

LE FONCTIONNEL PAR LA PRATIQUE LIVE CODING D'UN JEU WEB

QUENTIN DUVAL @quduval
GUILLAUME EVEILLARD @GuillaumeEveill

PROTAGONISTES

QUENTIN

6 ans à Murex

C++ le jour

Haskell & Clojure

OBJECTIF

LIVE CODER

NE PAS SE PLANTER

PROTAGONISTES

GUILLAUME

5 ans à Murex

JAVA le jour

Cherche son langage

OBJECTIF

MEUBLER

PENDANT LES BUGS

CLOJURE (SCRIPT)

(((LISP)))

Functional

JVM: Clojure

JS: ClojureScript



40 min de Talk

5 min Q/R





CLOJURE

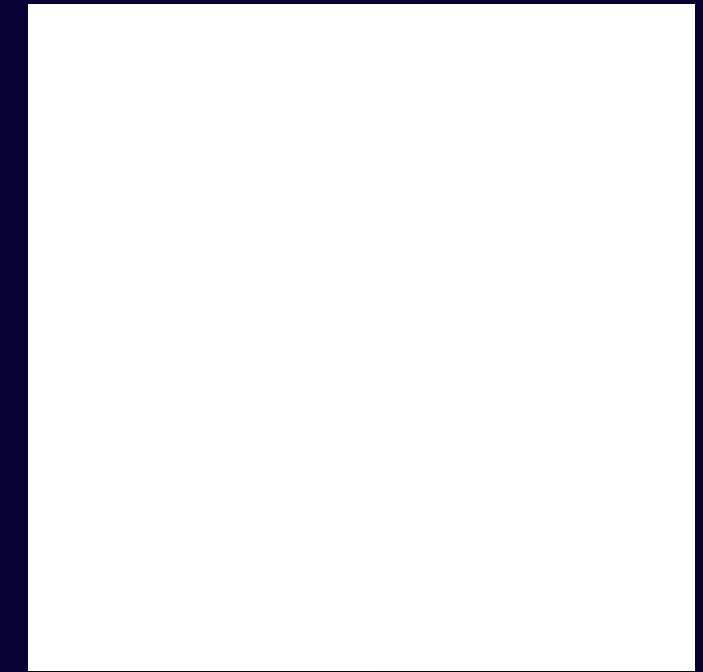
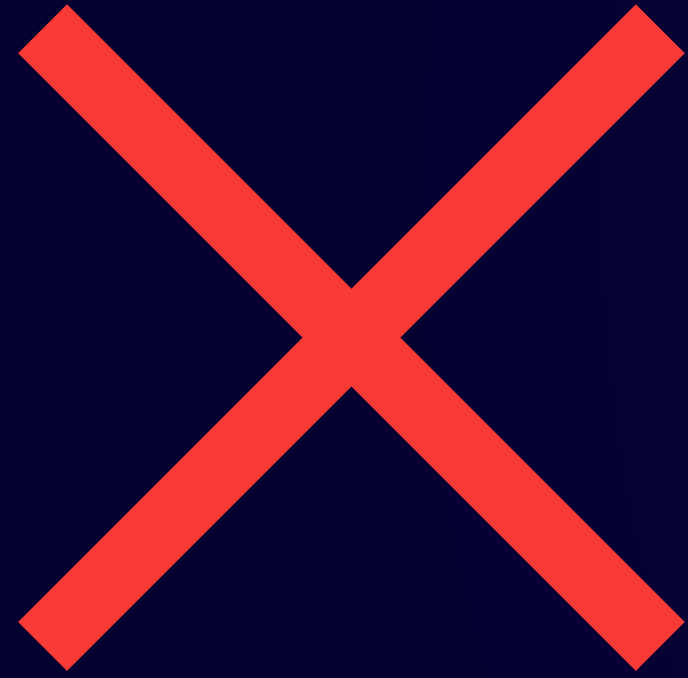
CLOJURE

DEMO REPL

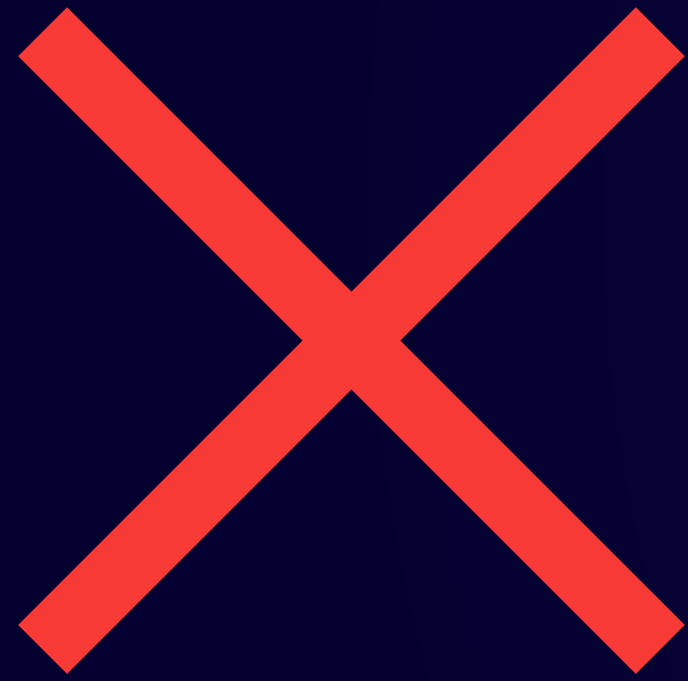


TACTACTOE

OWNER



OWNER



:owner/cross

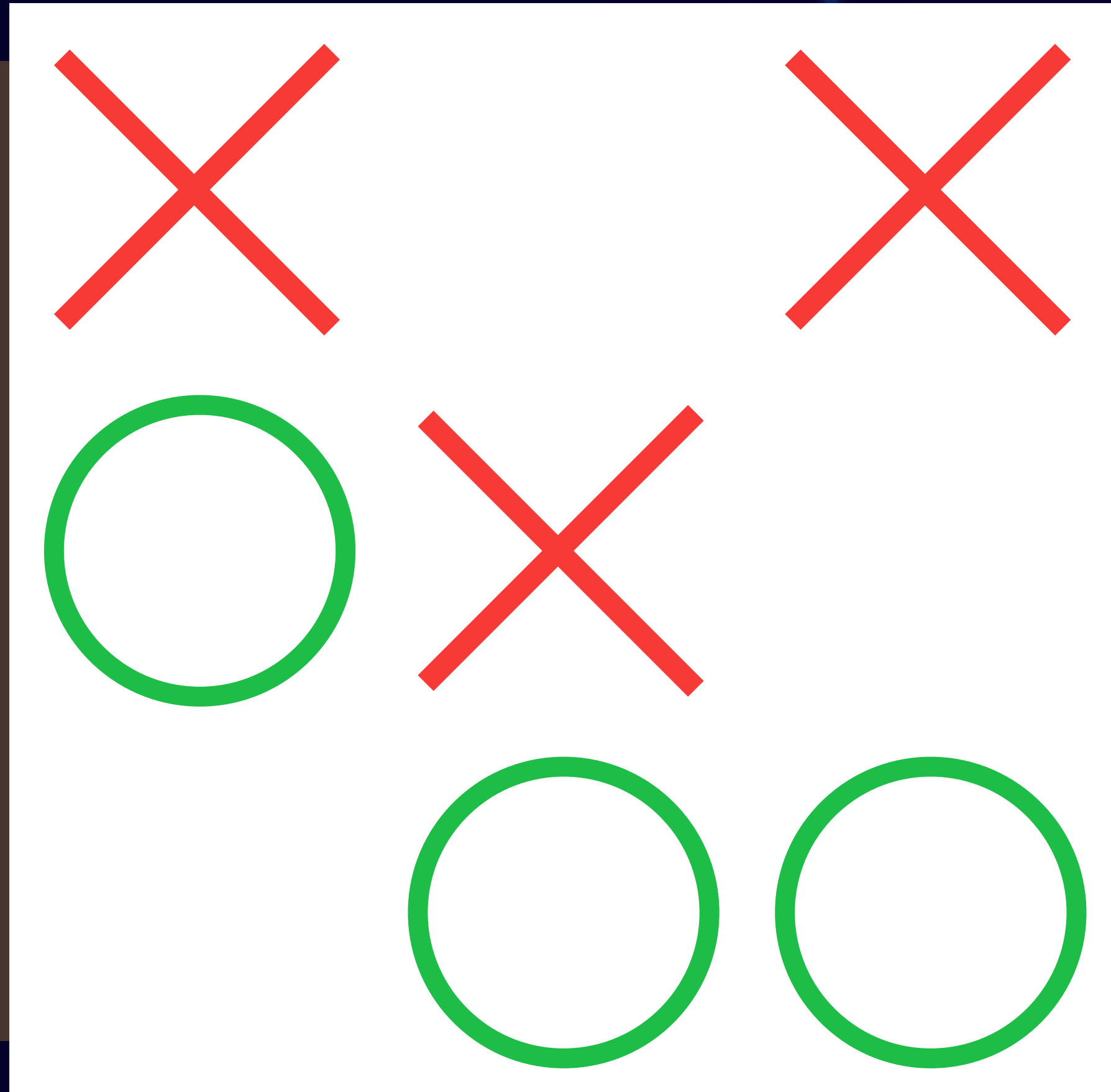


:owner/circle

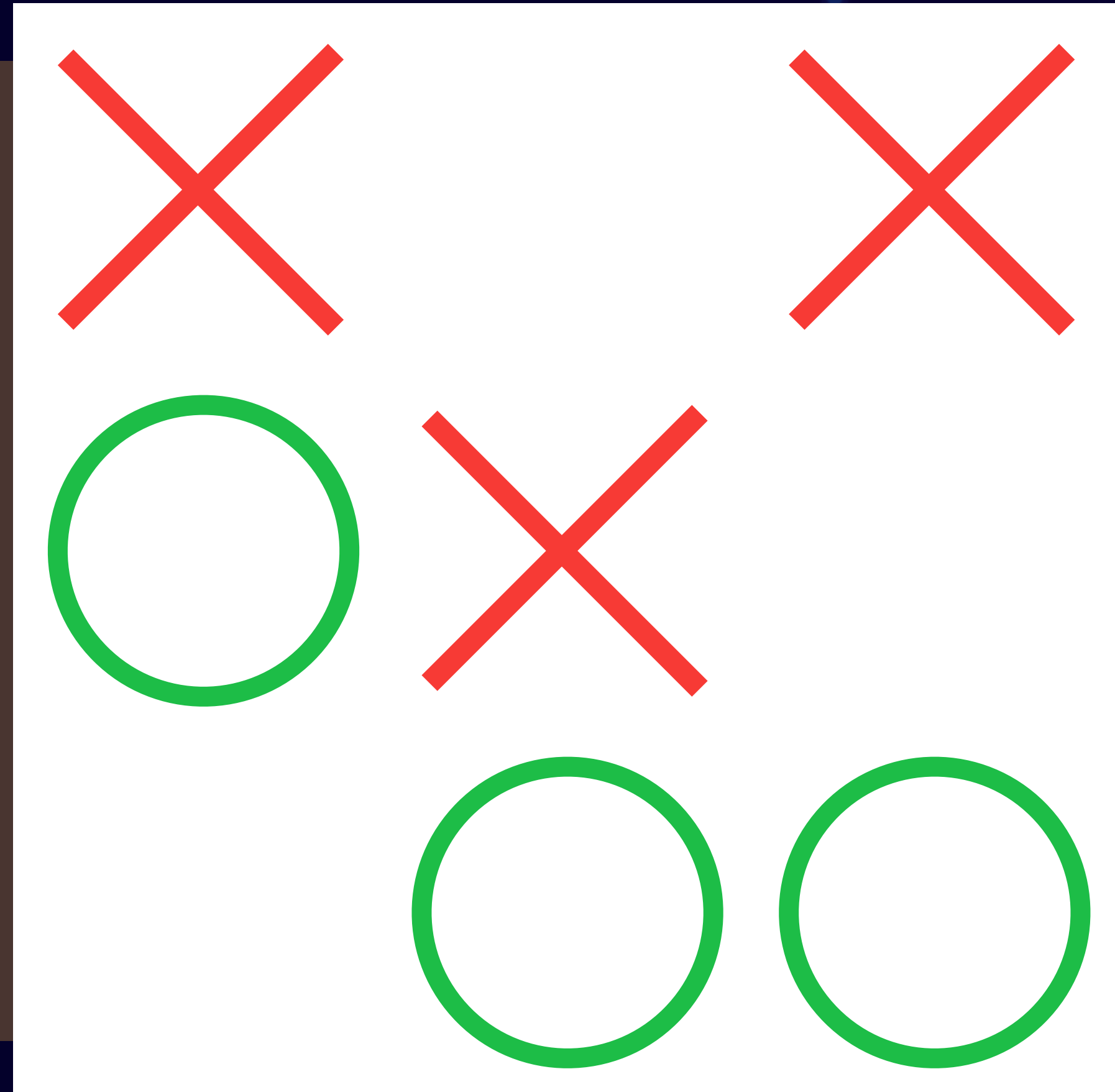


:owner/none

BOARD

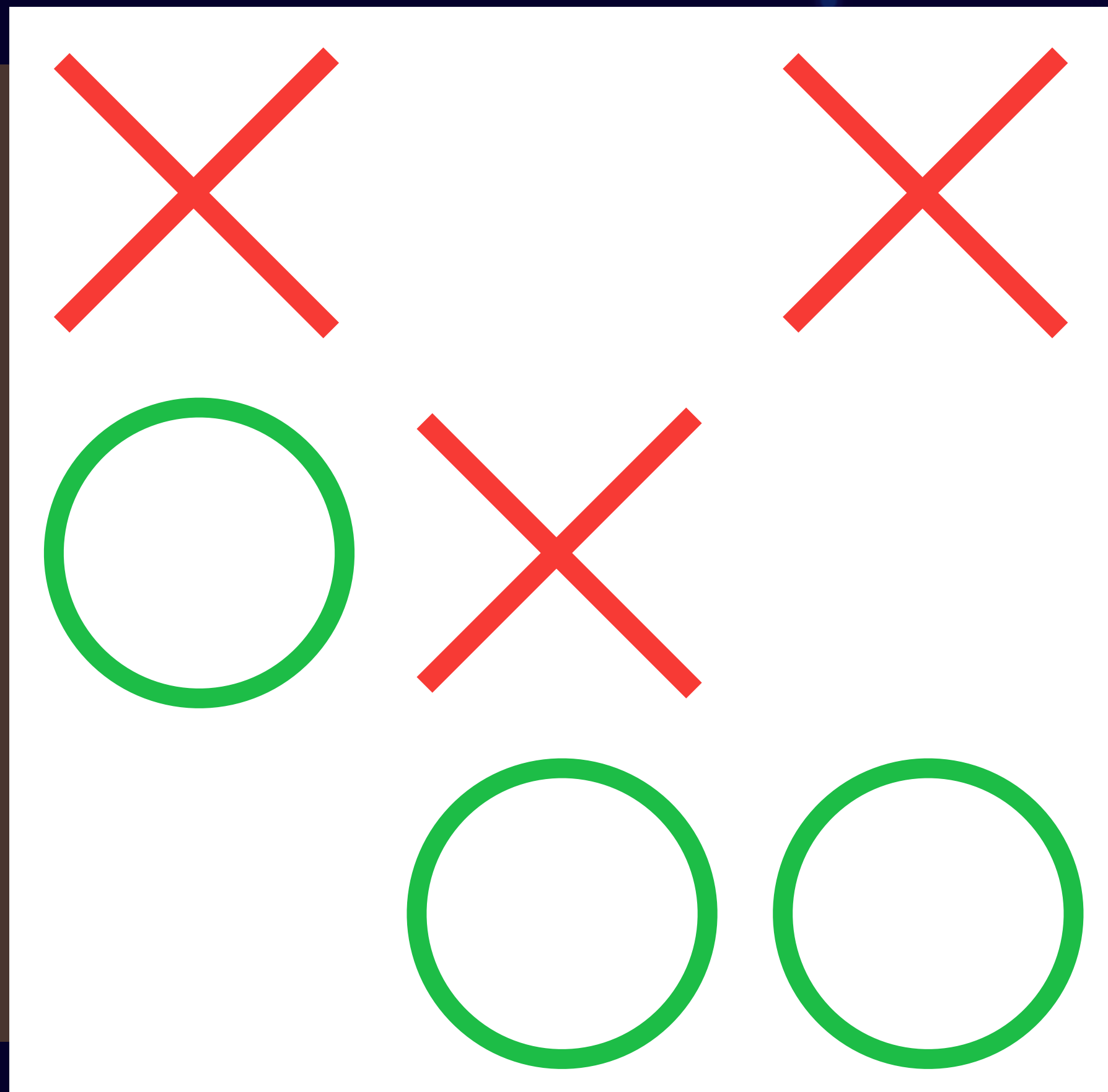


BOARD



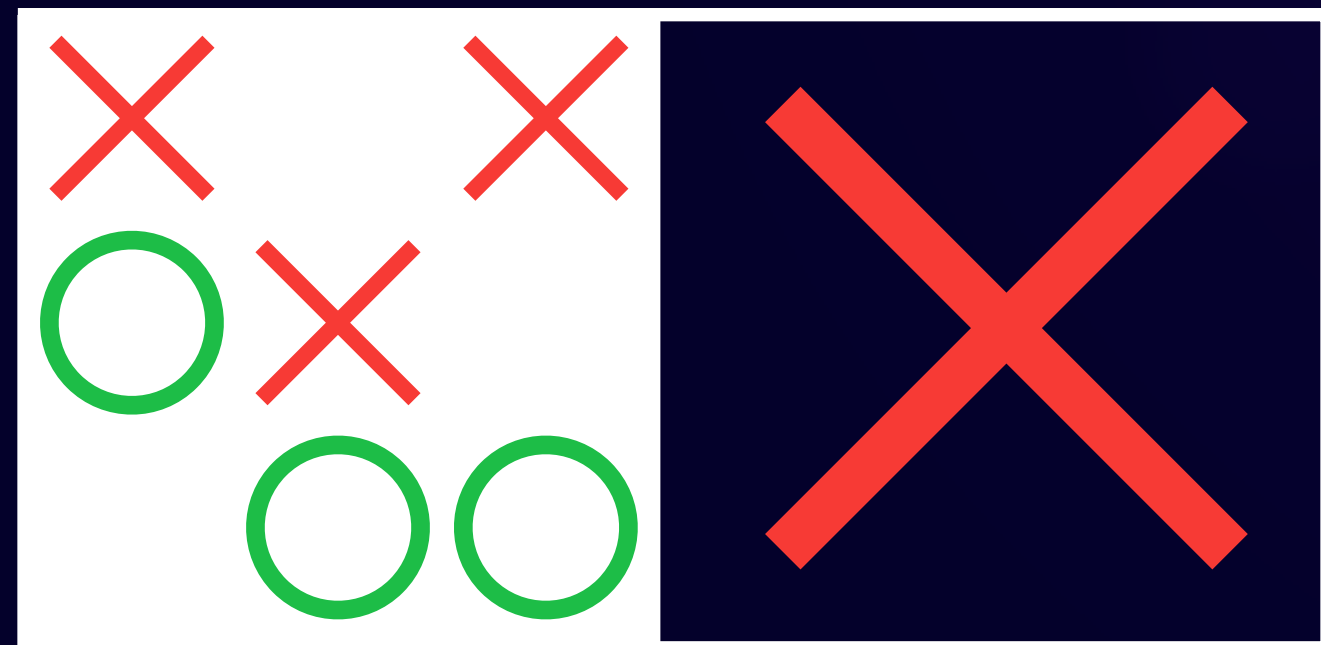
```
{ [0 0] :owner/cross  
  [1 0] :owner/circle  
  [2 0] :owner/none  
  ... }
```

TURN

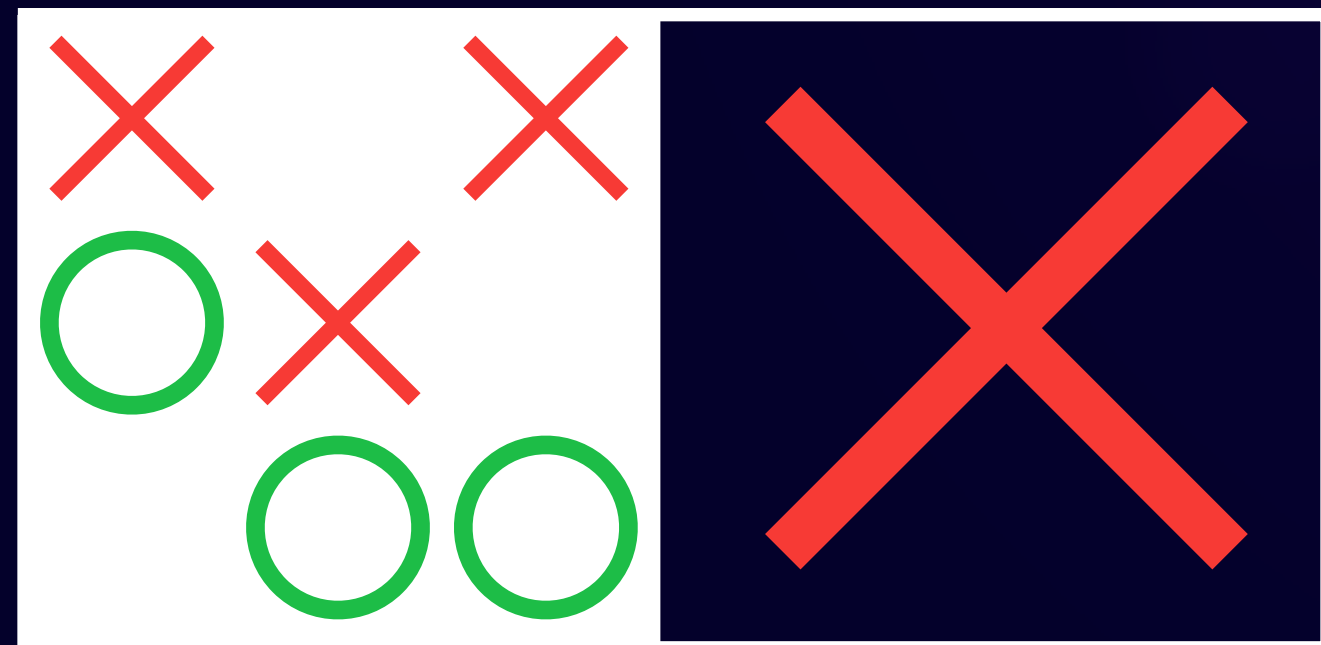
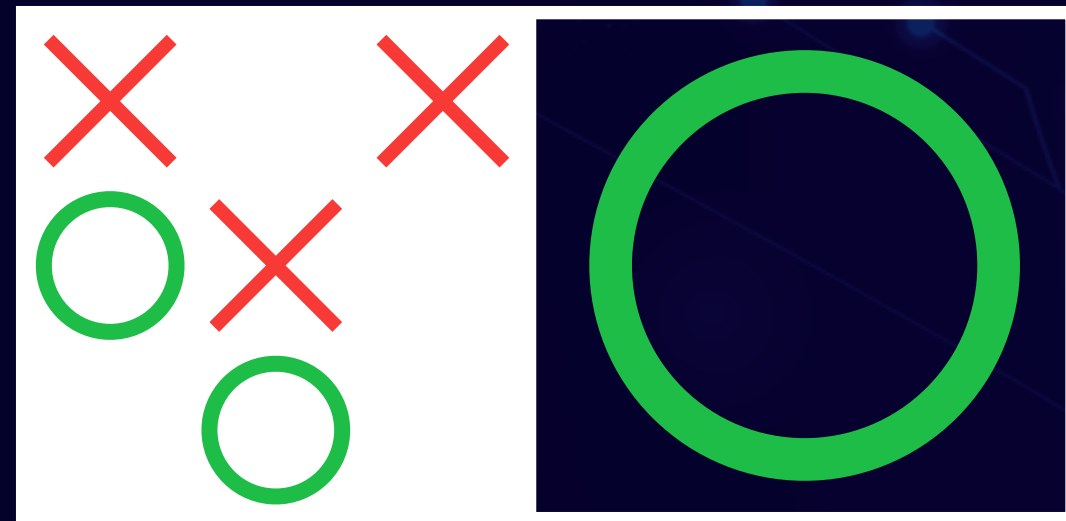


```
{ :board ...  
  :player ... }
```


GAME



GAME



[turn-0

turn-1

...

previous-turn

current-turn]

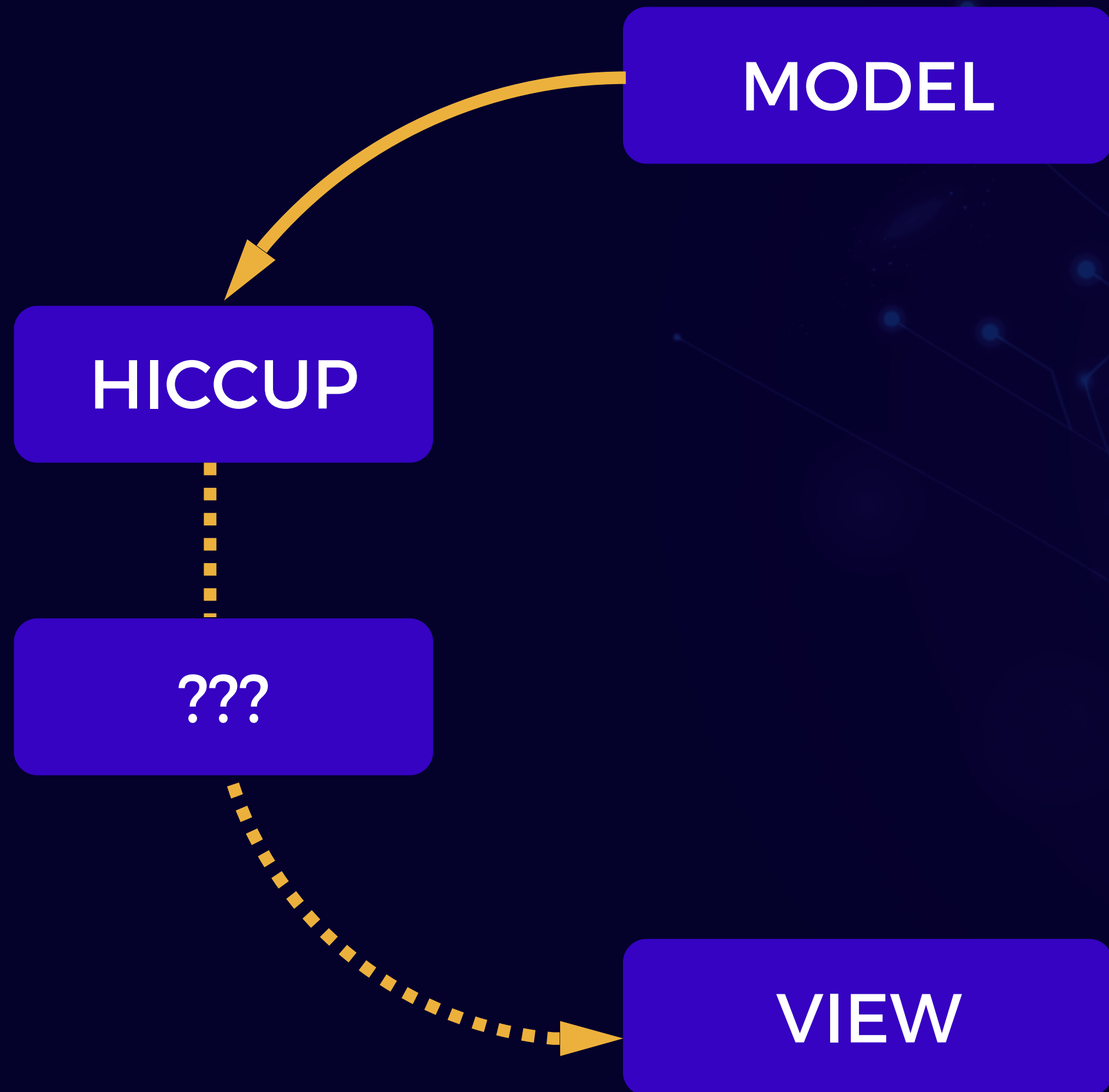
DESIGN

MODEL

VIEW



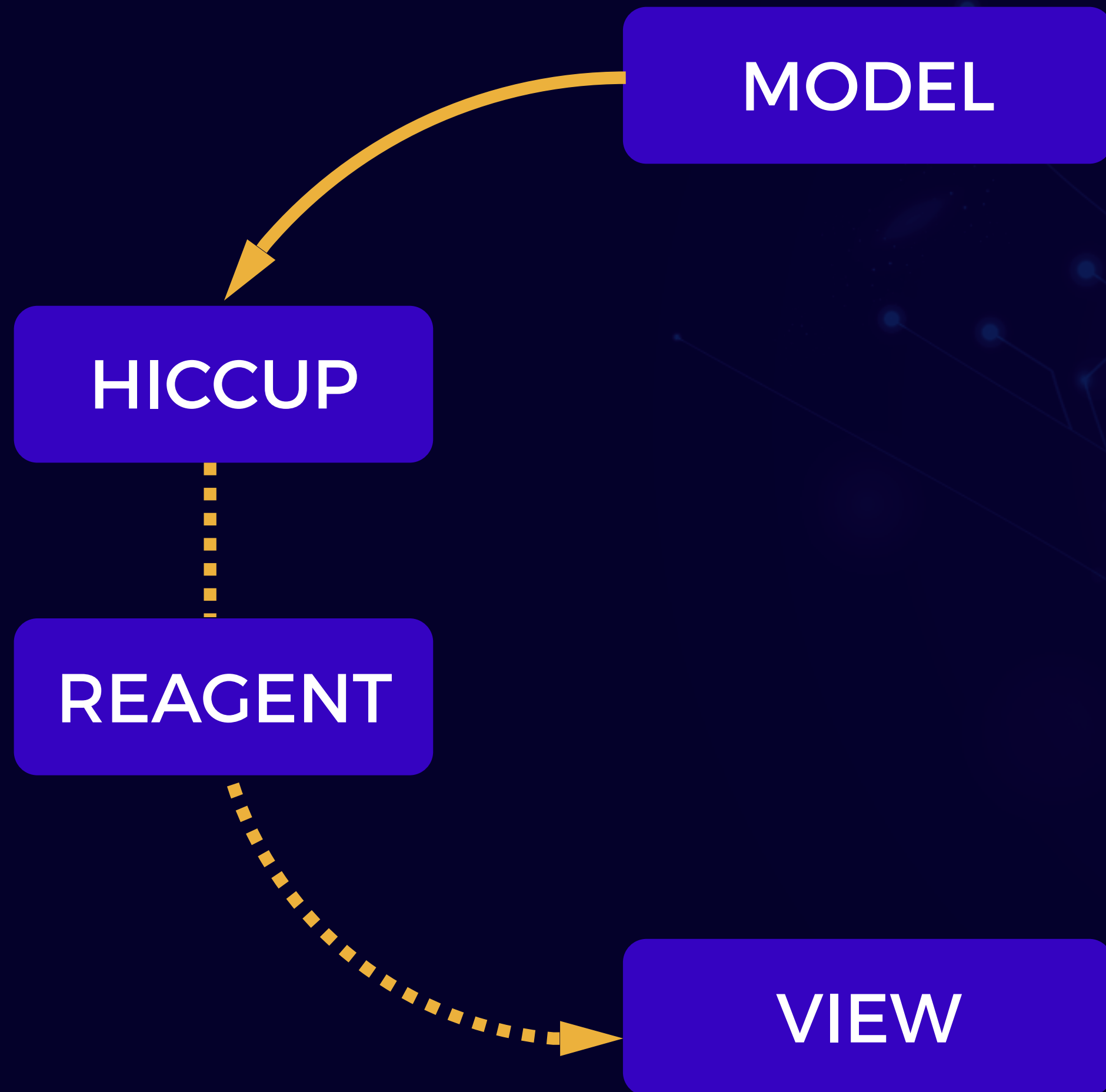
DESIGN



LIVE CODE

LIVE CODE

REAGENT



SURCOUCHE **SUR REACT**

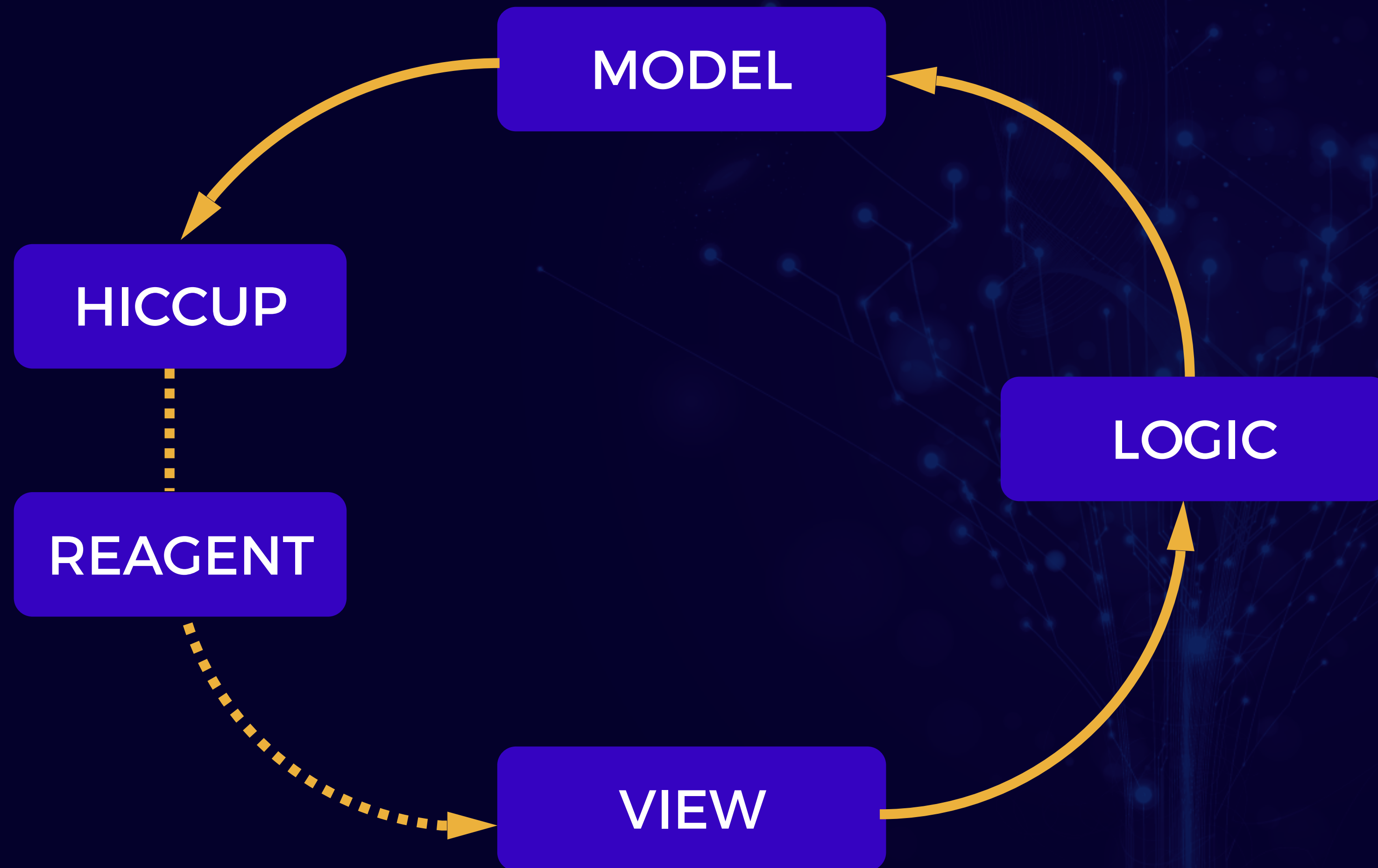
INTÉGRÉ **DANS LE LANGUAGE**

PAS DE **TEMPLATING**

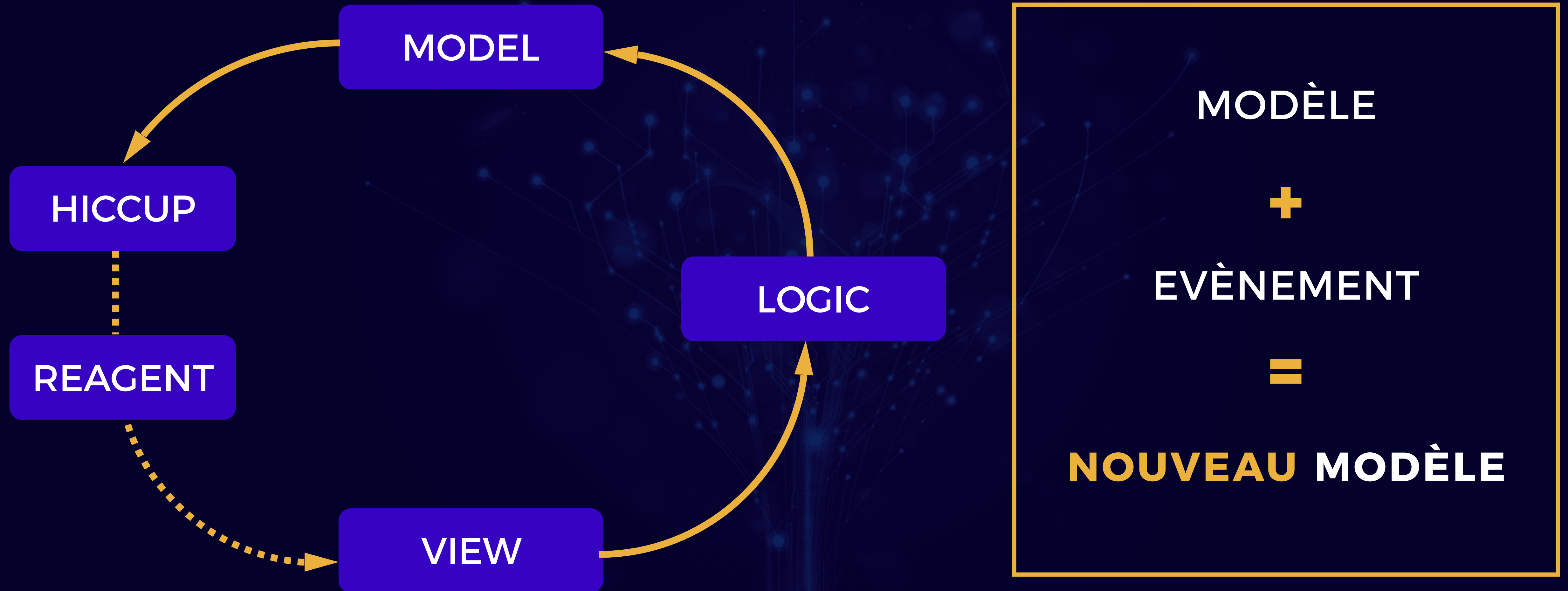
LIVE CODE

LIVE CODE

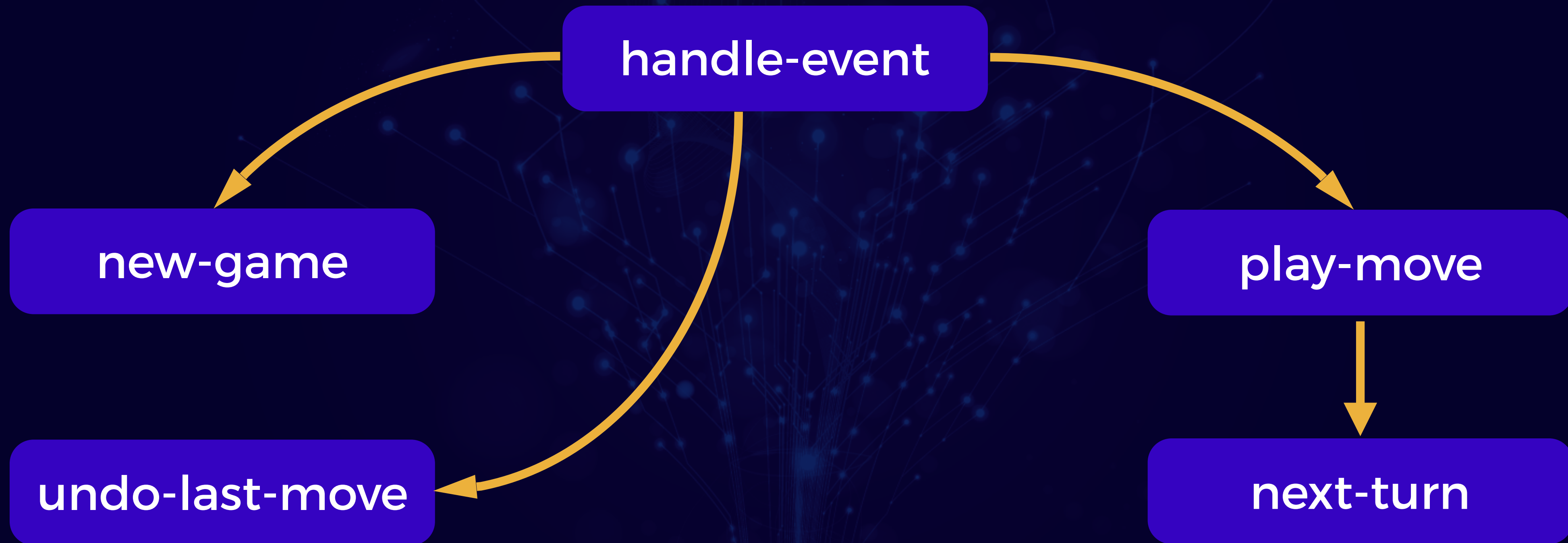
DESIGN



DESIGN



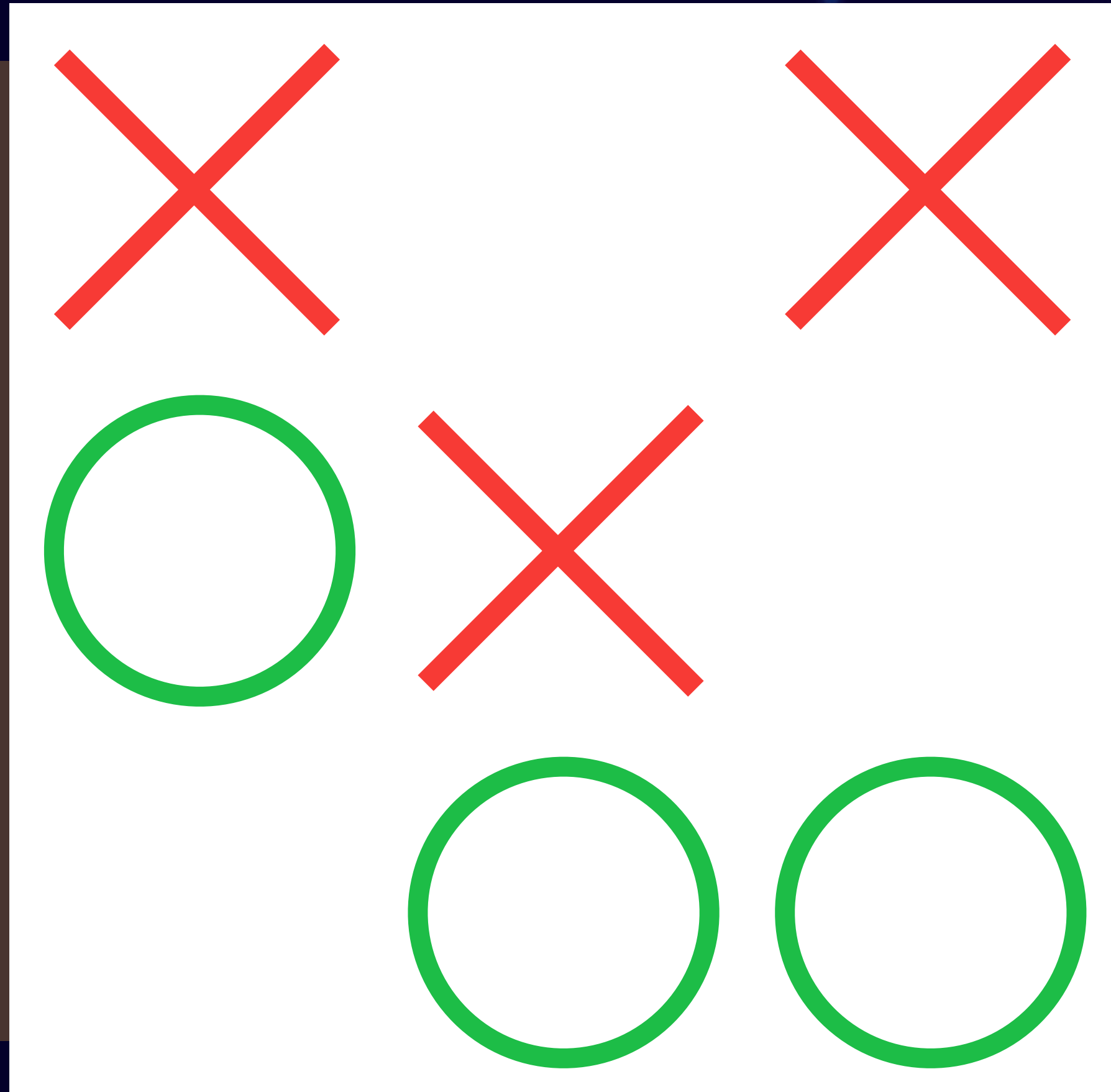
DESIGN



LIVE CODE

LIVE CODE

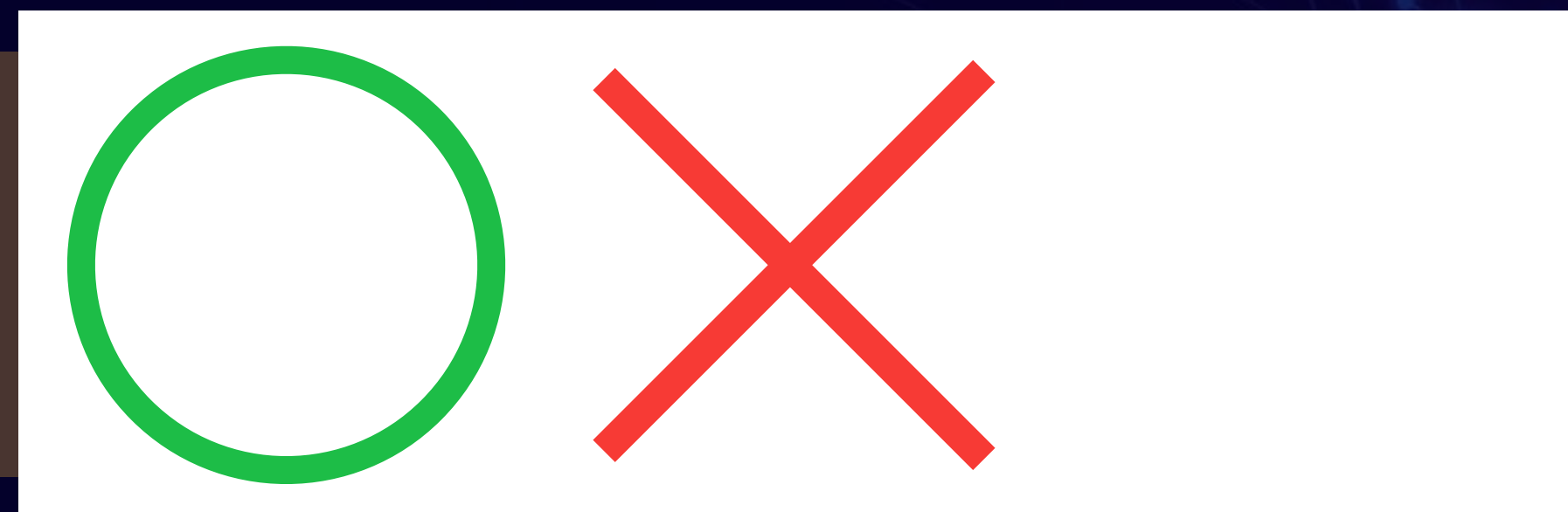
CONDITIONS DE VICTOIRE



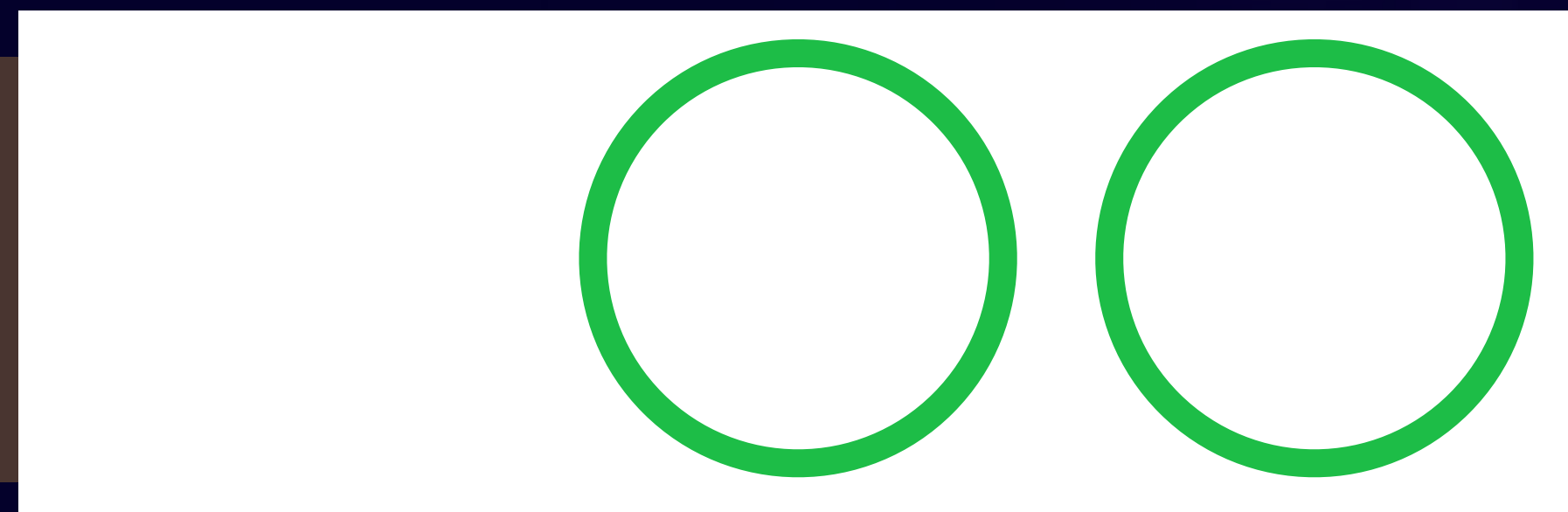
CONDITIONS DE VICTOIRE



$[[0\ 0]\ [0\ 1]\ [0\ 2]]$

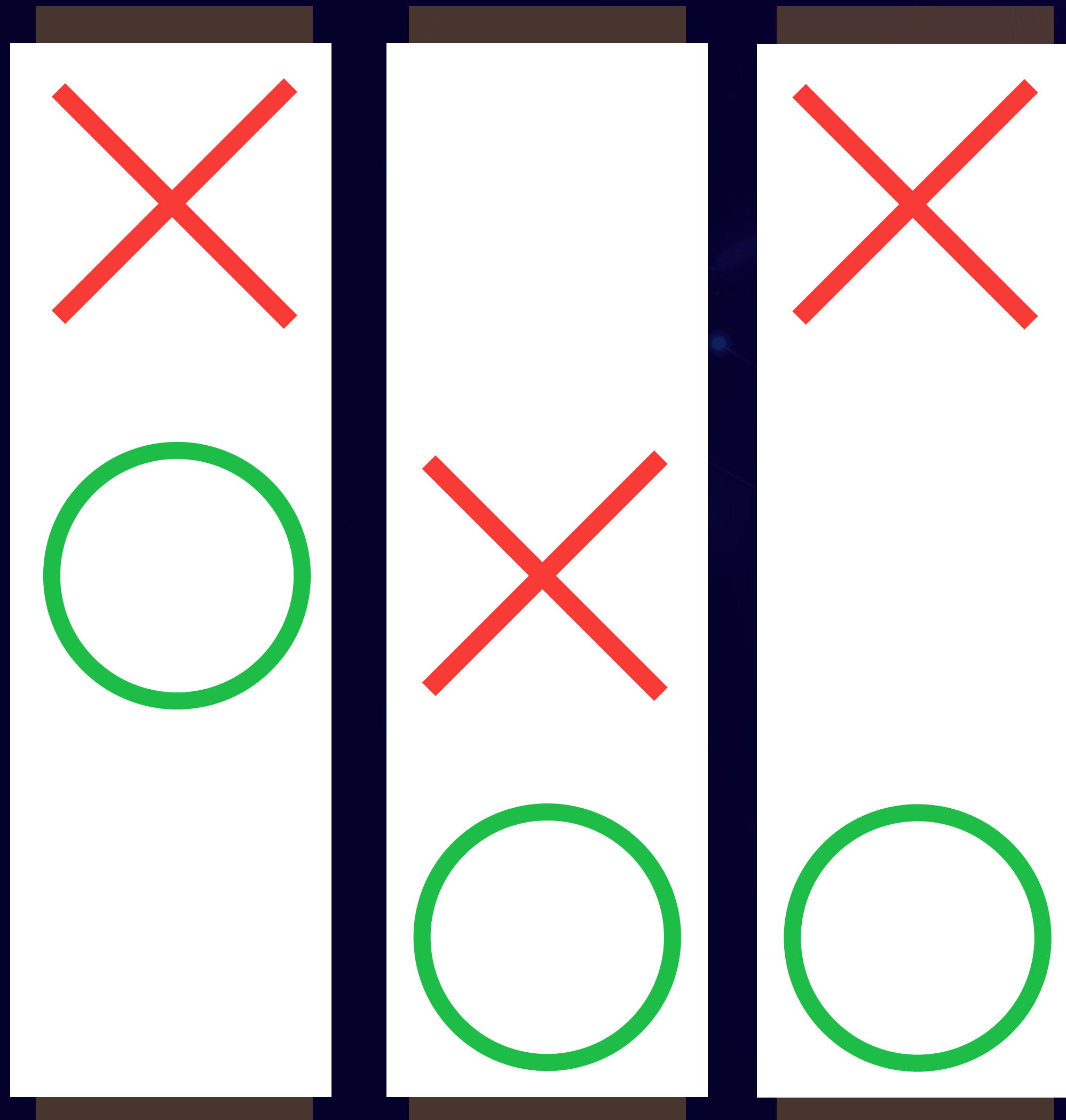


$[[1\ 0]\ [1\ 1]\ [1\ 2]]$



$[[2\ 0]\ [2\ 1]\ [2\ 2]]$

CONDITIONS DE VICTOIRE

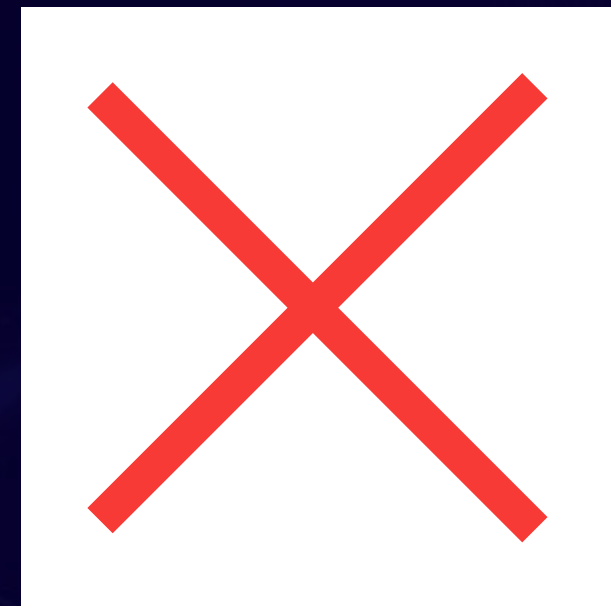
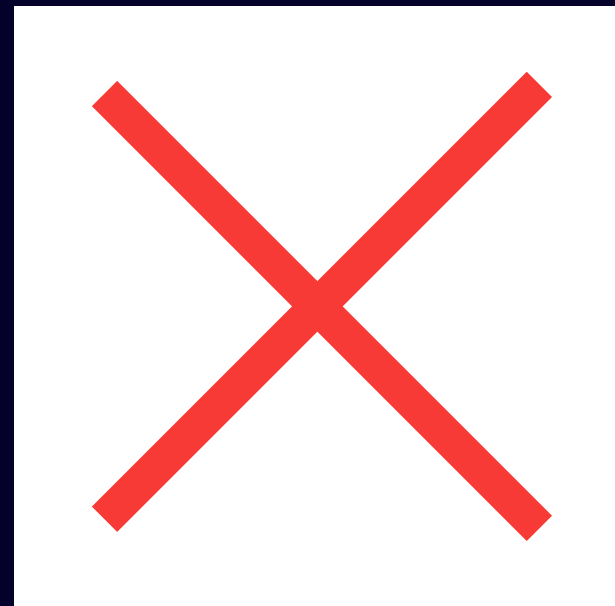


$[[0\ 0]\ [1\ 0]\ [2\ 0]]$

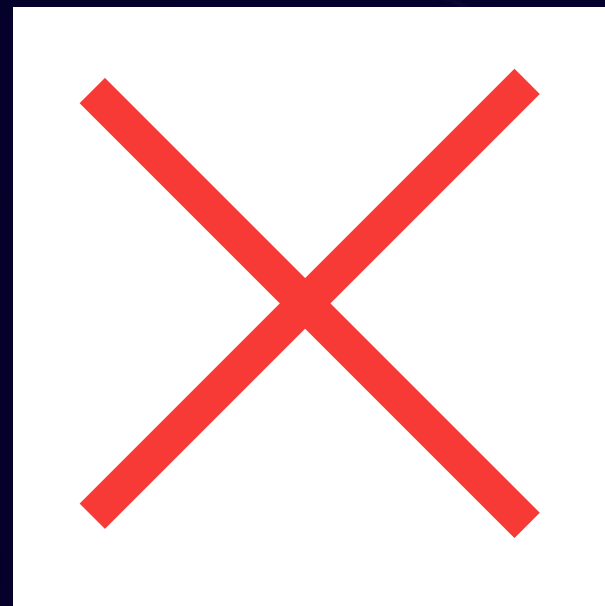
$[[0\ 1]\ [1\ 1]\ [2\ 1]]$

$[[0\ 2]\ [1\ 2]\ [2\ 2]]$

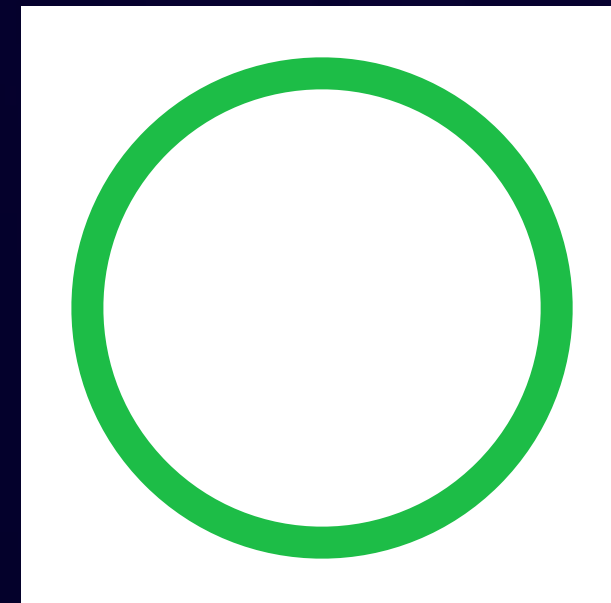
CONDITIONS DE VICTOIRE



$[[0\ 0]\ [1\ 1]\ [2\ 2]]$



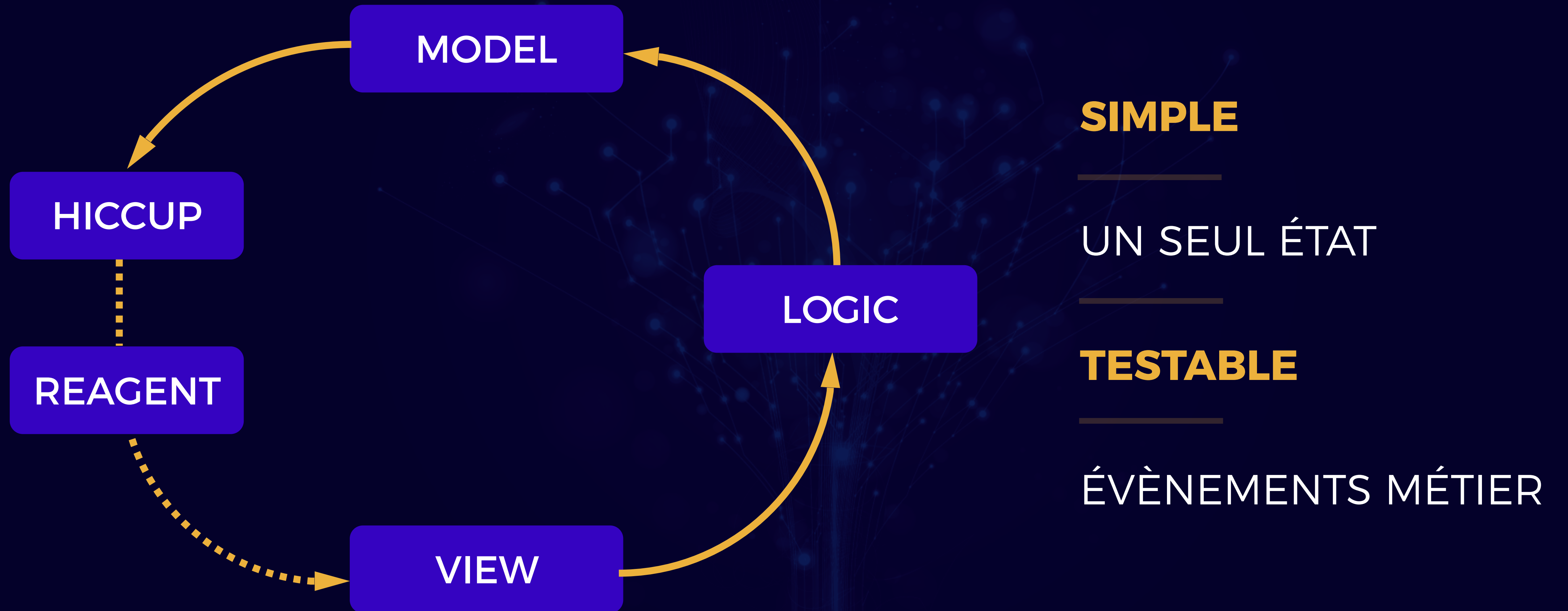
$[[0\ 2]\ [1\ 1]\ [2\ 0]]$



LIVE CODE

LIVE CODE

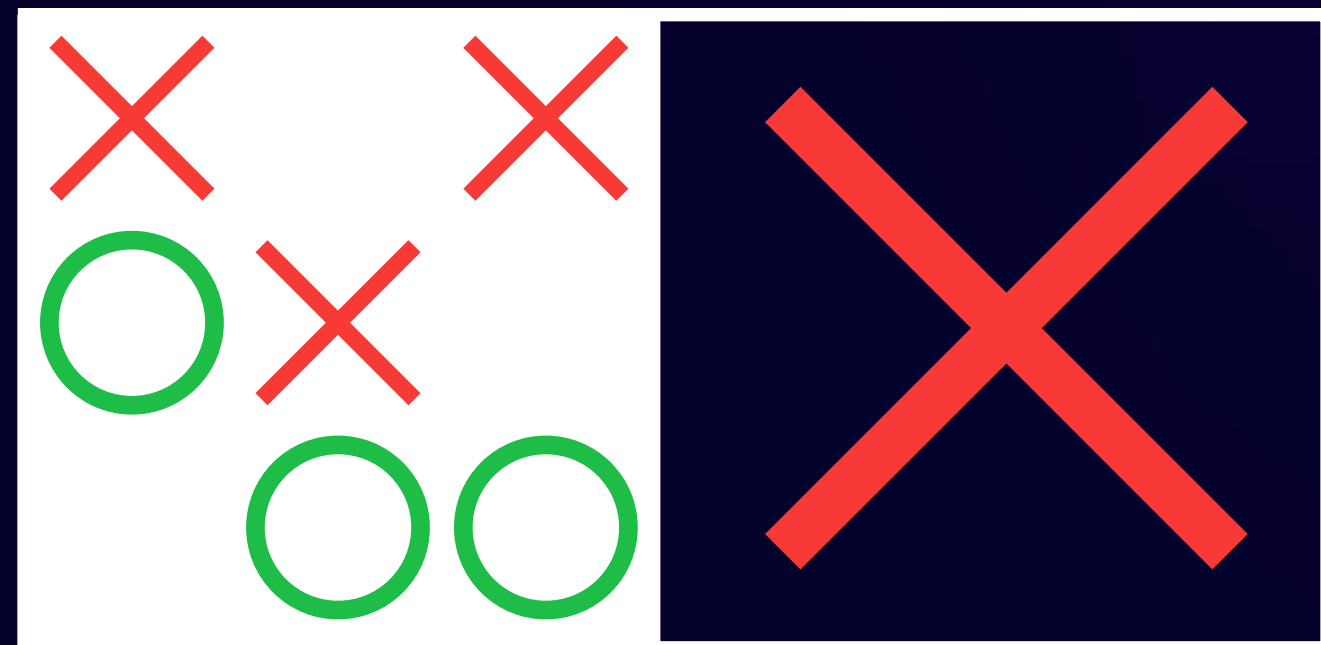
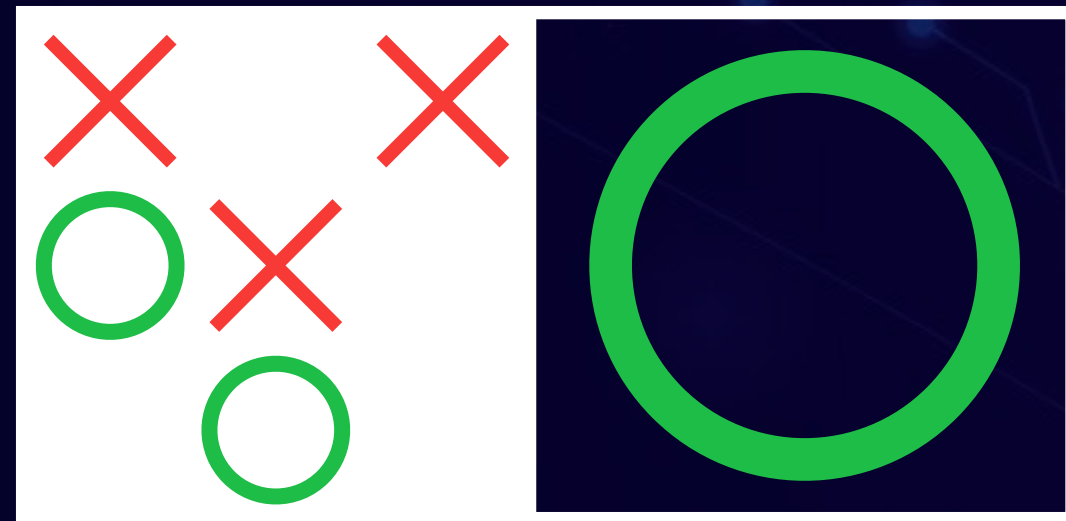
DESIGN





LE CTRL-Z

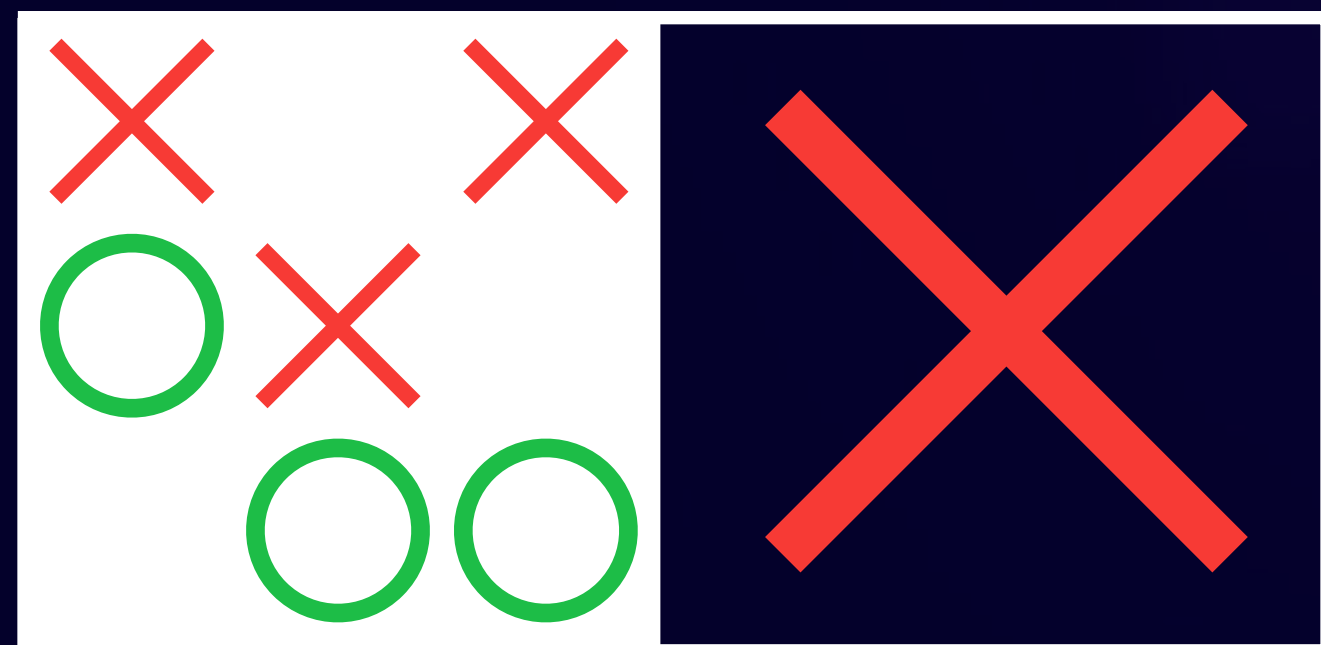
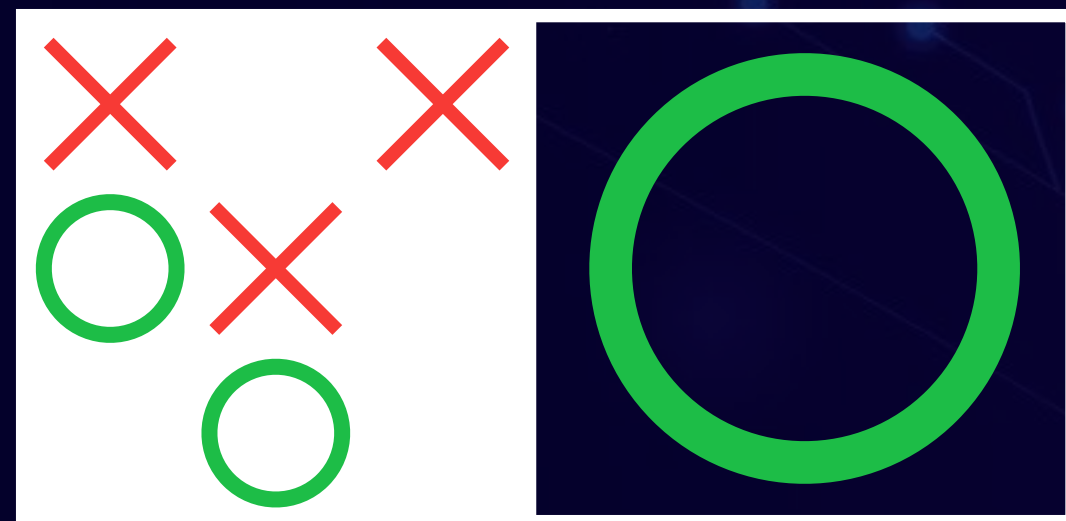
ETAT = SUCCESSION DE VALEURS



LIVE CODE

LIVE CODE

ETAT = SUCCESSION DE VALEURS



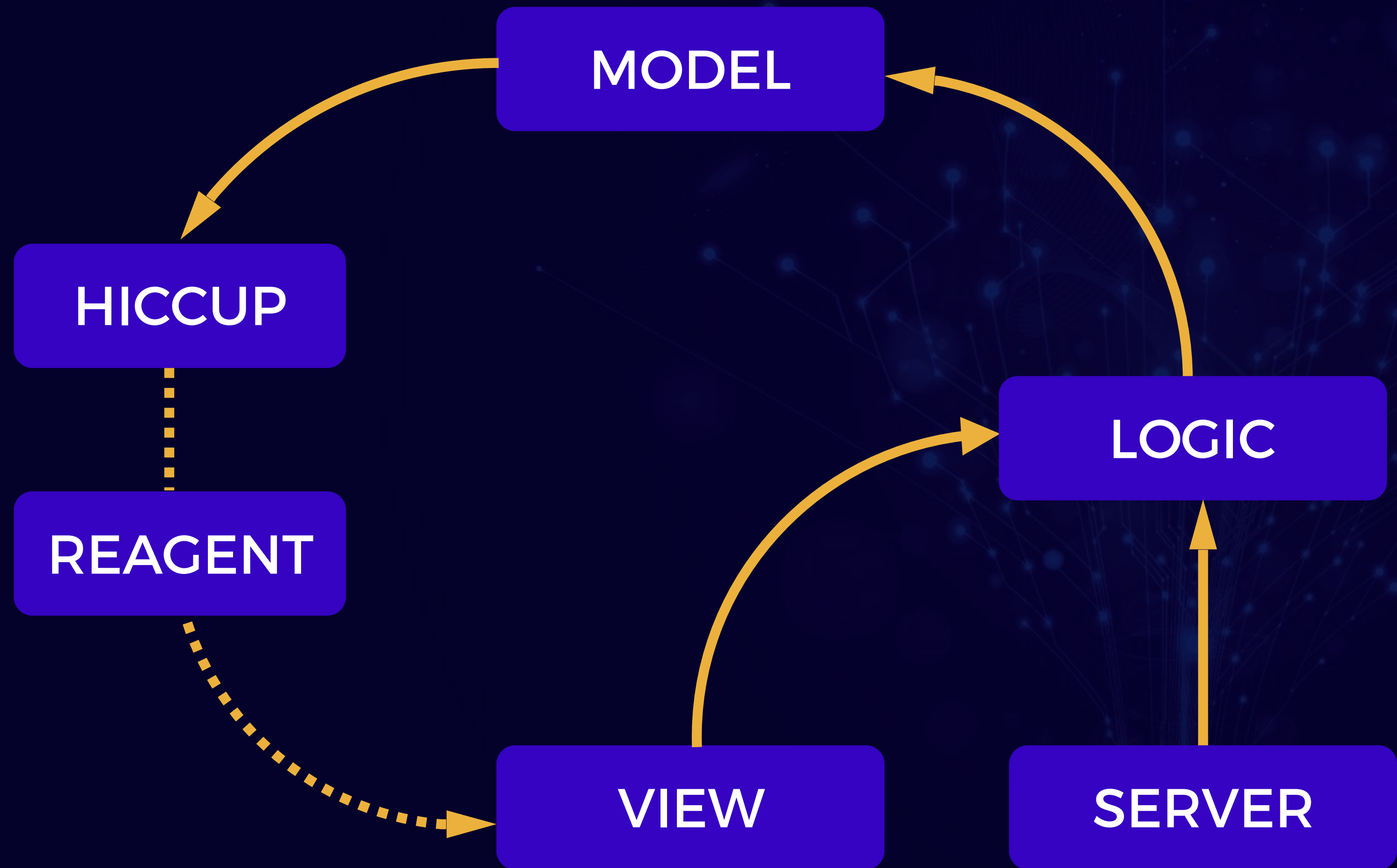
UNE CATÉGORIE ENTIÈRE
DE PROBLÈMES EN MOINS

REJOUABLE

OBSERVABLE

EFFICIENT

UN PATTERN EFFICACE



ÉVÈNEMENT SERVEUR

DÉCOUPLÉ
DE LA SOURCE

SCALABLE

THREAD-SAFE

LE FONCTIONNEL C'EST...



ACCESSIBLE
ET CONCRET



SIMPLE
ET EFFICACE



CARREMENT
JOUISSIF



SOURCE
D'INSPIRATION

MERCI



BLOG POST
DÉDIÉ:

[https://deque.blog/
2017/03/03/building-a-
clojurescript-game-
architecture-poc](https://deque.blog/2017/03/03/building-a-clojurescript-game-architecture-poc)



PRÉSENTATION ET
RESSOURCES:

[https://github.com/
QuentinDuval/
TicTacToeDevoxx/tree/
master](https://github.com/QuentinDuval/TicTacToeDevoxx/tree/master)



JOUEZ
AU JEU:

[https://
quentinduval.github.io/
tictactoe](https://quentinduval.github.io/tictactoe)