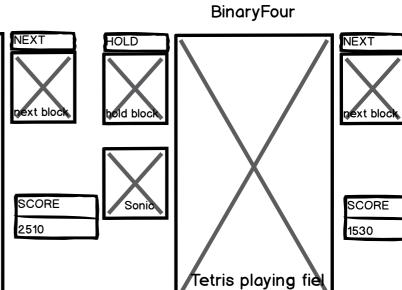


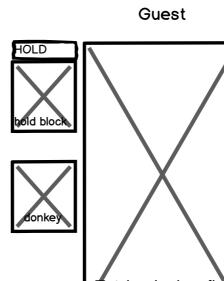


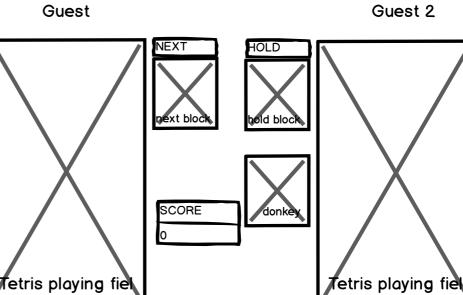


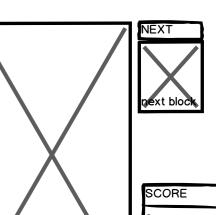


Theshadow3008









Pause

00:10:59

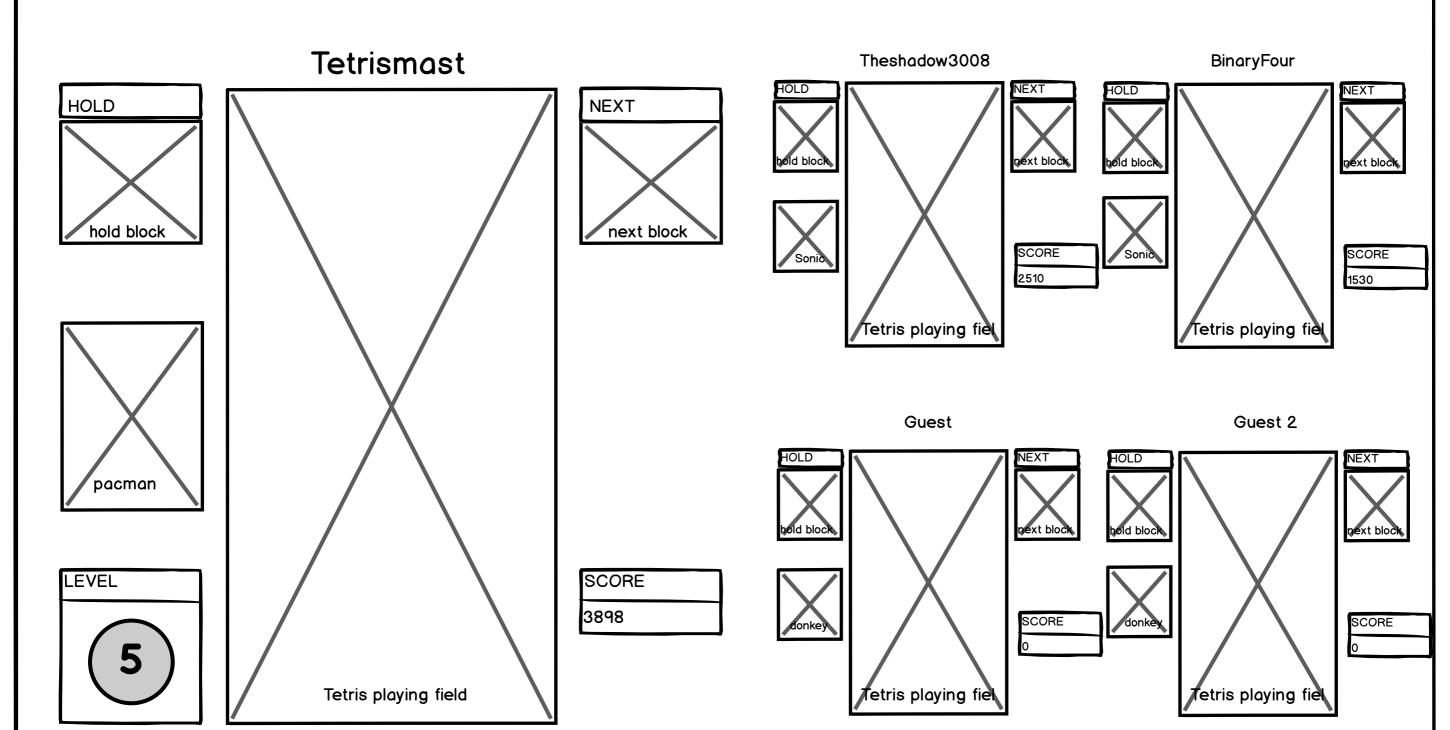
SCORE

3898

Friendly Battle







A pause has been requested by Tetrismaster. If you agree, press pause.

2/3

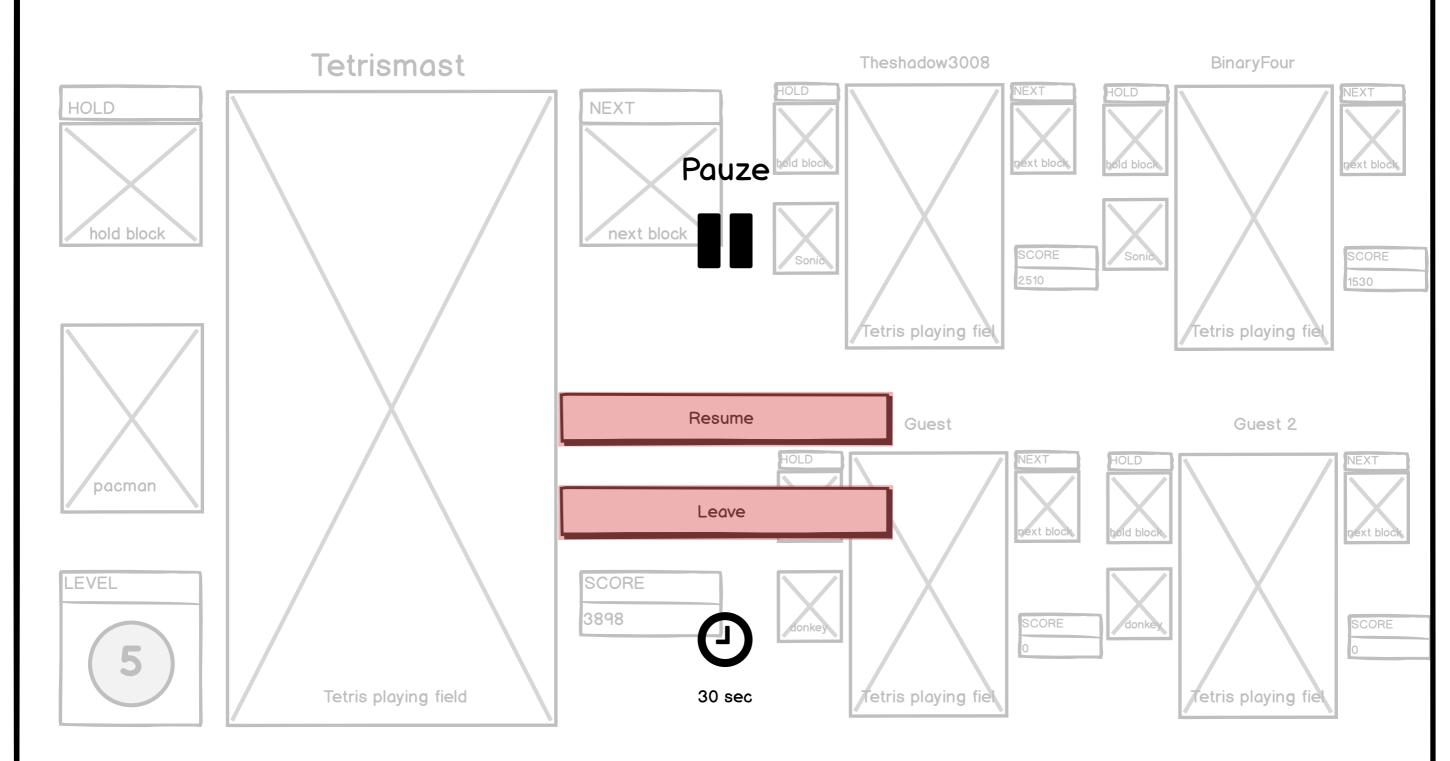
Pause

00:10:59

Friendly Battle







A pause has been requested by Tetrismaster. If you agree, press pause.

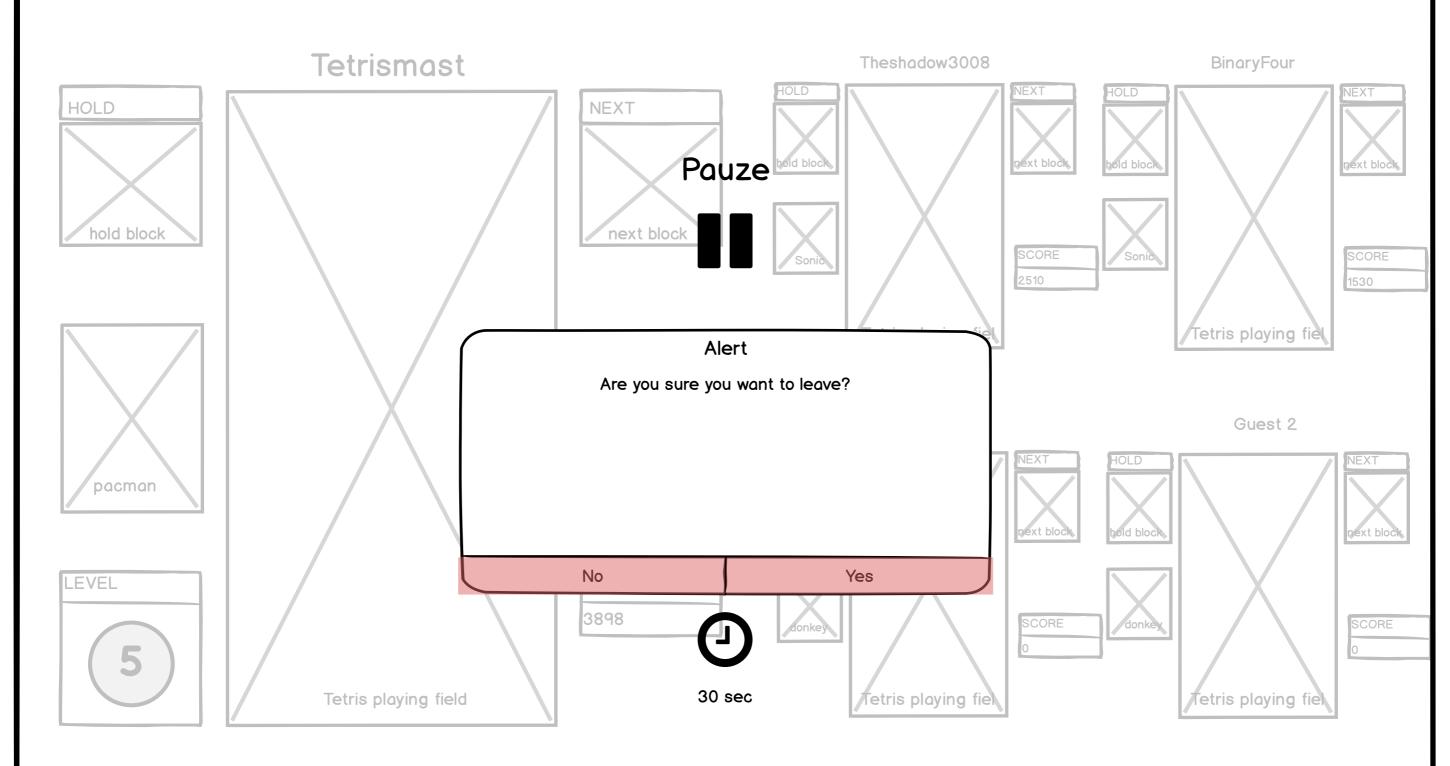
2/3

Pause 00:10:59 Friendly Battle







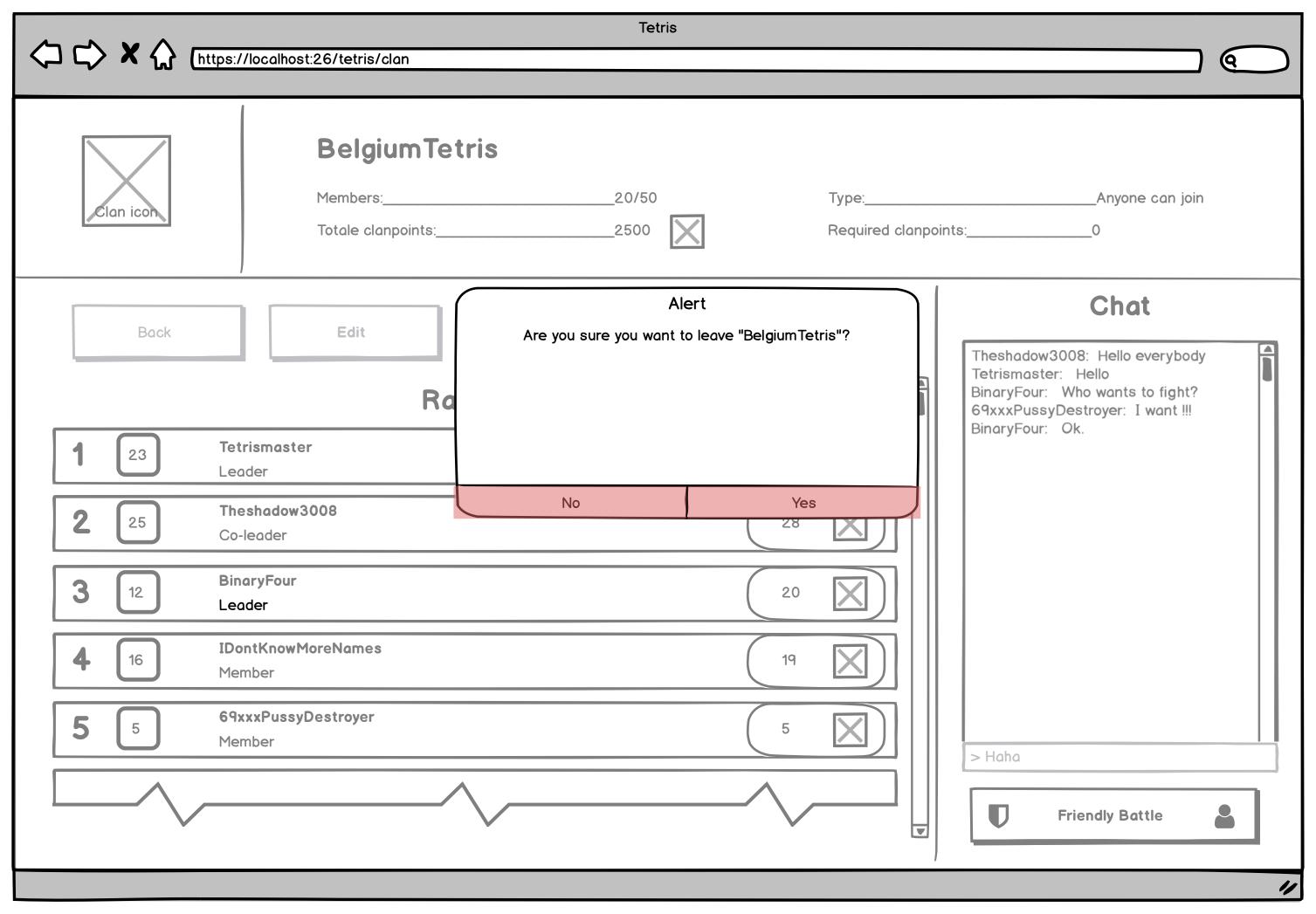


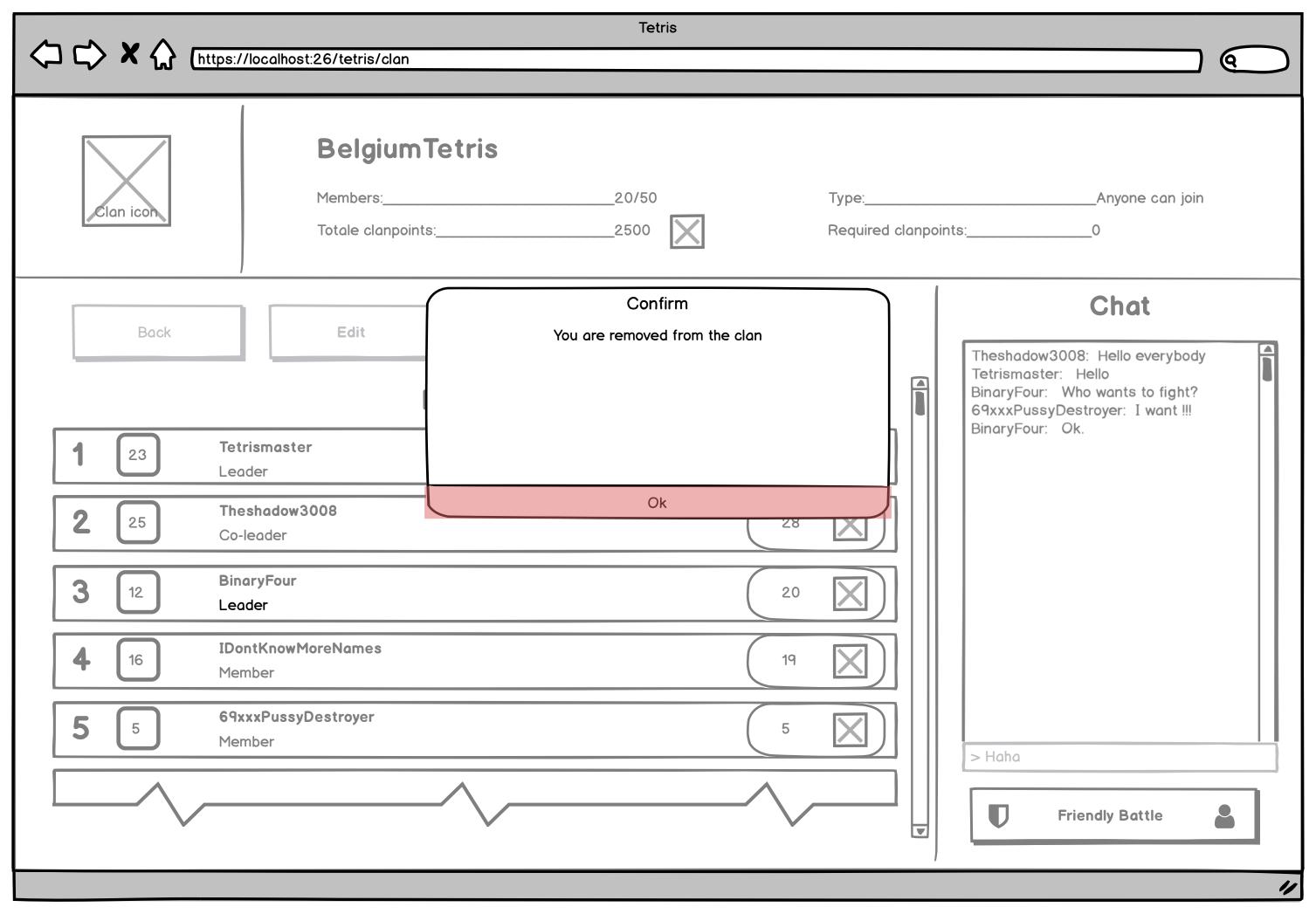
A pause has been requested by Tetrismaster. If you agree, press pause.

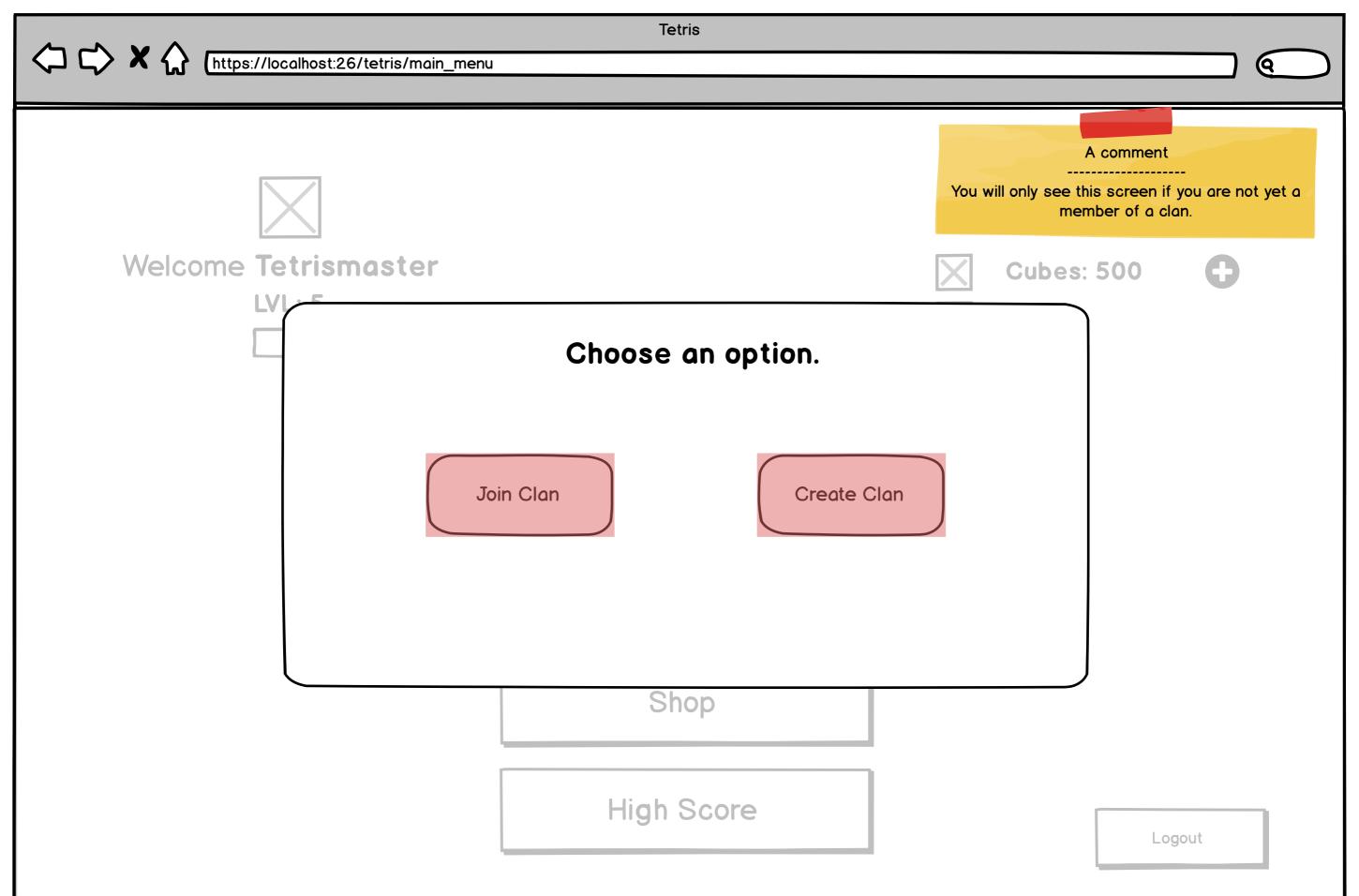
2/3

Pause 00:10:59 Friendly Battle











Create Clan

Clan name:

Belgium Tetris

Clan icon:



Clan type:

< Anyone can join >

Minimum Clanpoints to join:

(0)

Back

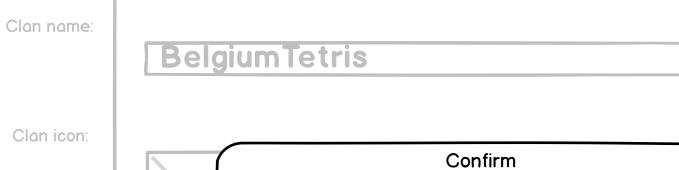
Create clan







Create Clan



The clan "BelgiumTetris" has been created Clan id Ok

Anyone can join >

Minimum Clanpoints to join:

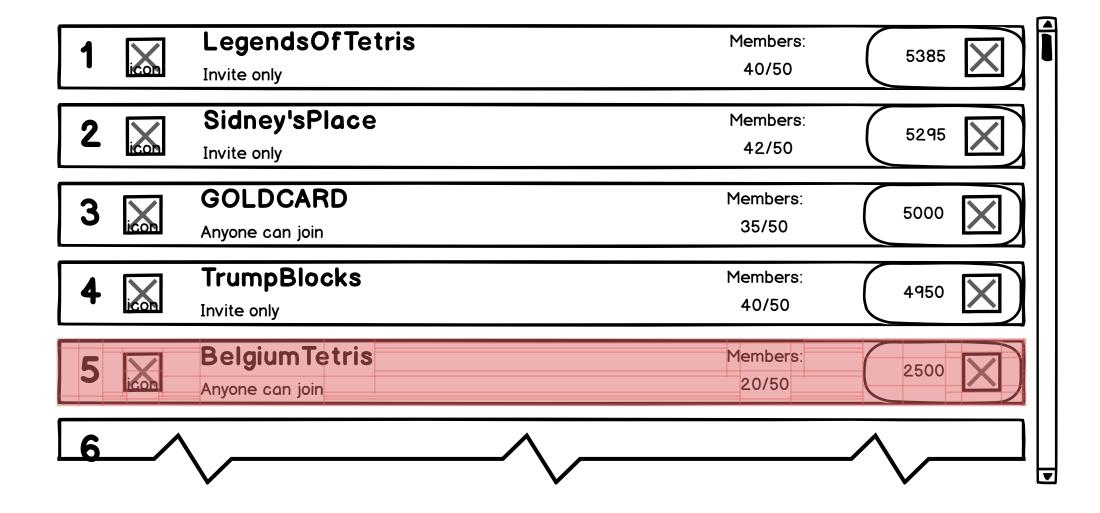
Clan type:

Back

Create clan



Join a Clan



Clan name:

Q vb: TetrisBelgië

Back

