Soutenance du projet de programmation : La Ruche

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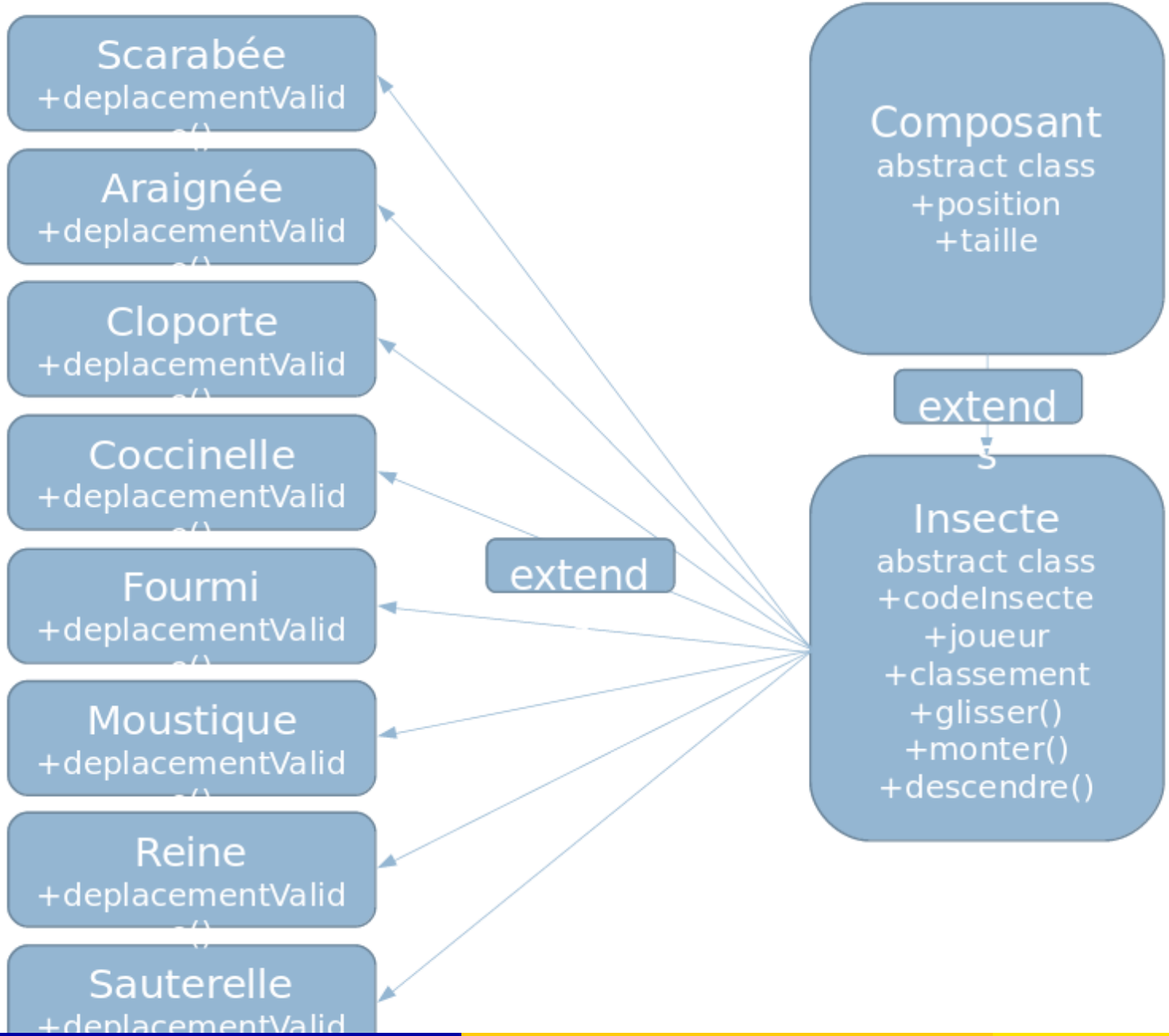
Hadjadj Lies Muller Lucie

31 Mai 2017

1. Introduction
2. Représentation des données
3. Problème d'unicité
4. Interraction Homme Machine & Fonctionnalitées
5. Évolution de l'IHM et Tests utilisateurs
6. Intelligence Artificielle
7. Quelques pistes d'amélioration

Rappel des règles

- Jeu à deux joueurs
- Entourer la reine adverse
- Chaque pièces possèdent ses propres coups
- Respect de l'unicité de la ruche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Araignée
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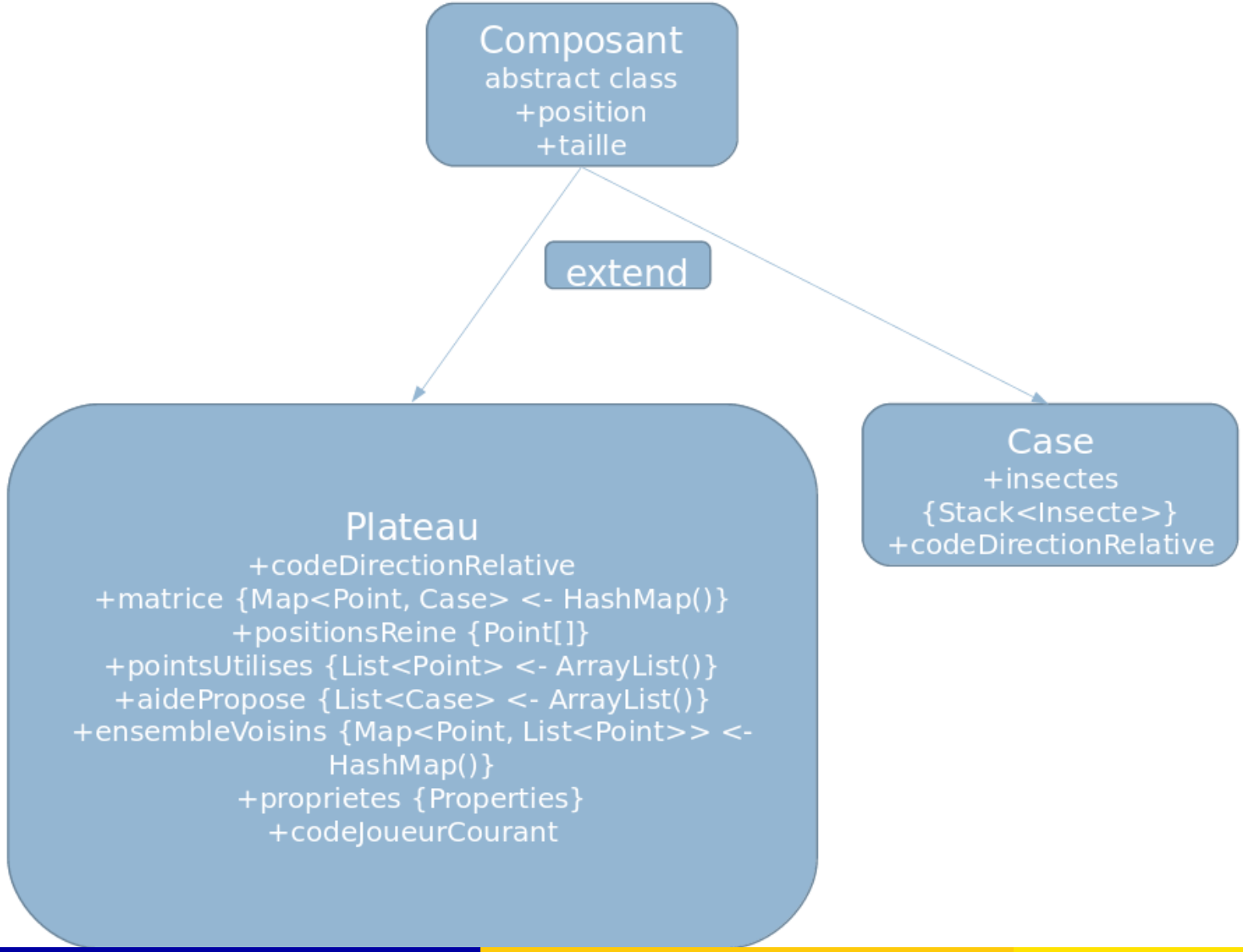
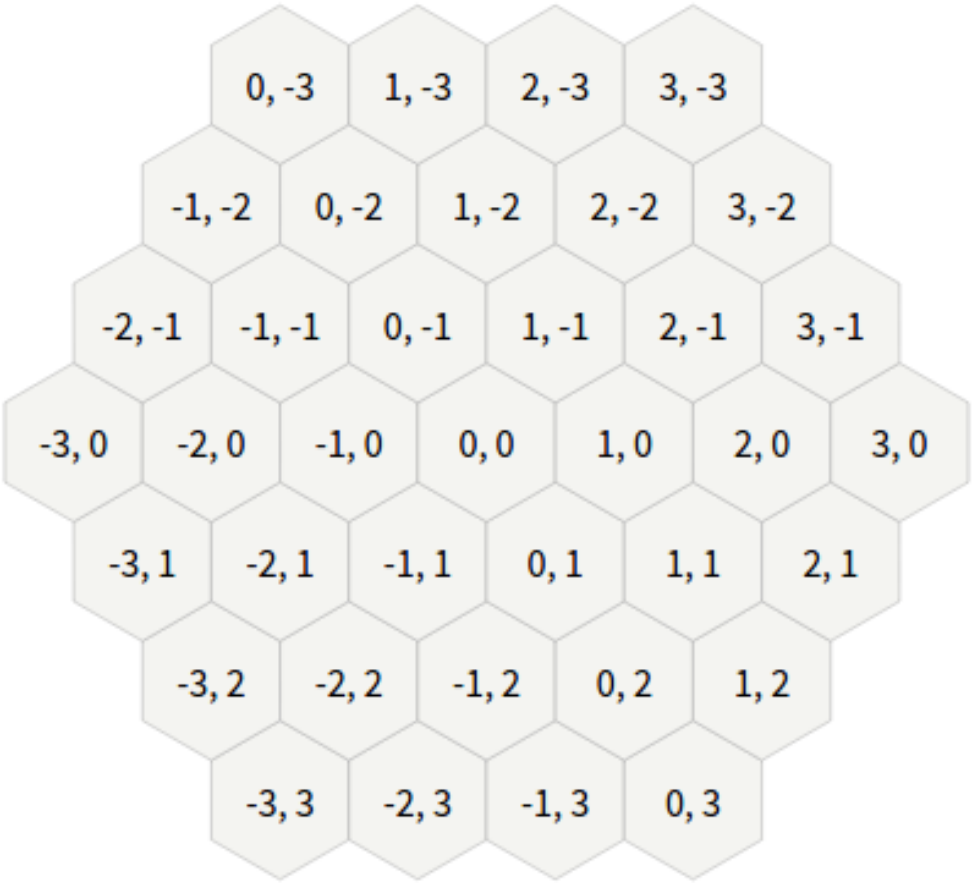
Cloporte
+deplacementValid
Coccinelle
+deplacementValid
Fourmi
+deplacementValid
Moustique
+deplacementValid
Reine
+deplacementValid
Sauterelle
extend
Composant
abstract class
+position
+taille
extend
Insecte
abstract class
+codeInsecte
+joueur
+classement
+glisser()
+monter()
+descendre()

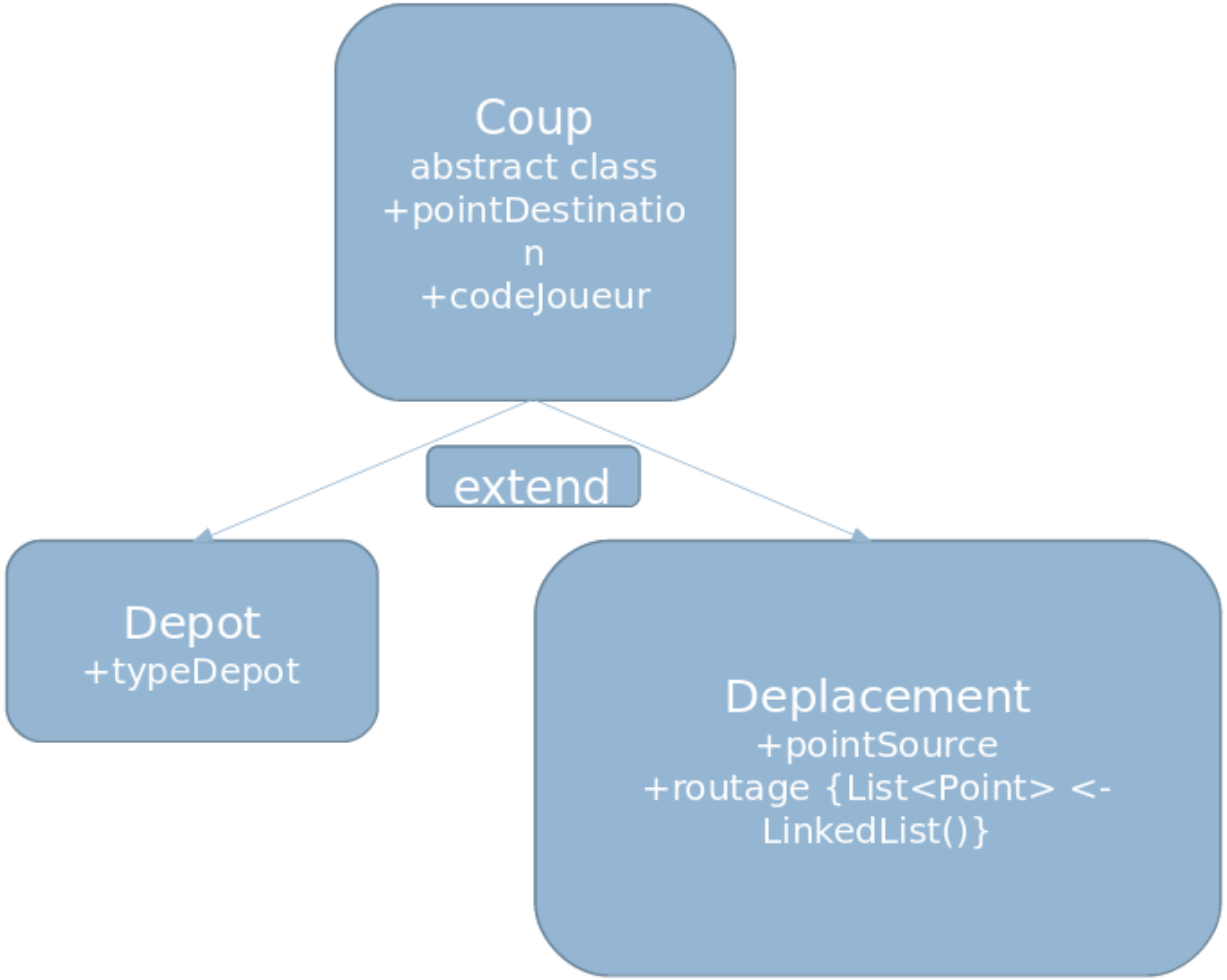
Représentation du Plateau



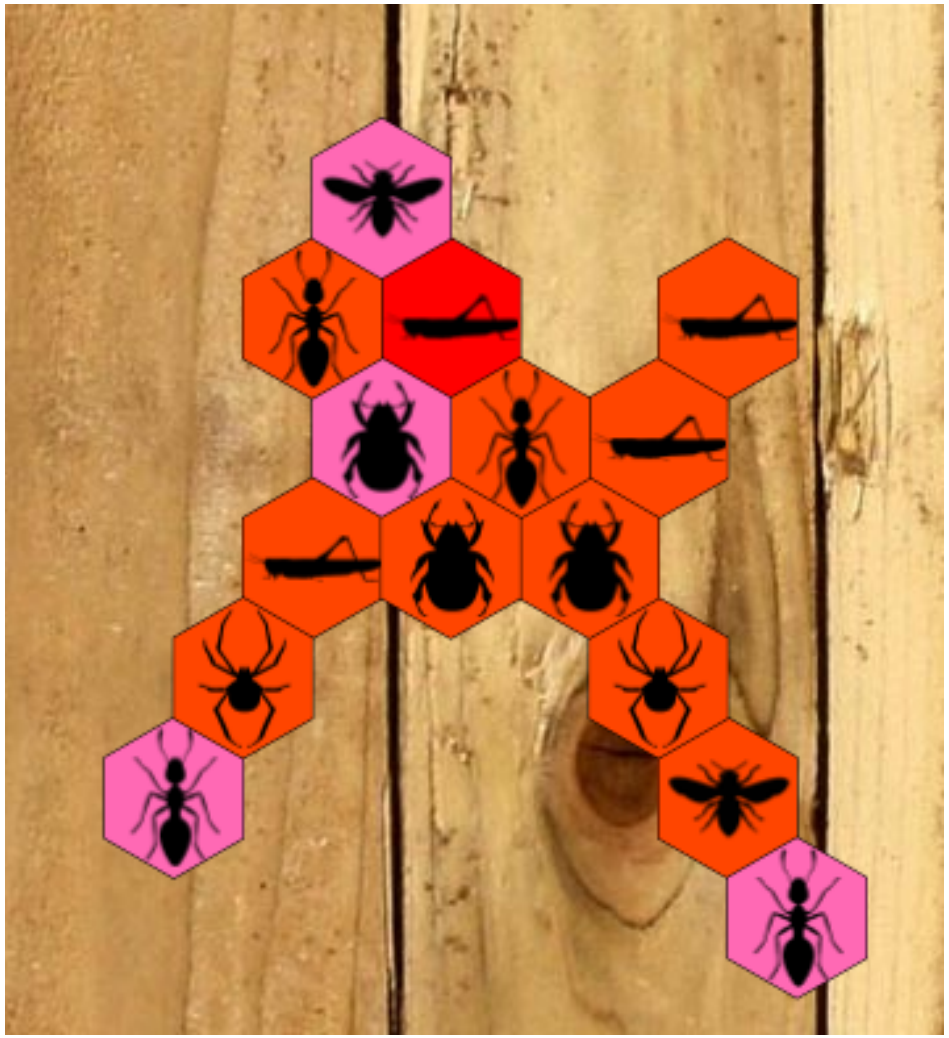
Représentation des composants



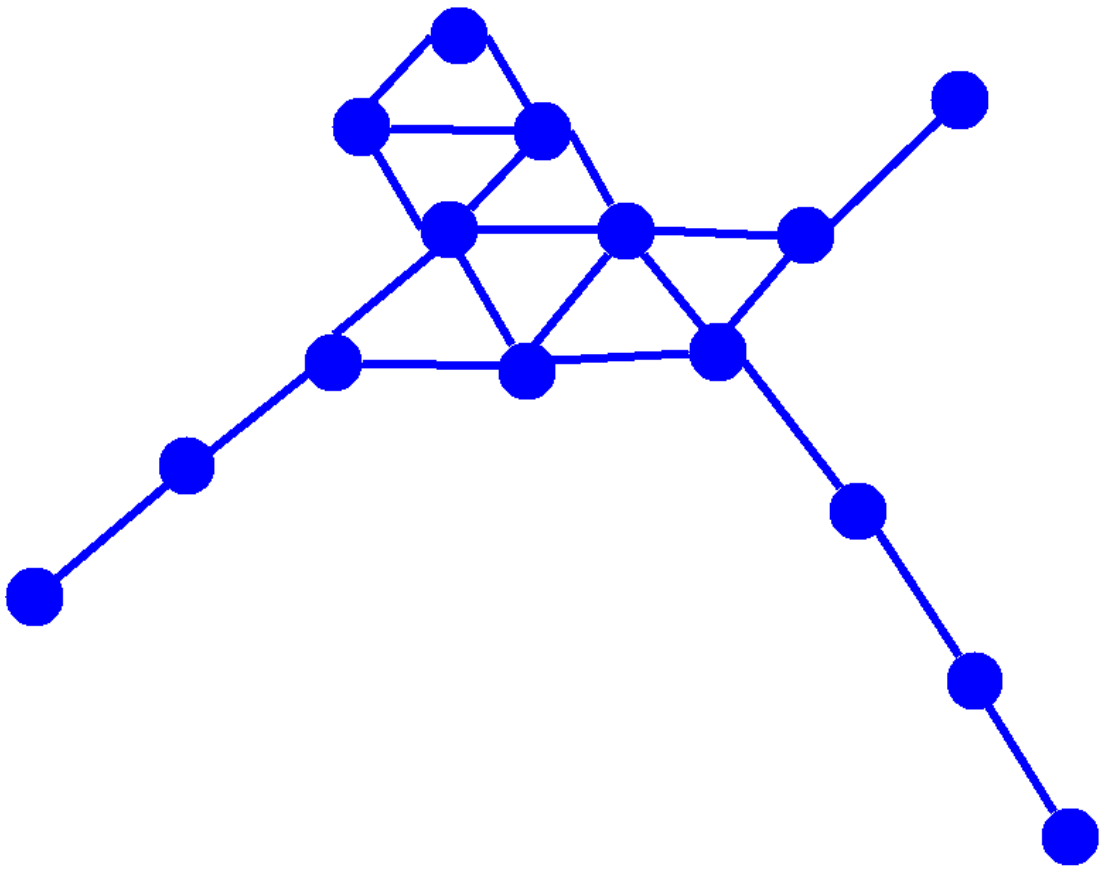
Représentation des Coups



Problème d'unicité



Problème d'unicité



Problème d'unicité

- Equation de récurrence :

$$V_{ij}^{t} = (V_{ix}^{t+1} et V_{xj}^{t+1}) ou V_{ij}^{t+1}$$

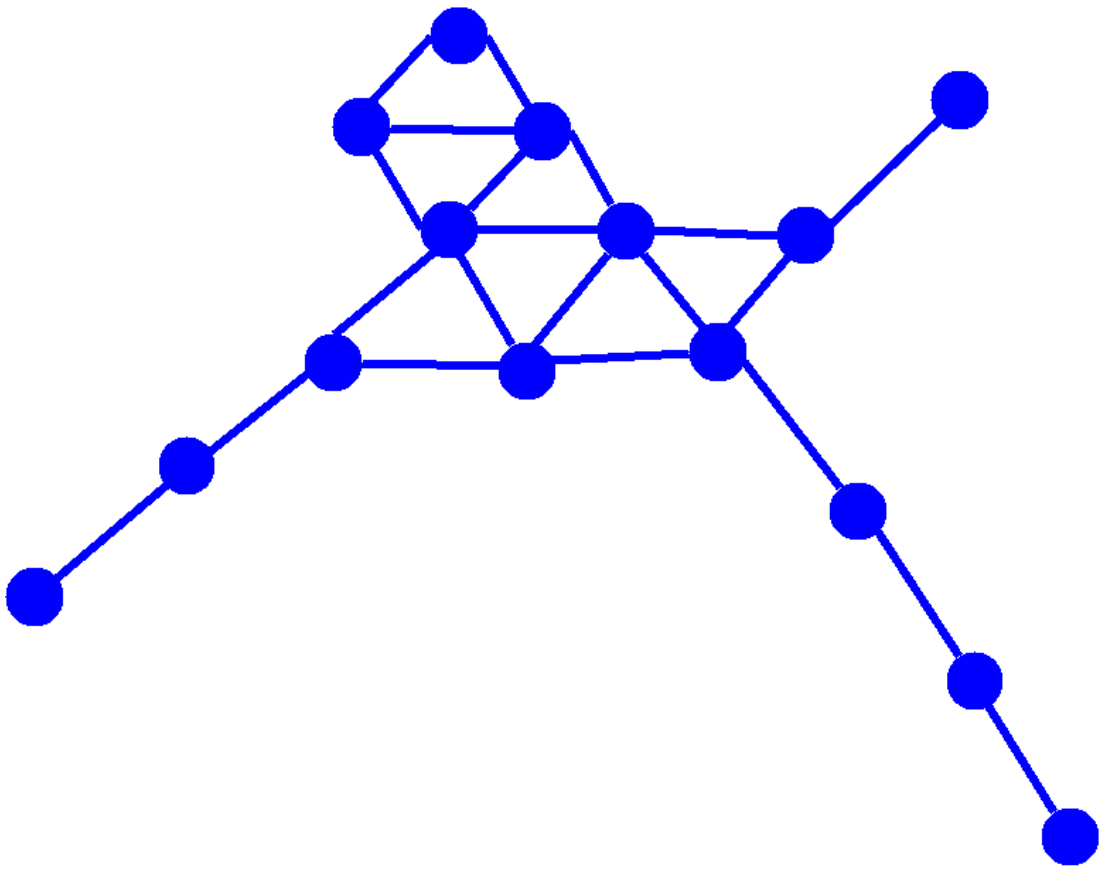
Problème d'unicité

- Equation de récurrence :

$$V_{ij}^{t} = (V_{ix}^{t+1}.V_{xj}^{t+1}) + V_{ij}^{t+1}$$

- Union Find

Problème d'unicité



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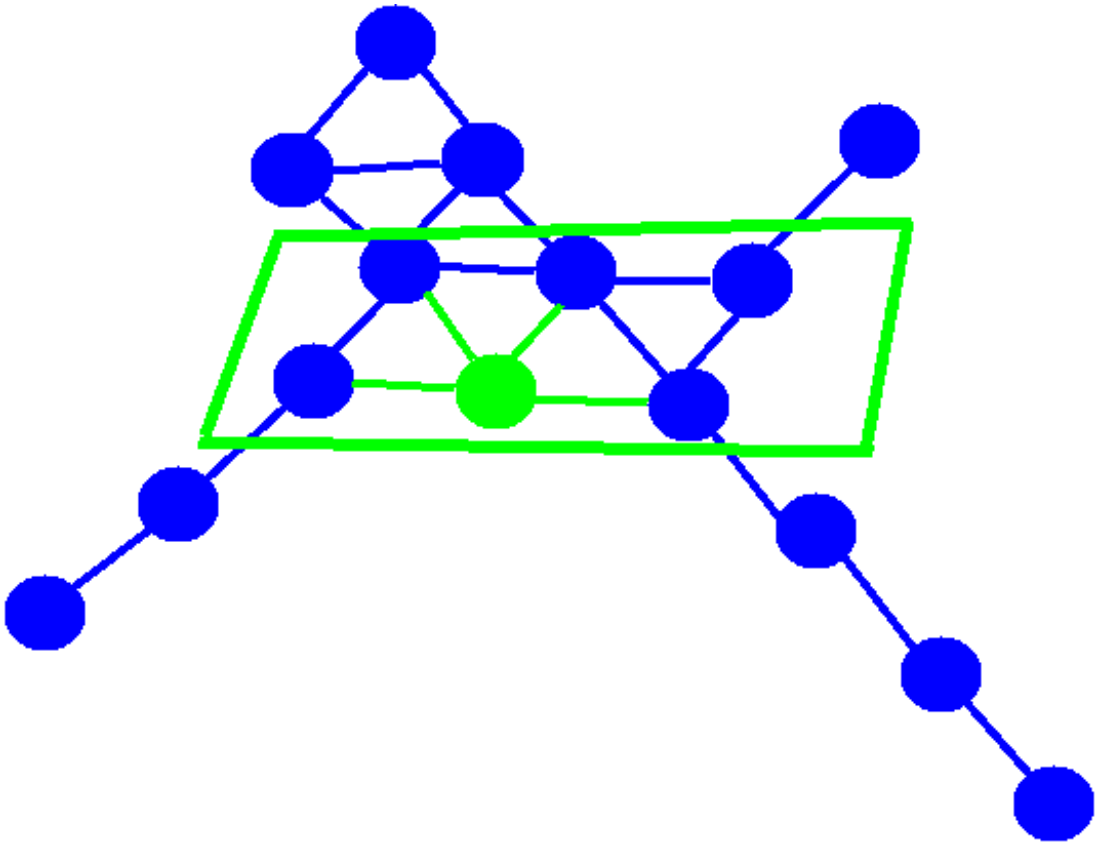

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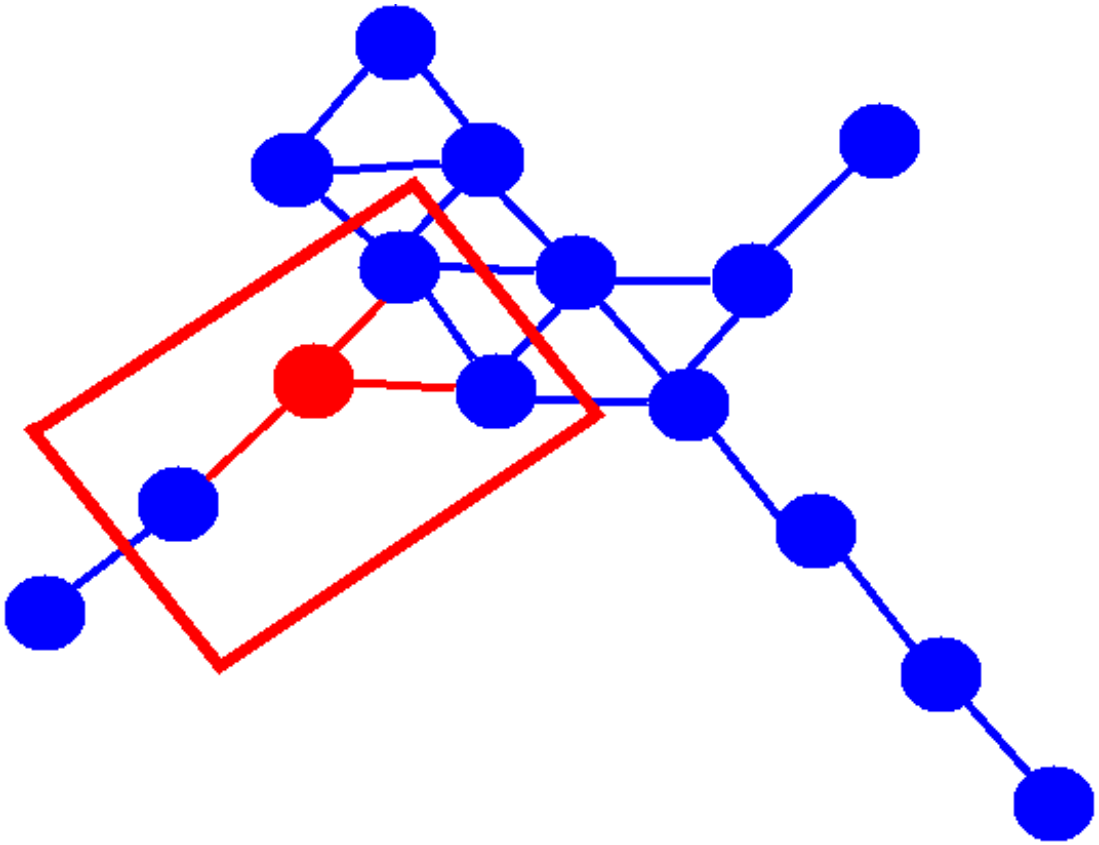

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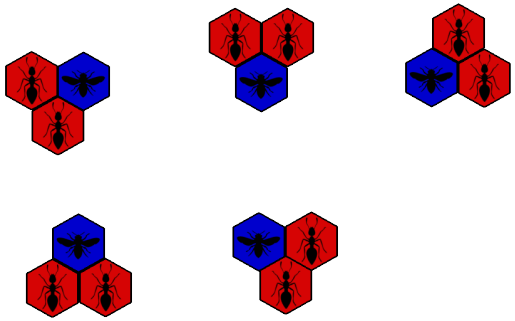

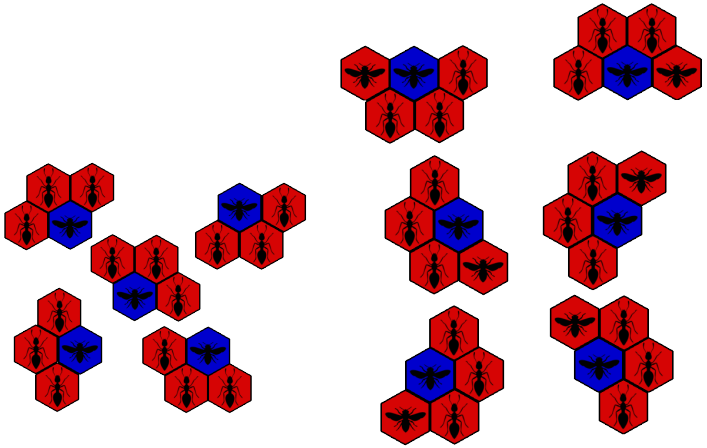

Présentation générale de l'IHM

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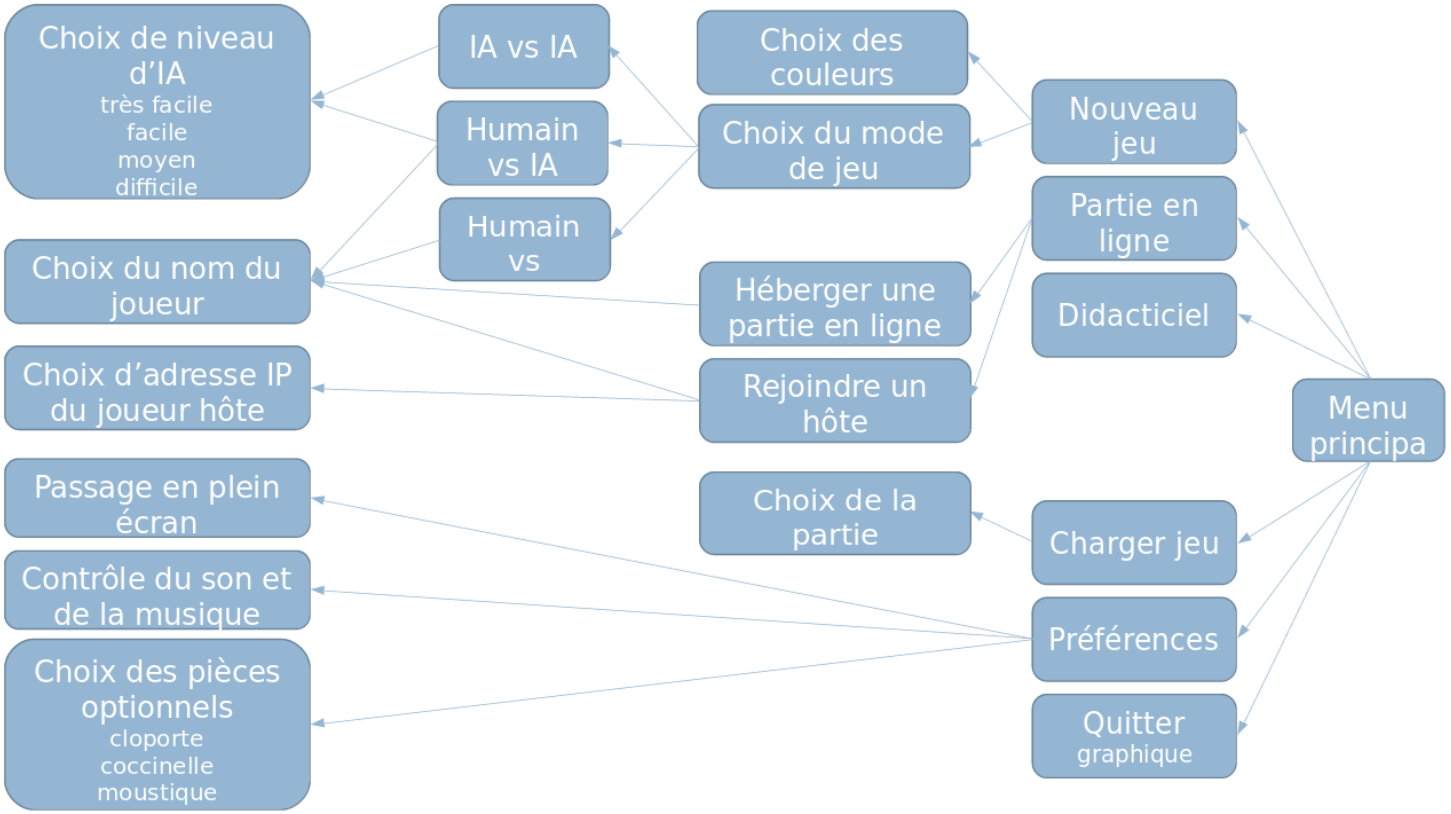
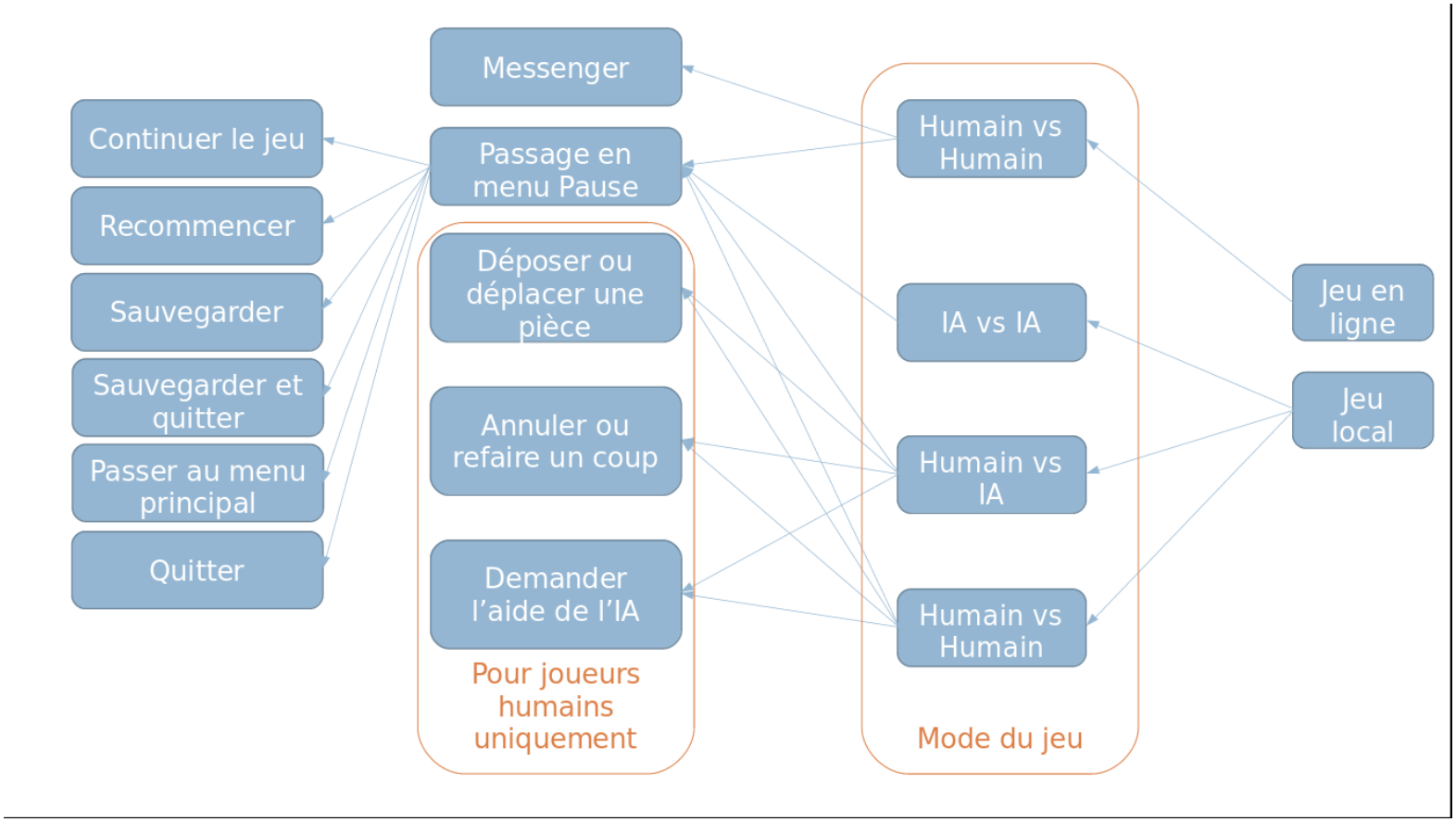


Partie en local



Sauvegarde & Chargment

Sauvegarde & Chargment

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0::toto::0
010
(1.0,1.0)->(2.0,0.0)->(3.0,-1.0)->(3.0,-2.0)
(0.0,-1.0)->(0.0,0.0)->(1.0,-1.0)->(1.0,0.0)
0:(0.0,2.0)
5:(0.0,-1.0)
2:(1.0,2.0)
3:(2.0,-1.0)
4:(1.0,1.0)
3:(1.0,-1.0)
4:(0.0,1.0)
0:(0.0,0.0)
```

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0::toto::0
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0:(0.0,2.0)
5:(0.0,-1.0)
2:(1.0,2.0)
3:(2.0,-1.0)
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4:(0.0,1.0)
0:(0.0,0.0)
```

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0:(0.0,2.0)
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(1.0,1.0)->(2.0,0.0)->(3.0,-1.0)->(3.0,-2.0)
(0.0,-1.0)->(0.0,0.0)->(1.0,-1.0)->(1.0,0.0)
0:(0.0,2.0)
5:(0.0,-1.0)
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4:(0.0,1.0)
0:(0.0,0.0)
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Partie en réseau

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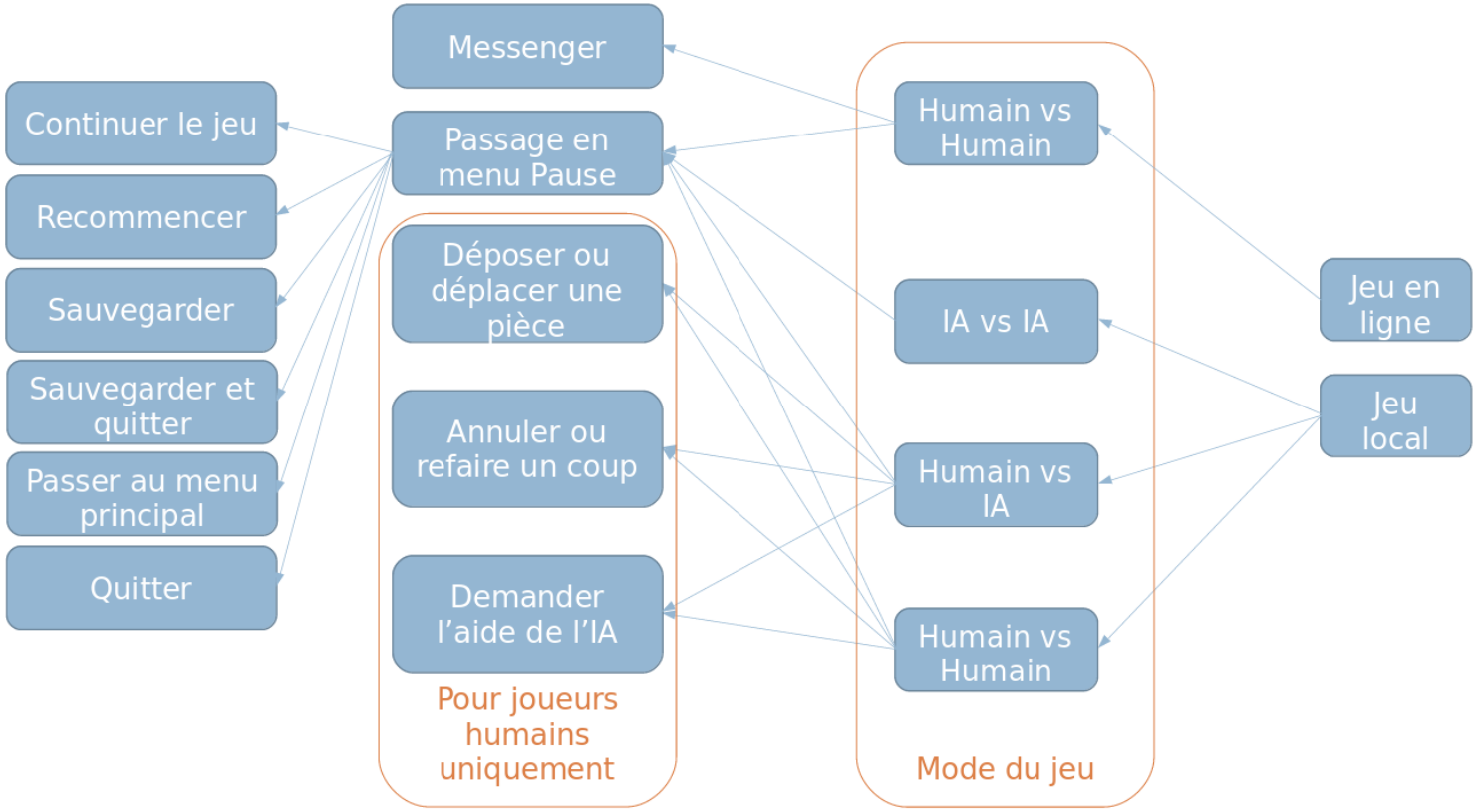
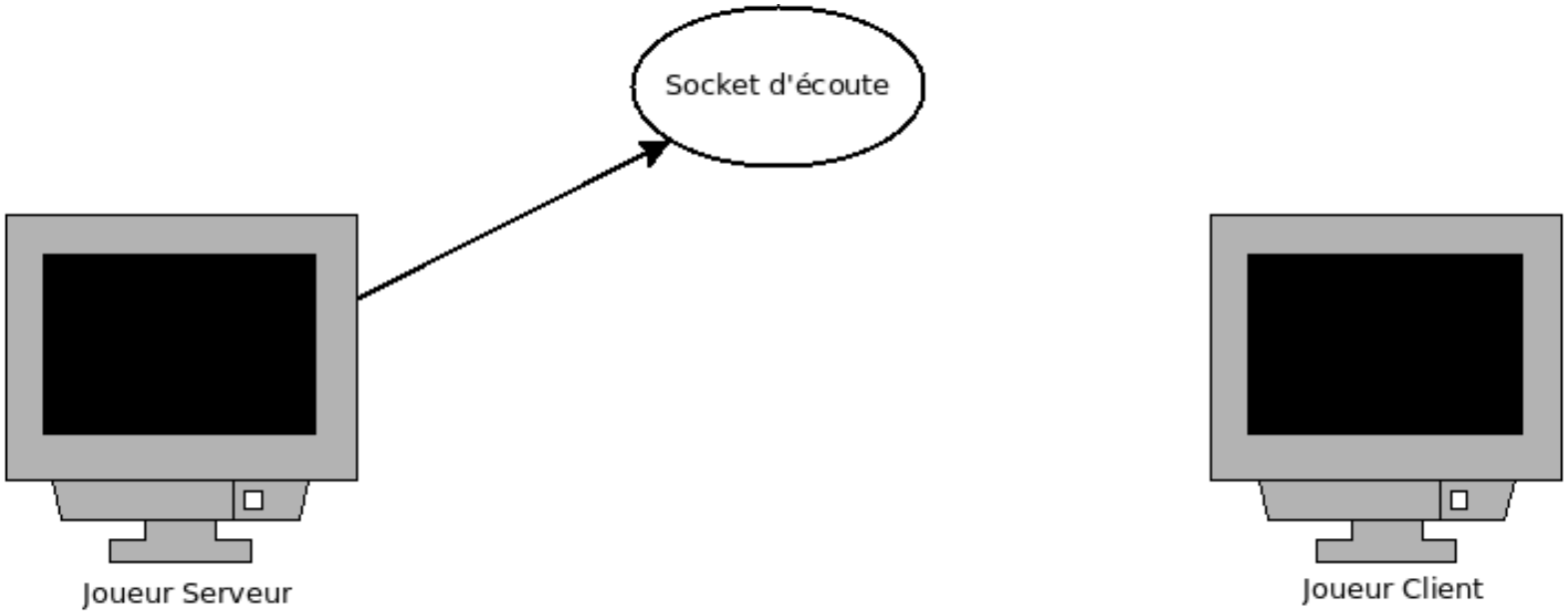


Partie en réseau



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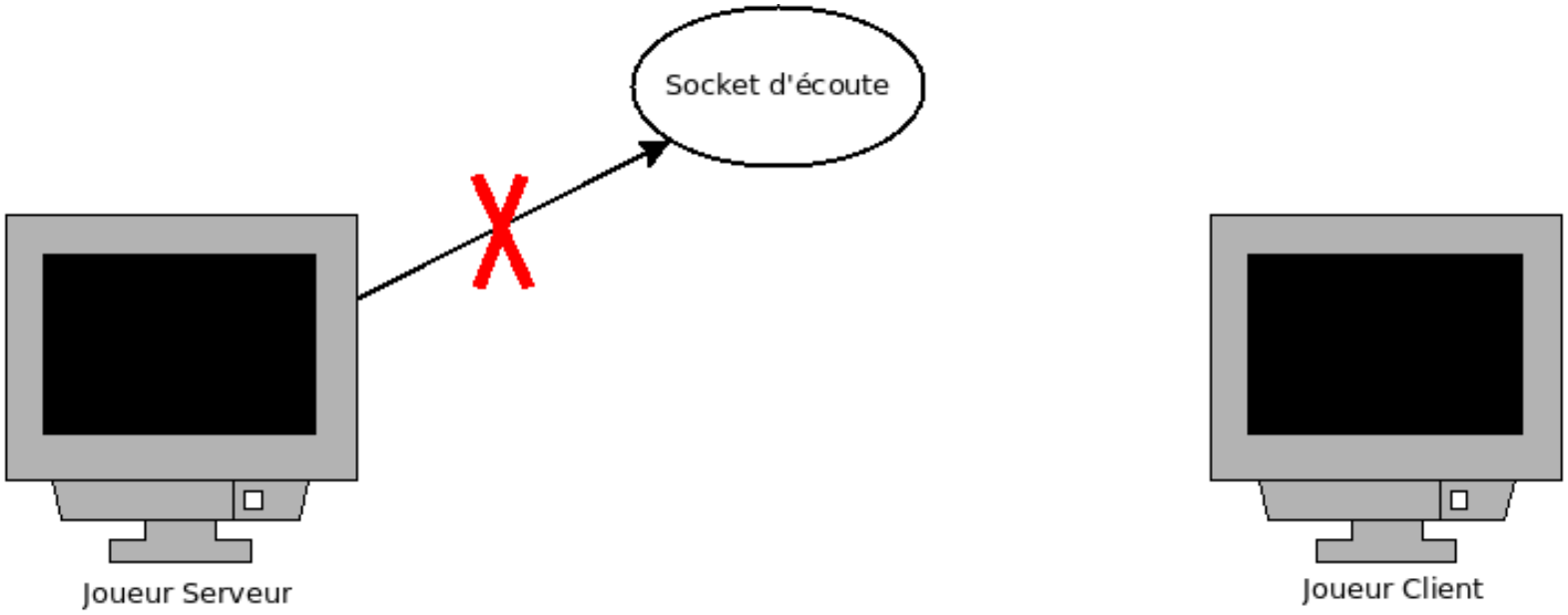

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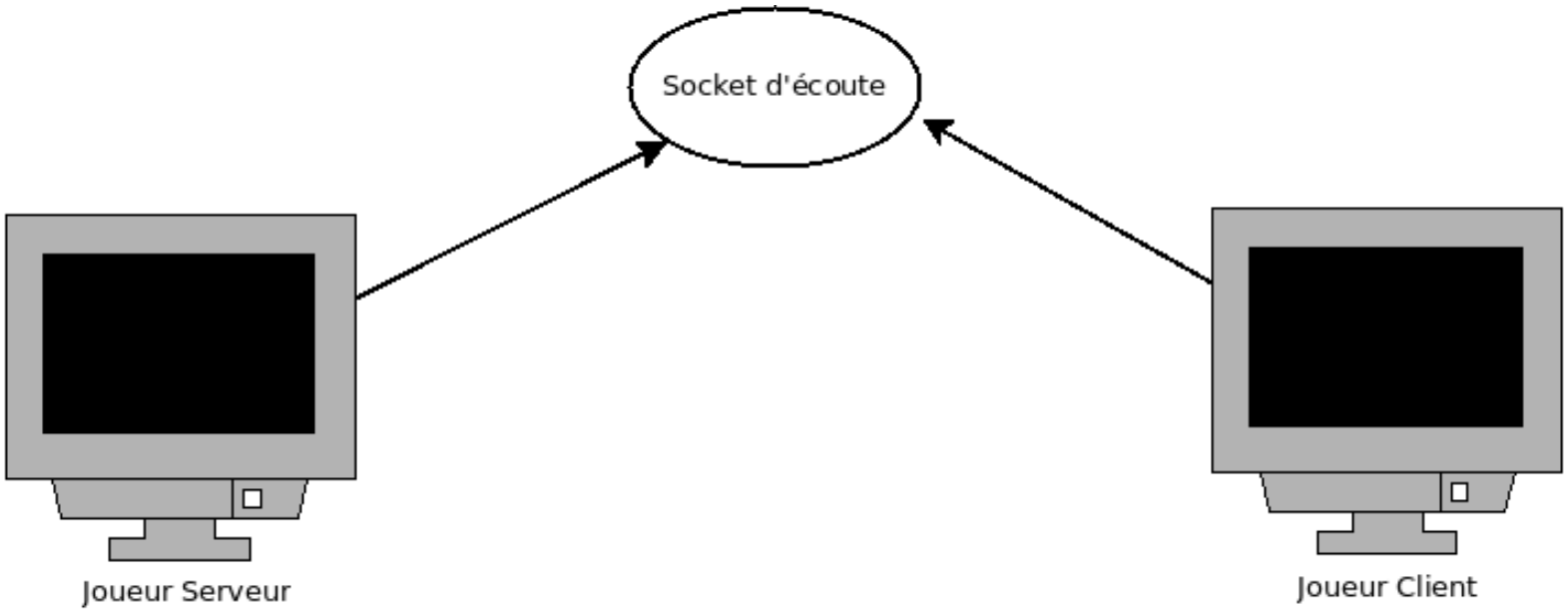

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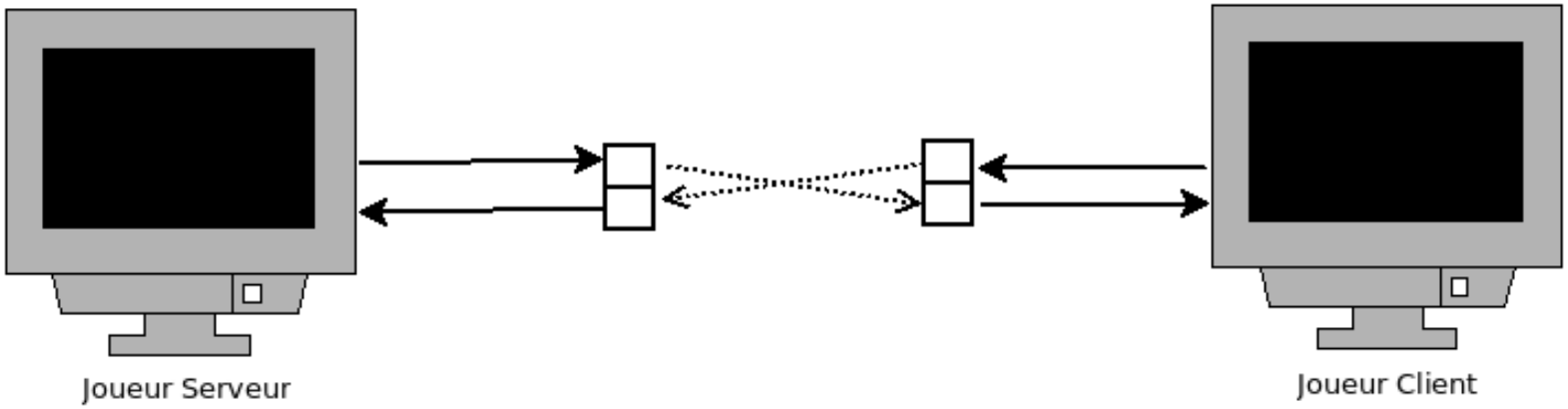

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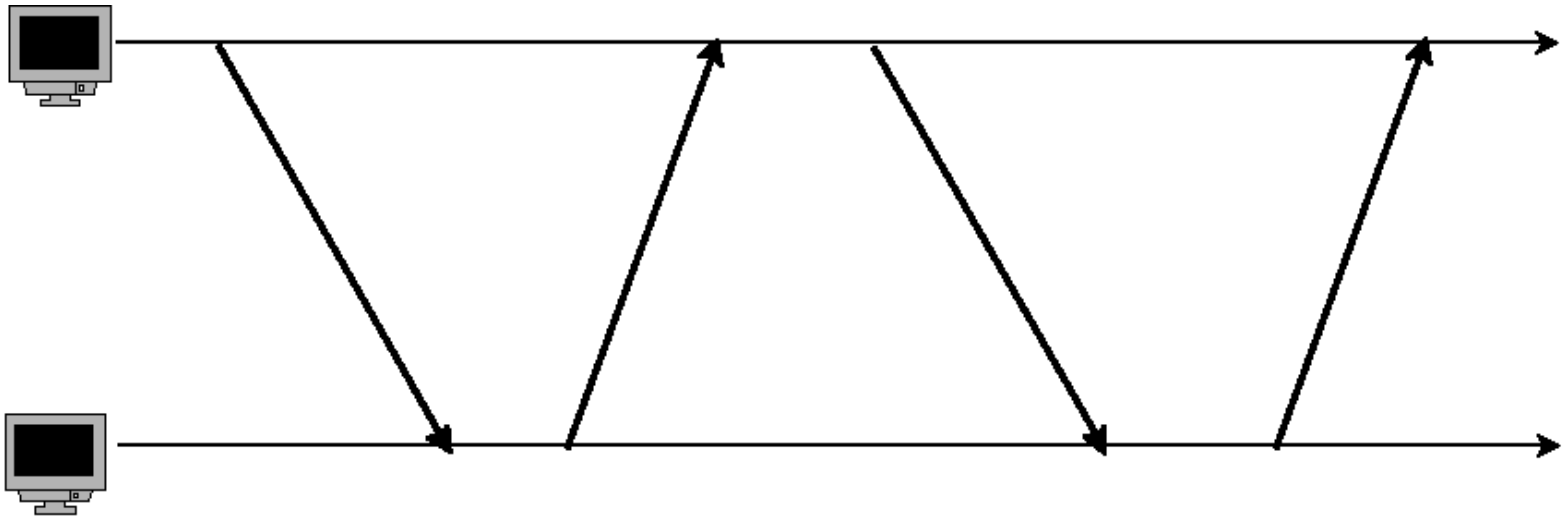

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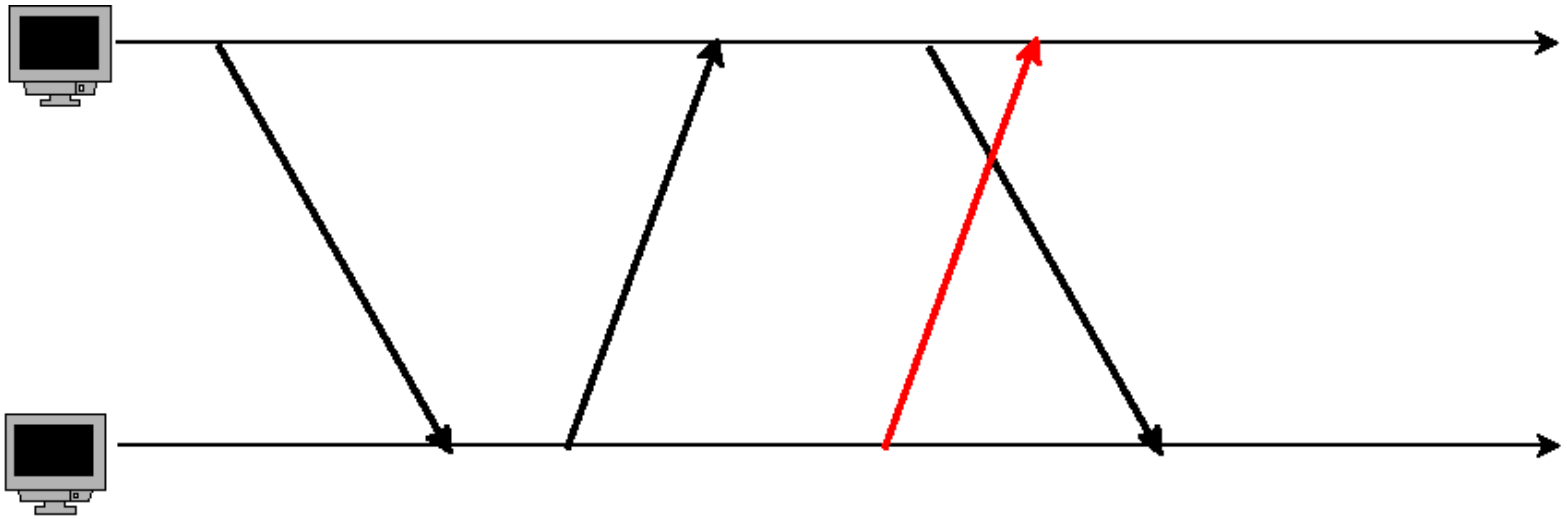

Menu Principale

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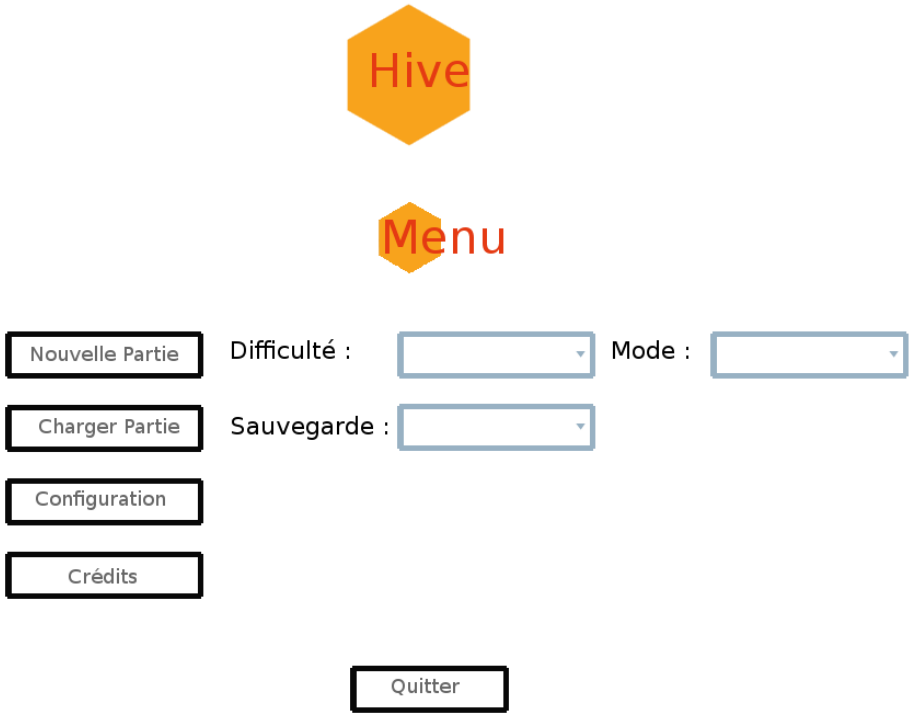

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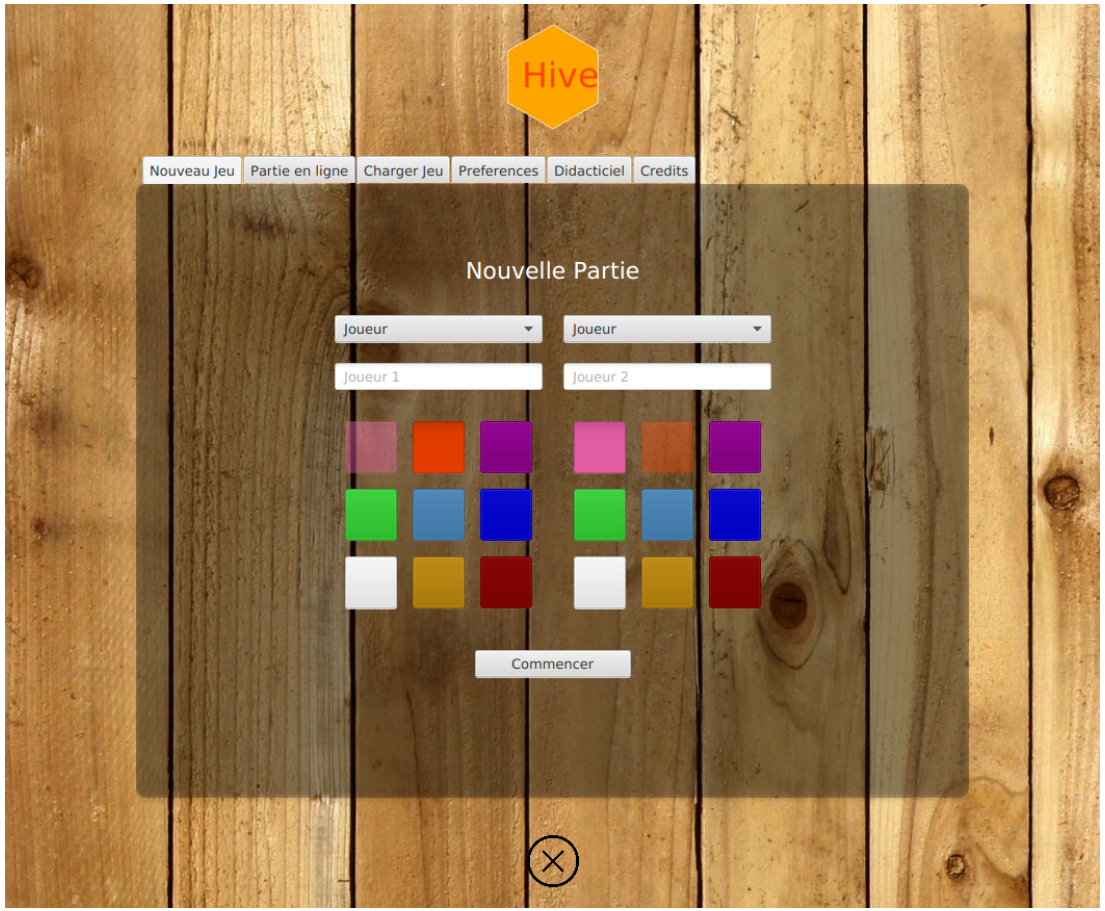

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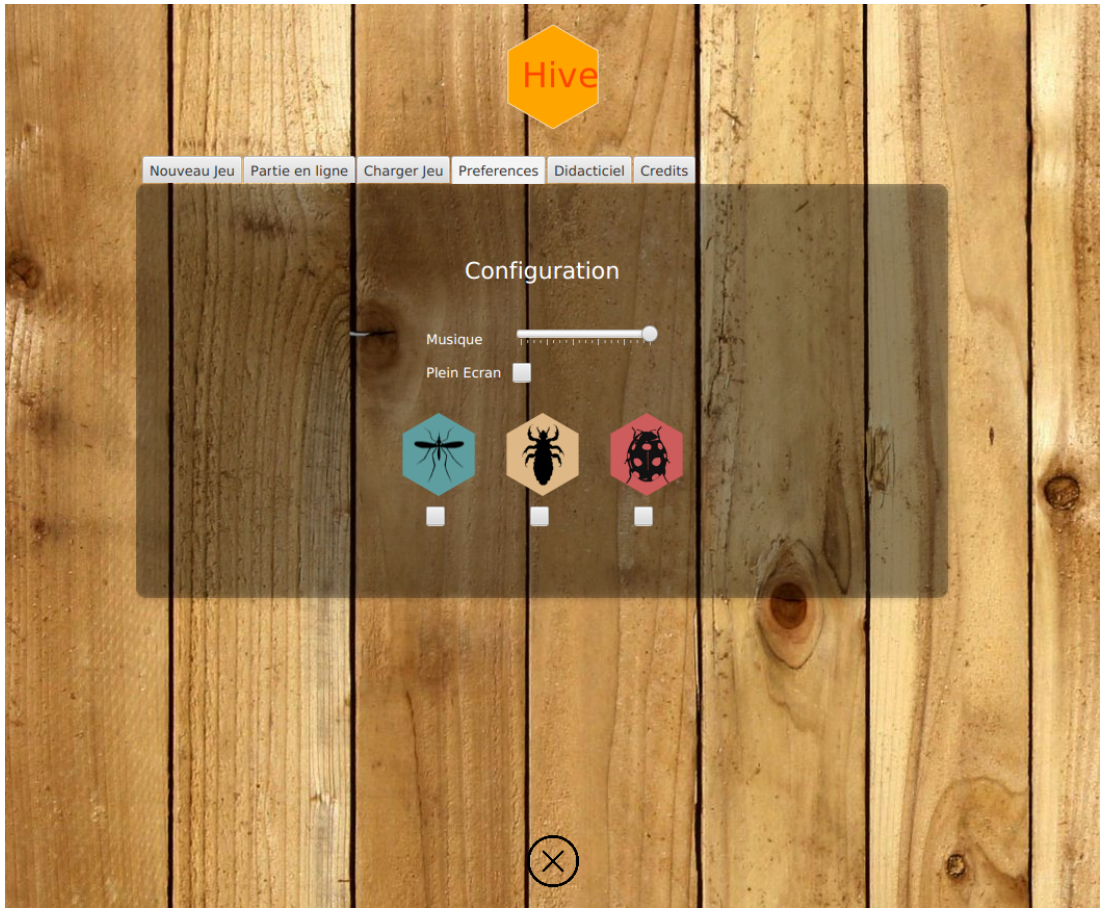

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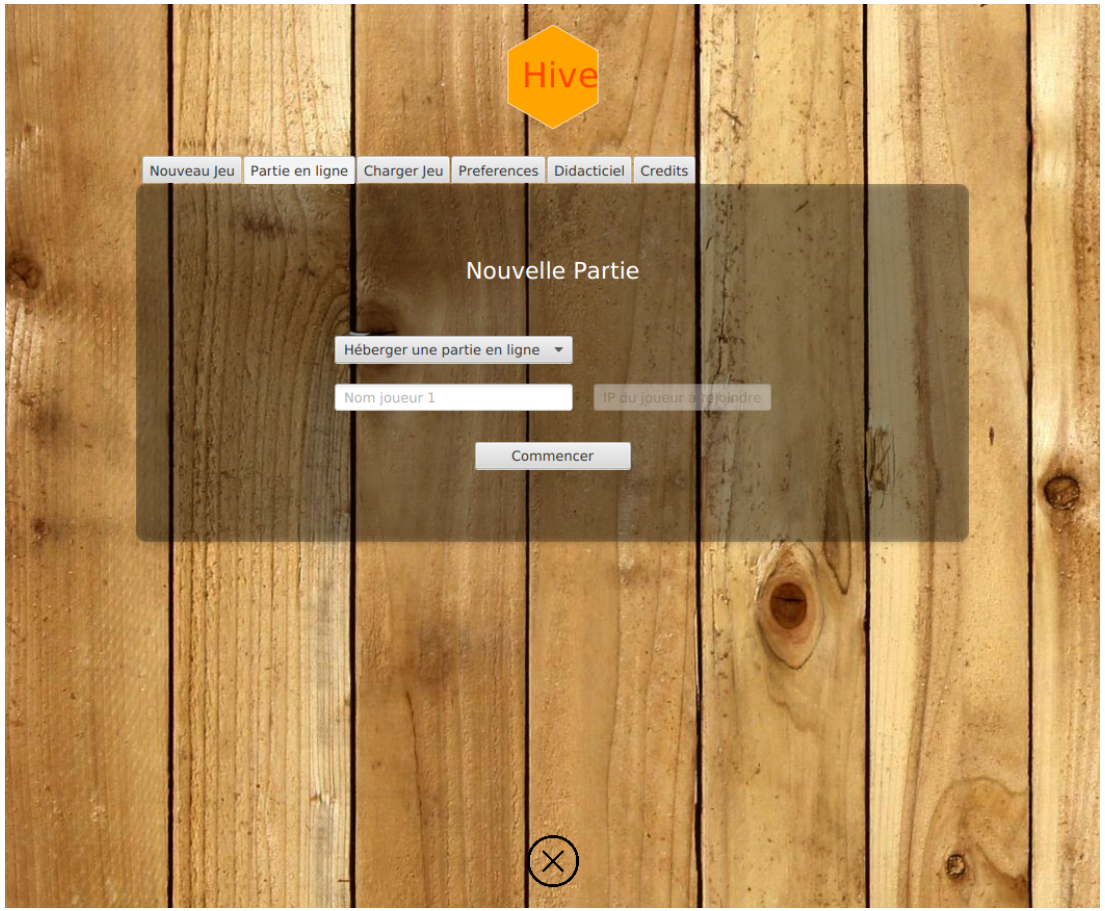

L'interface du jeu

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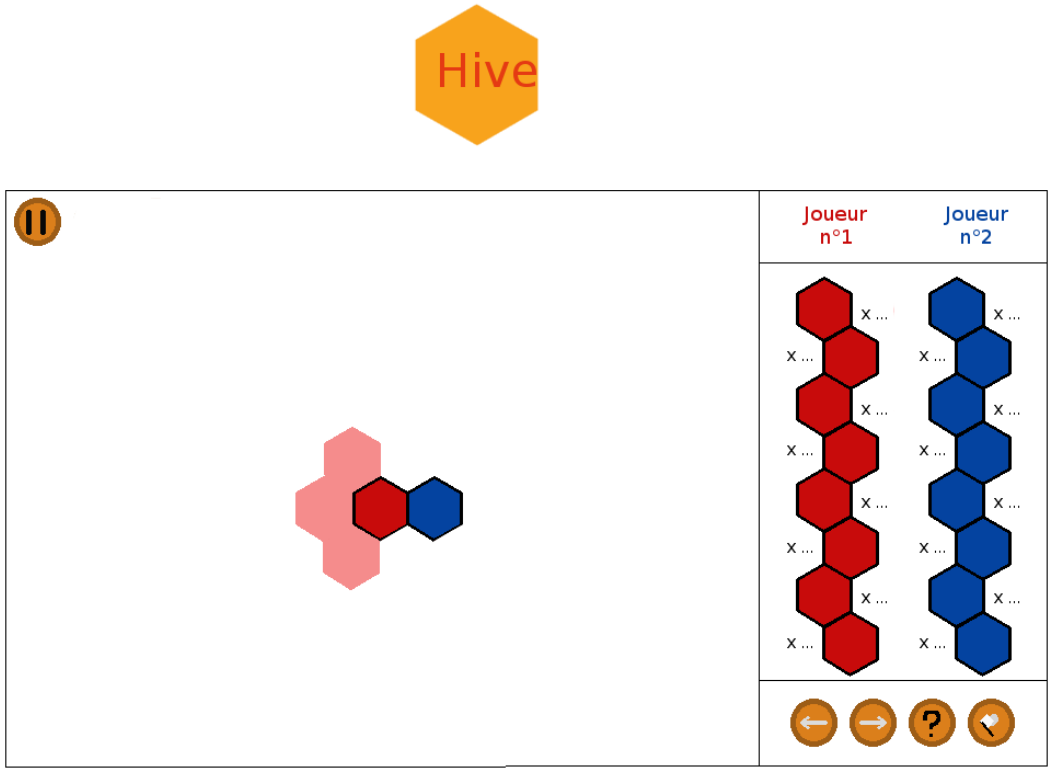

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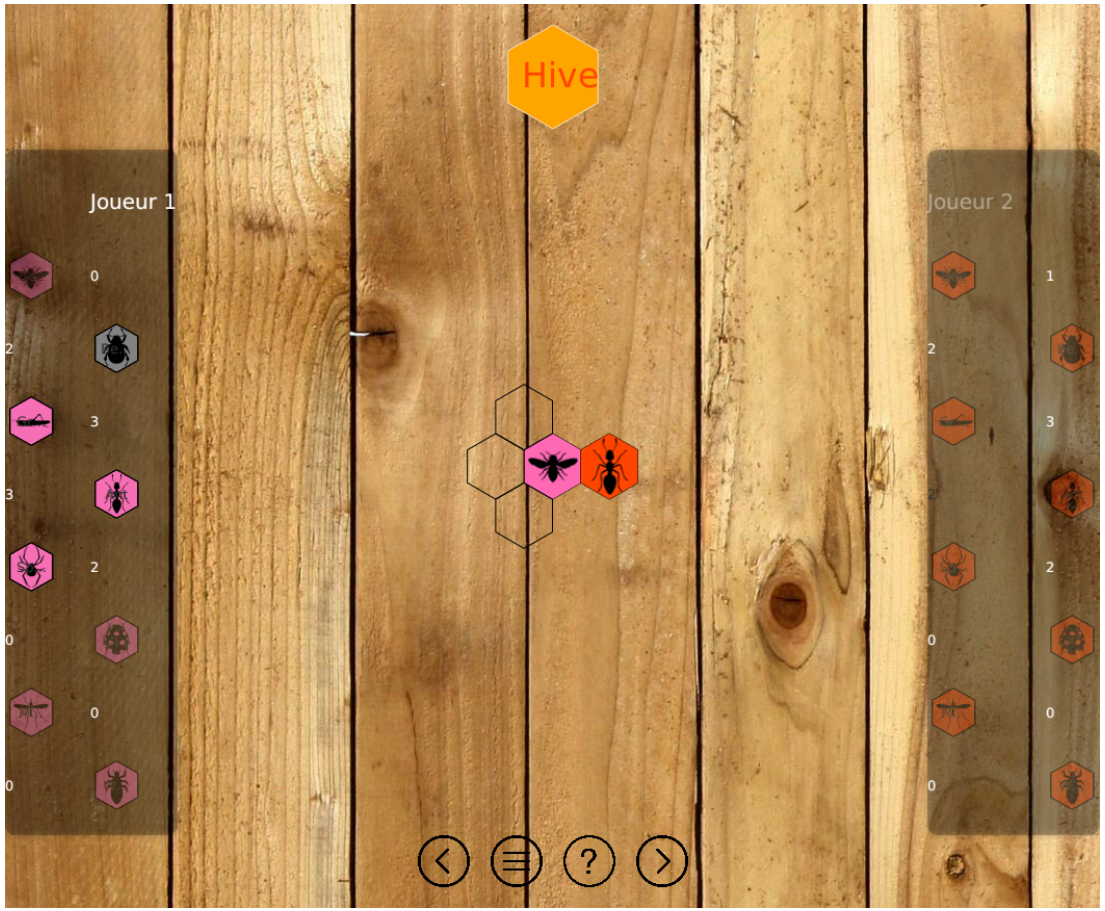

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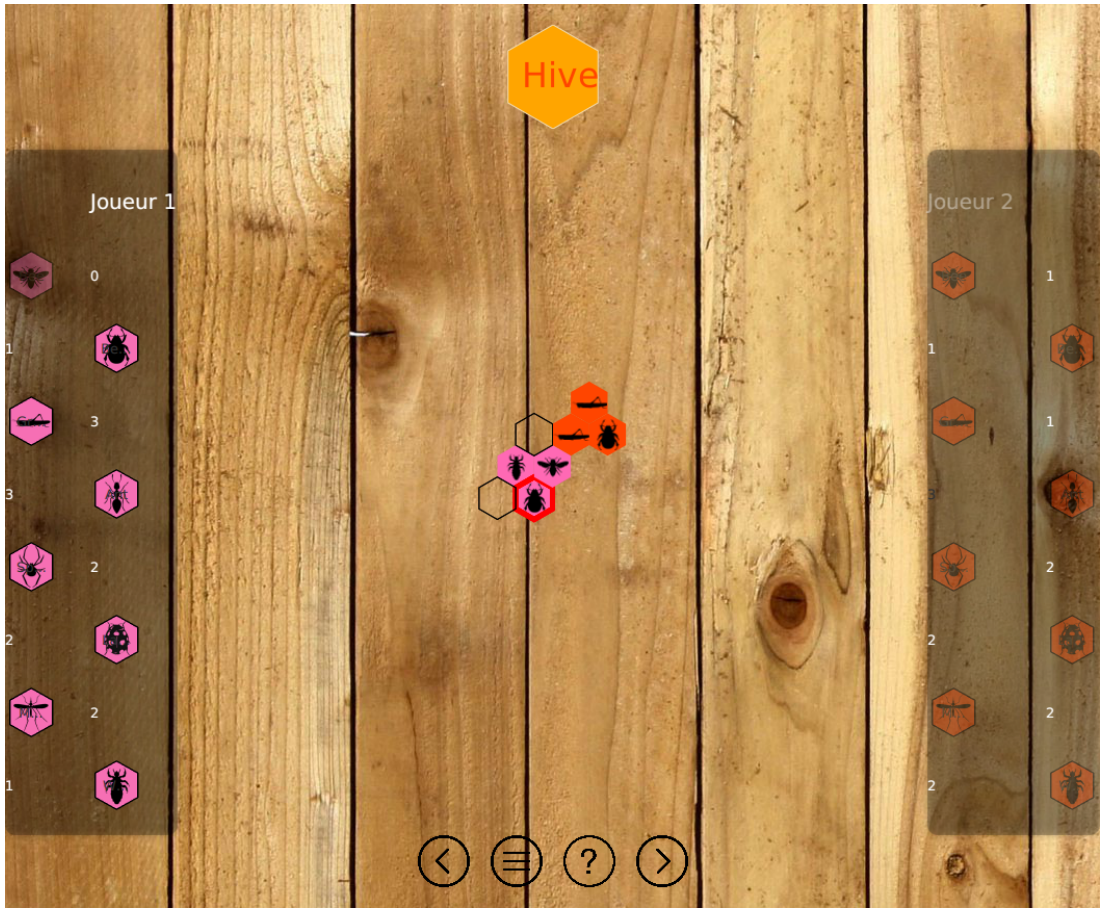
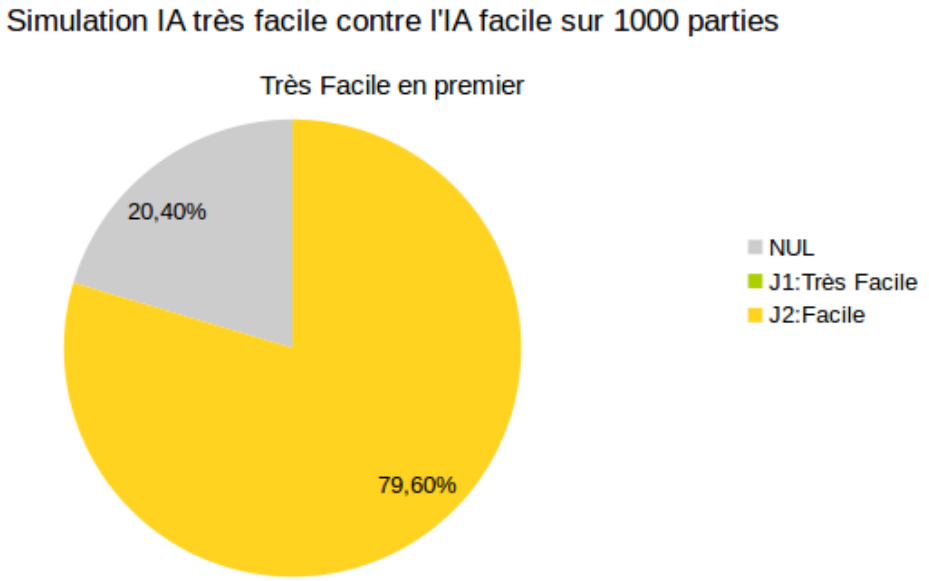
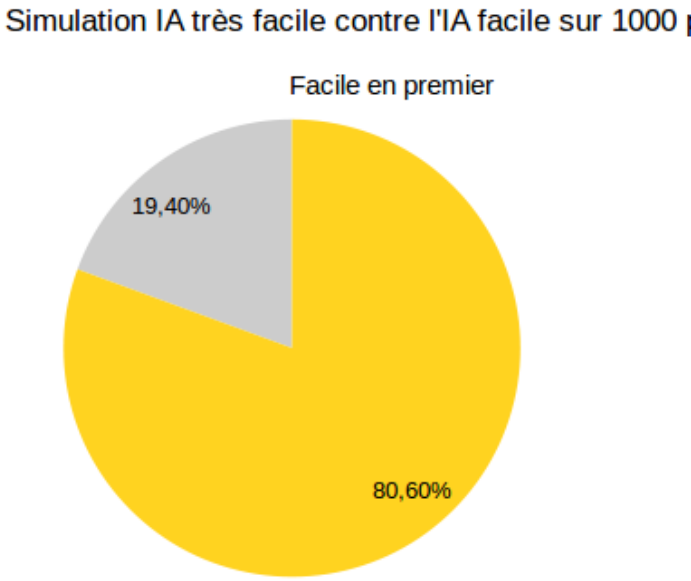


Les différents niveaux de difficulté

- Très Facile
- Facile
- Moyen
- Difficile

Vérification du niveau des IA





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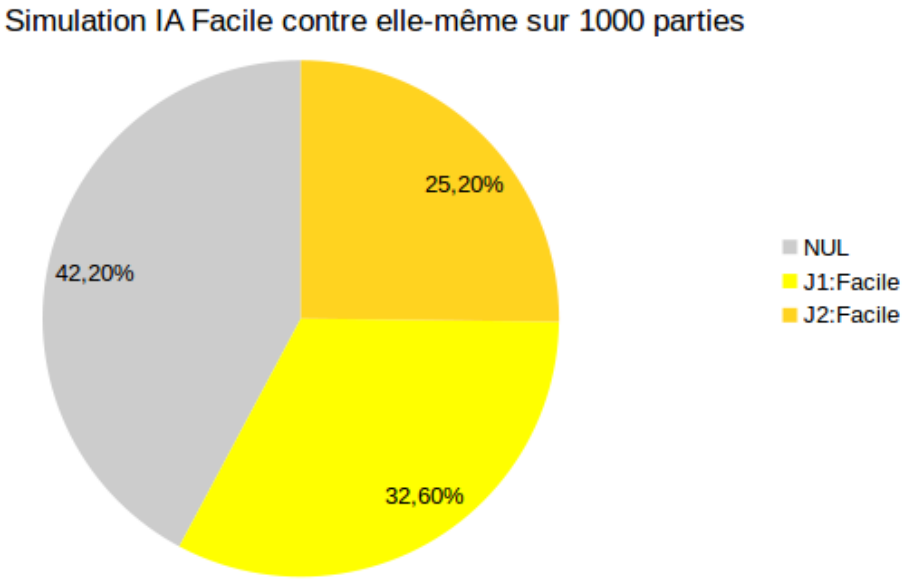

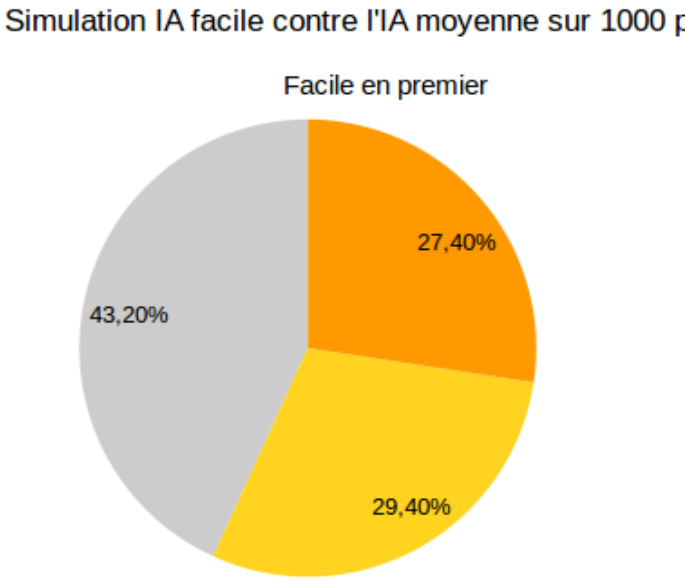

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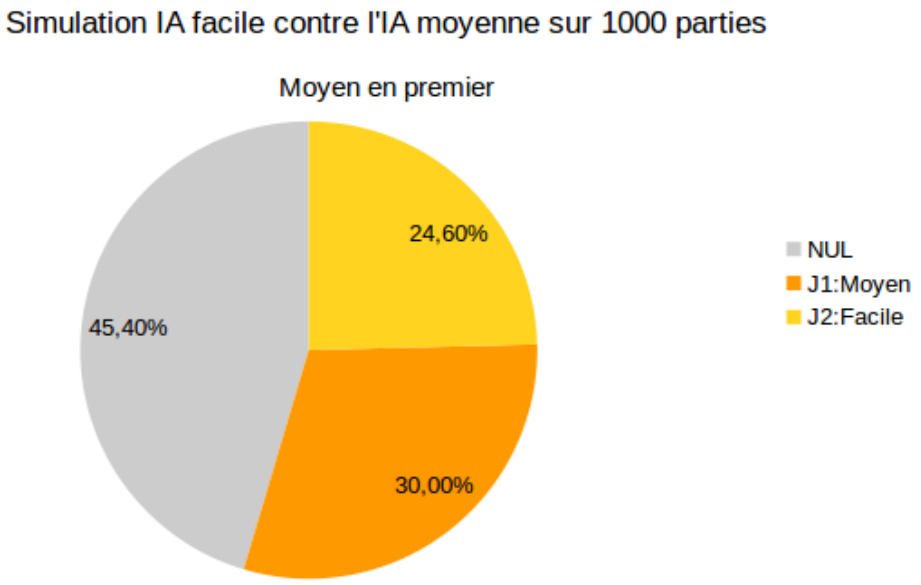

Pour l'IHM

Pour les fonctionnalitées

- Jeu à deux joueurs
- Partie en réseau sur un serveur externe
- Système de profils

Pour l'IA