## Le Dévelopement d'un programme joueur

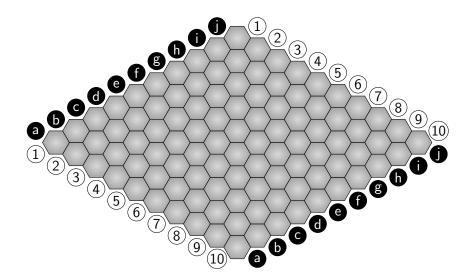
T.I.P.E 2014

#### Plan

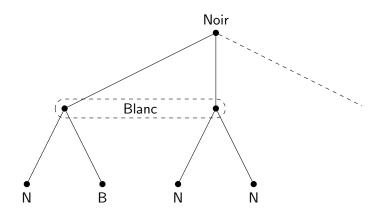
Introduction

Aproche simple

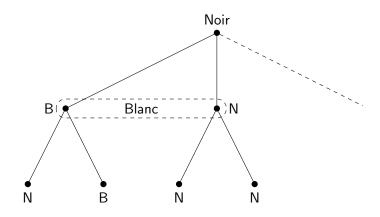
#### Hex



## Présentation de l'algorithme Minimax



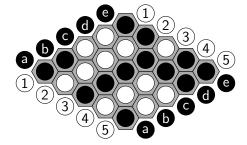
## Présentation de l'algorithme Minimax



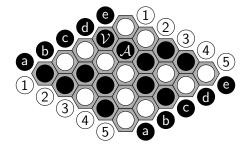
# Compléxité

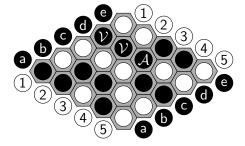
- winner
- ► getWinningPlay

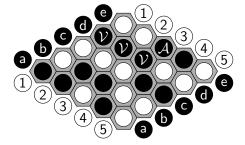
#### winner

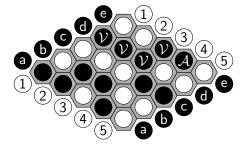


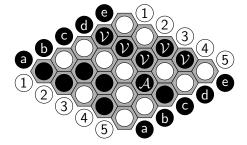
## Implémentation

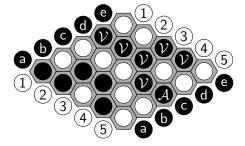


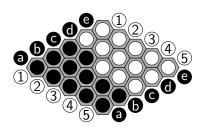












► Compléxité d'un parcours

$$P(n) = \sum_{k=1}^{\left\lceil \frac{n^2}{2} \right\rceil} k$$

$$\implies P(n) = O\left(\left\lceil \frac{n^2}{2} \right\rceil^2\right)$$

$$\implies P(n) = O\left(n^4\right)$$

▶ Compléxité de winner

$$W(n) = nP(n) = O(n^5)$$