



UNIVERSITÉ
DE MONTPELLIER

Soutenance de projet

Mercredi 31 Mai 2017

Éditeur de Comportement

Warbot sous Unity

Groupe Losh'Dora
Édouard BREUILLE
Célia ROUQUAIROL

Sous la direction de Jacques FERBER

Année universitaire 2016 - 2017

SOMMAIRE

I - Présentation du projet et objectif

SOMMAIRE

I - Présentation du projet et objectif

II - Design Pattern Interpreter

SOMMAIRE

I - Présentation du projet et objectif

II - Design Pattern Interpreter

III - Convertisseur XML

SOMMAIRE

I - Présentation du projet et objectif

II - Design Pattern Interpreter

III - Convertisseur XML

IV - Interface graphique

SOMMAIRE

I - Présentation du projet et objectif

II - Design Pattern Interpreter

III - Convertisseur XML

IV - Interface graphique

V - Vue d'ensemble

SOMMAIRE

I - Présentation du projet et objectif

II - Design Pattern Interpreter

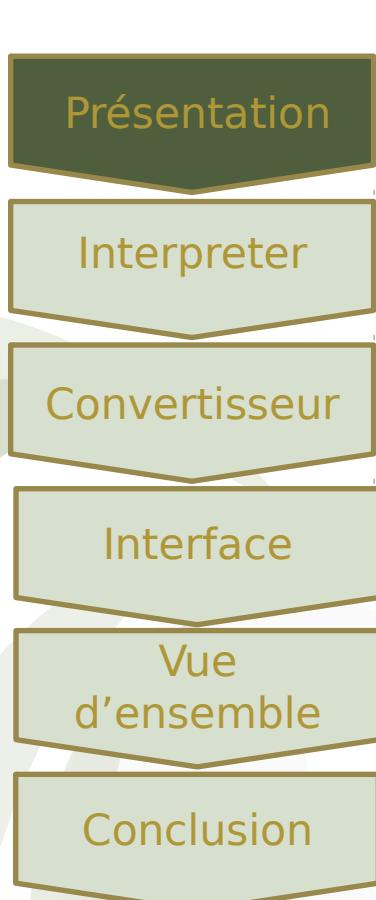
III - Convertisseur XML

IV - Interface graphique

V - Vue d'ensemble

VI - Conclusion

Présentation de Warbot



Présentation de Warbot

Présentation

Interpréter

Convertisseur

Interface

Vue
d'ensemble

Conclusion



Amasser des ressources

Présentation de Warbot

Présentation

Interpréter

Convertisseur

Interface

Vue
d'ensemble

Conclusion



Créer des unités

Présentation de Warbot

Présentation

Interpréter

Convertisseur

Interface

Vue
d'ensemble

Conclusion



Détruire la base adverse

Présentation de Warbot

Présentation

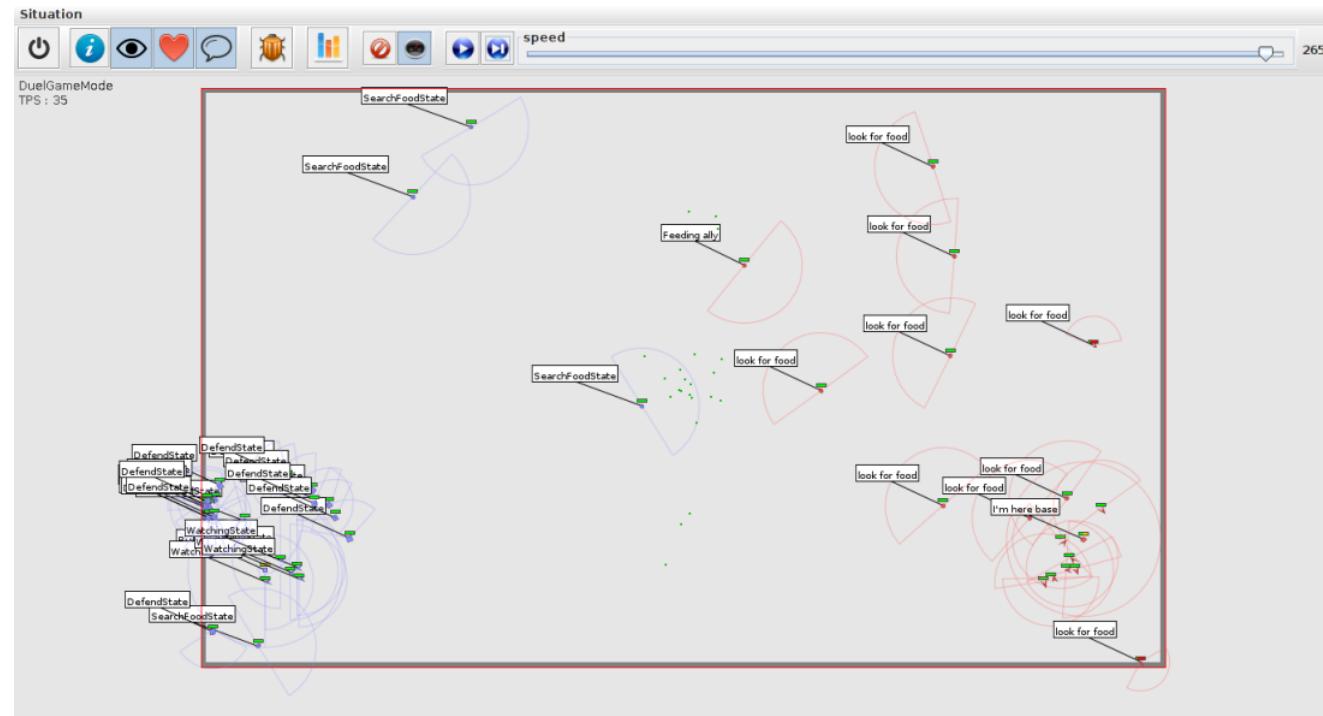
Interpréter

Convertisseur

Interface

Vue
d'ensemble

Conclusion



Présentation de Warbot

Présentation

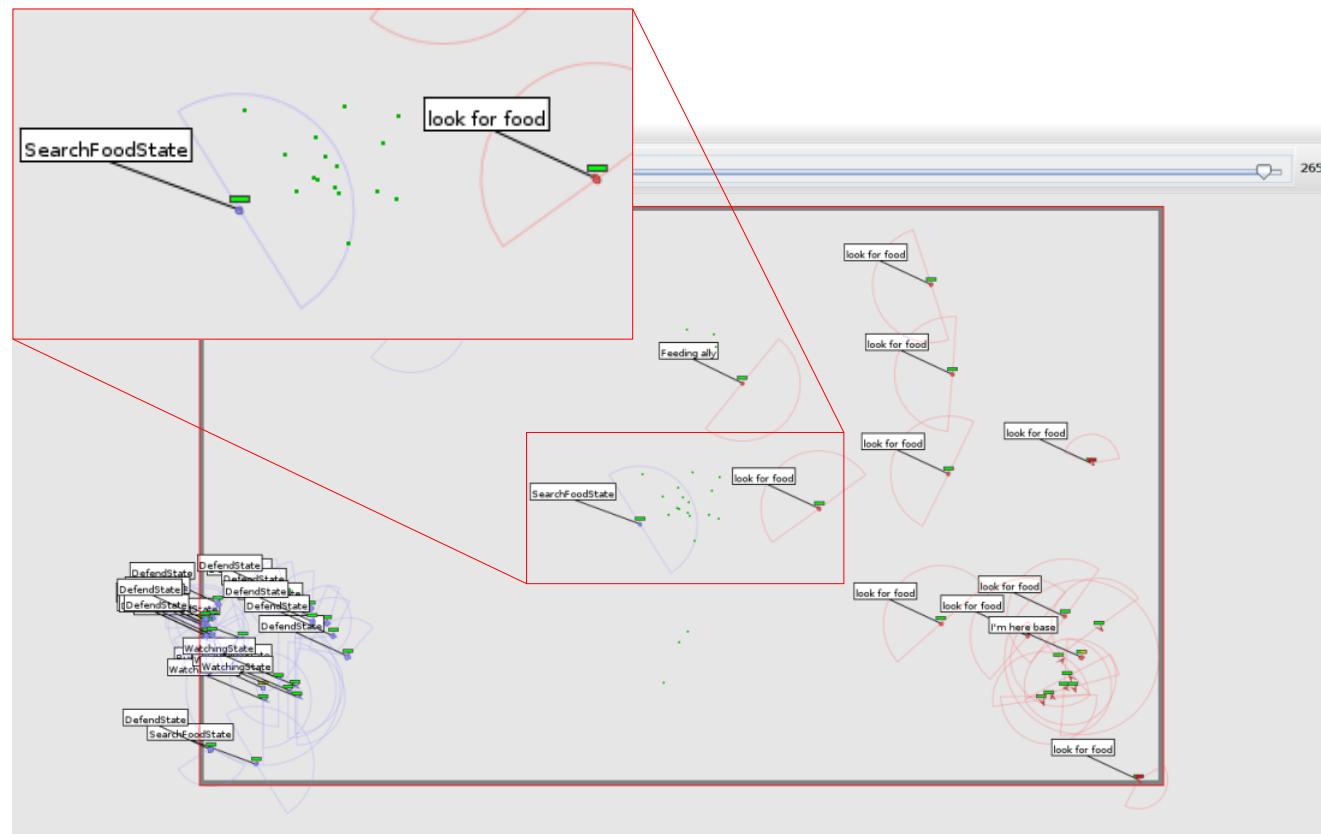
Interpréteur

Convertisseur

Interface

Vue
d'ensemble

Conclusion



Présentation de Warbot

Présentation

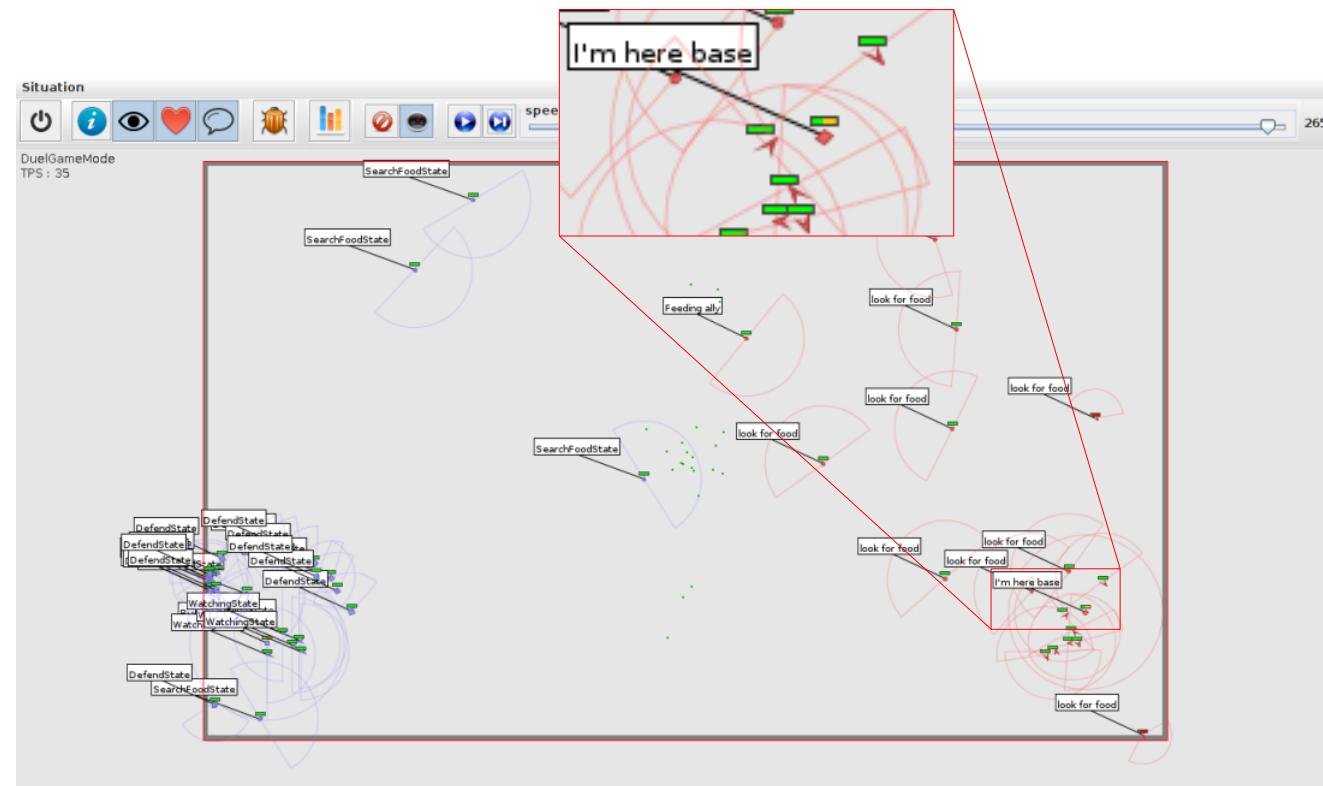
Interpréteur

Convertisseur

Interface

Vue
d'ensemble

Conclusion



Présentation de Warbot

Présentation

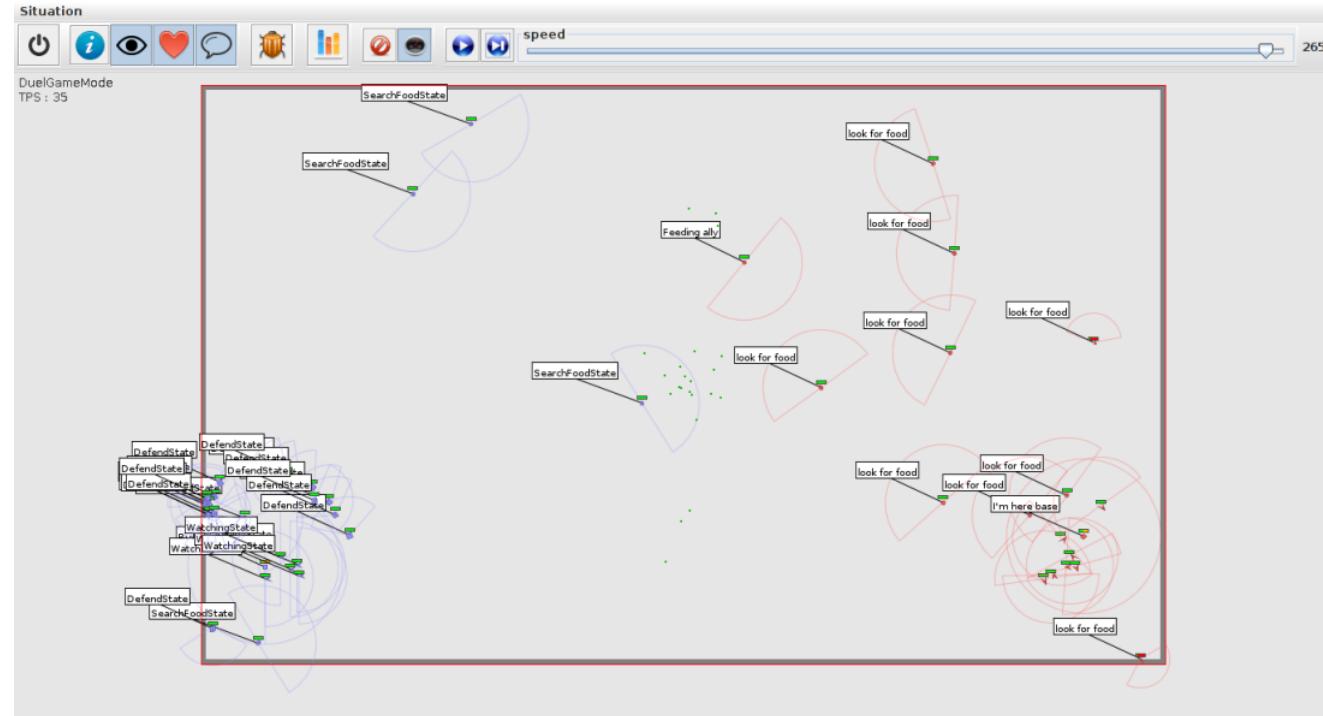
Interpréter

Convertisseur

Interface

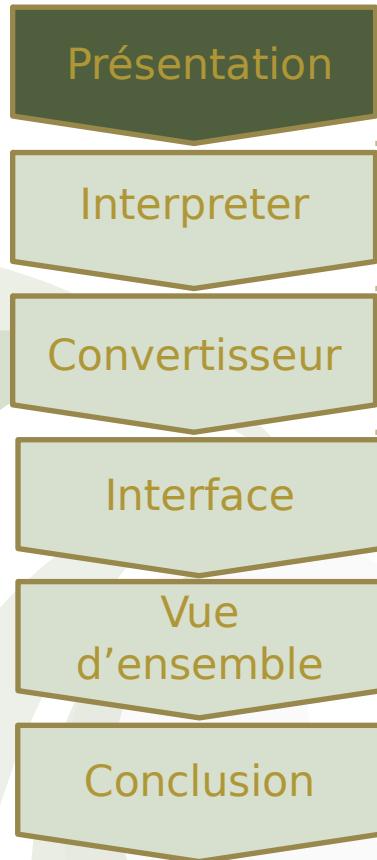
Vue
d'ensemble

Conclusion



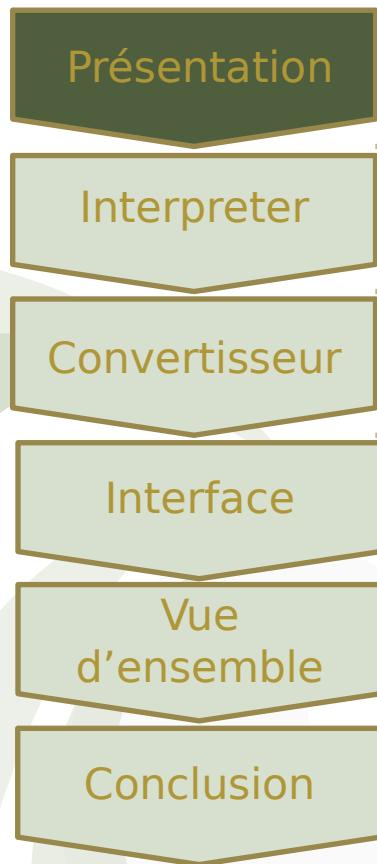
Réflexion plutôt que réflexes

Présentation de Warbot



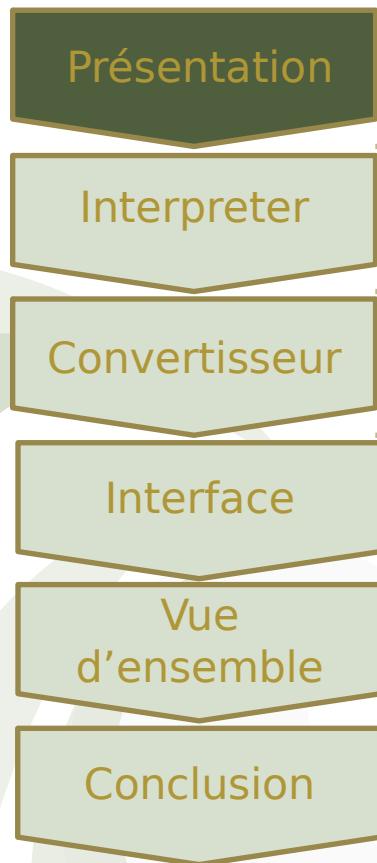
- Création en 2002

Présentation de Warbot



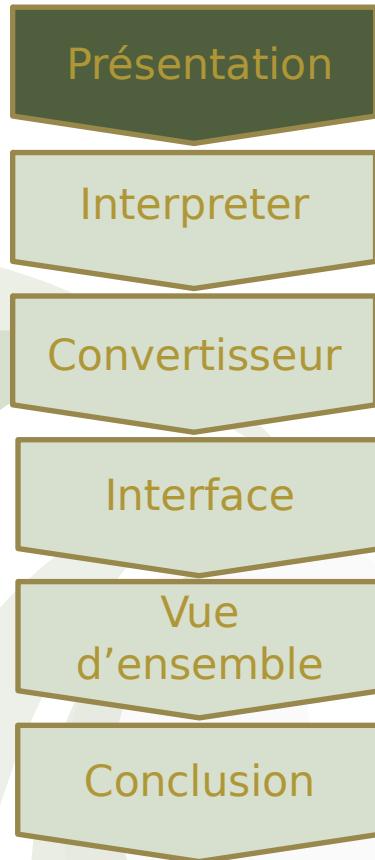
- Création en 2002
- Système multi-agents

Présentation de Warbot



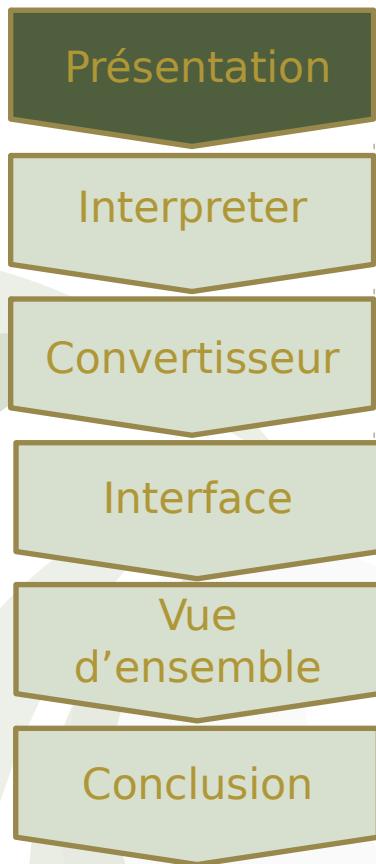
- Création en 2002
- Système multi-agents
- NetLogo / Java

Présentation de Warbot

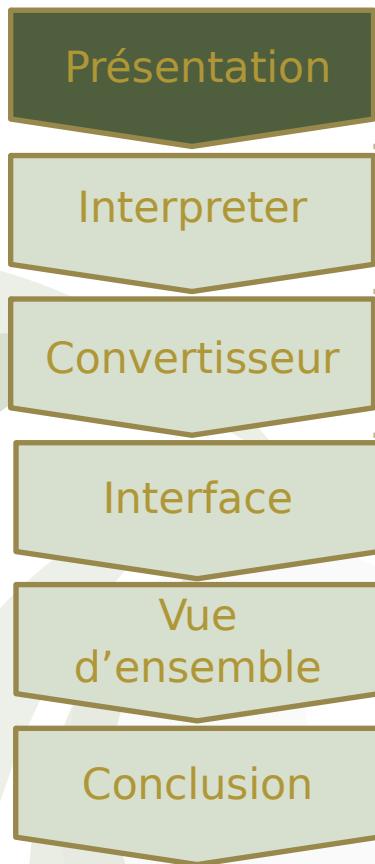


- Création en 2002
- Système multi-agents
- NetLogo / Java
- MadKit / TurtleKit

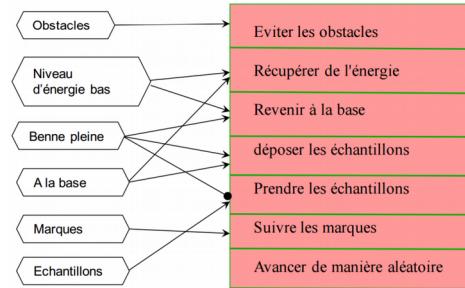
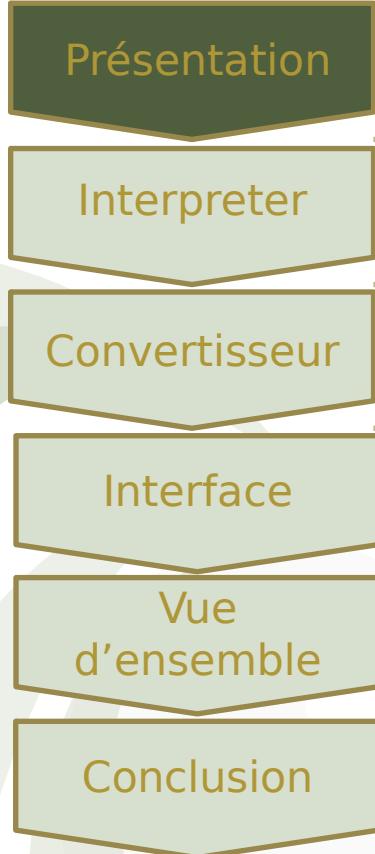
Objectif



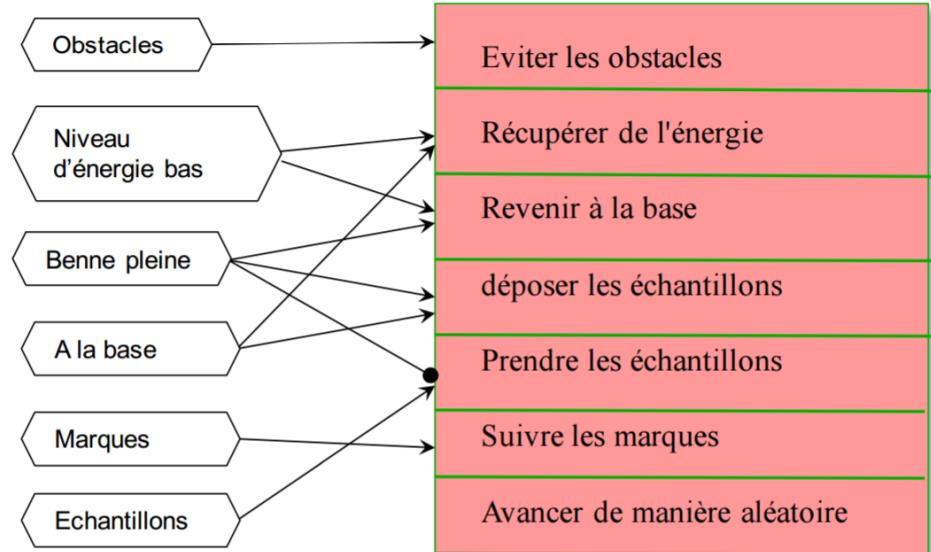
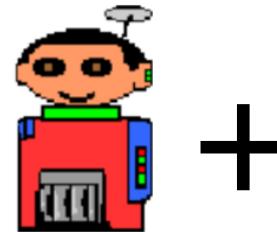
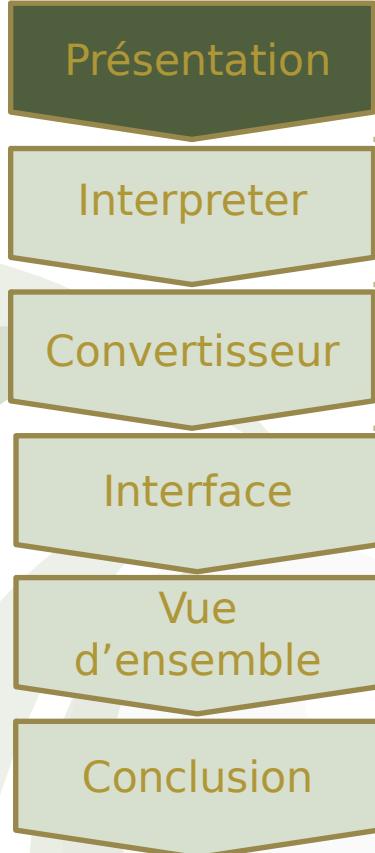
Objectif



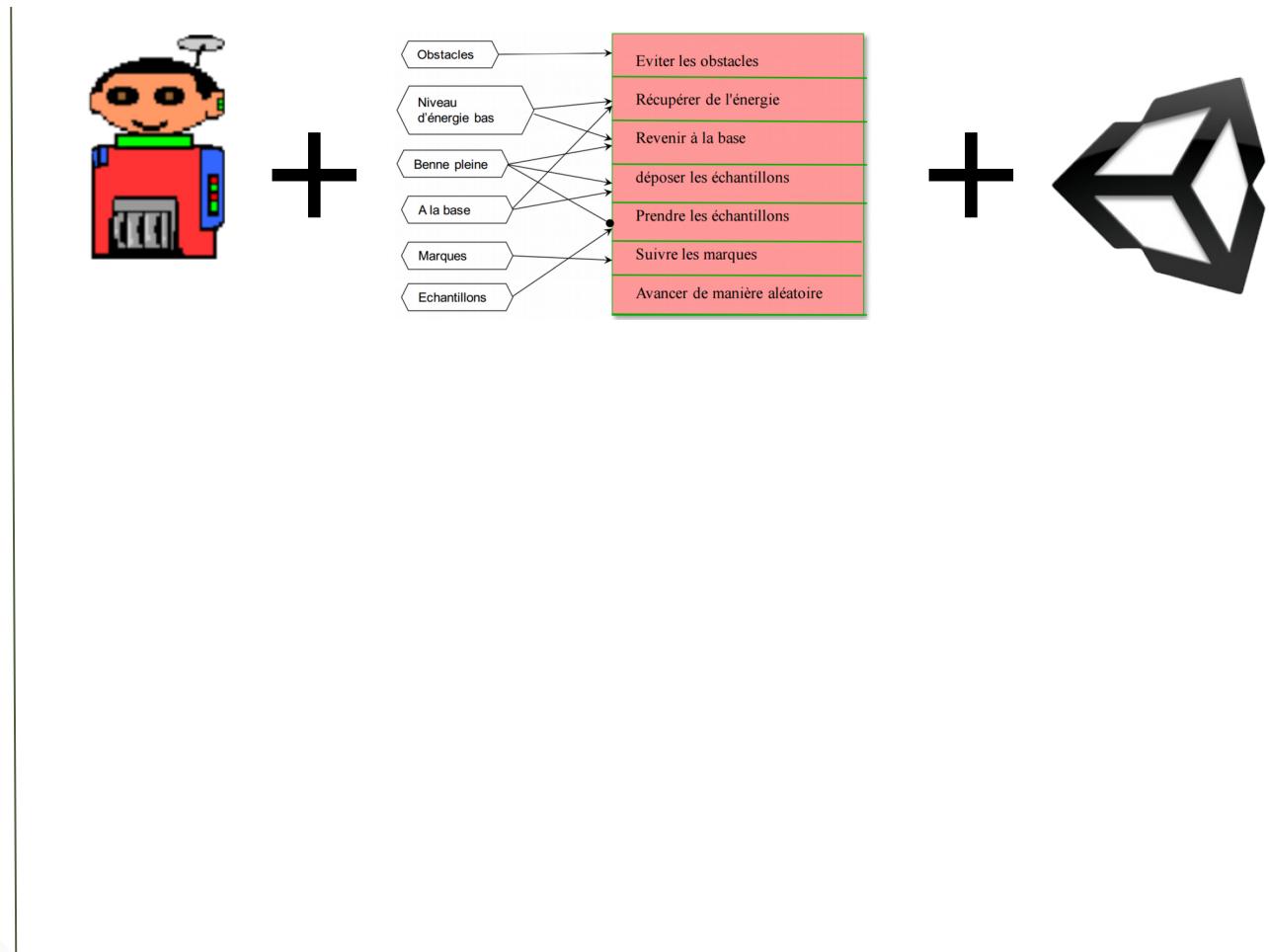
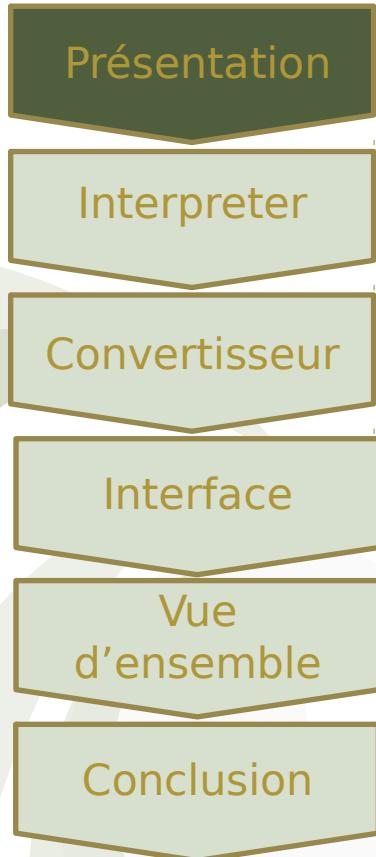
Objectif



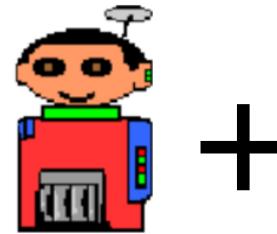
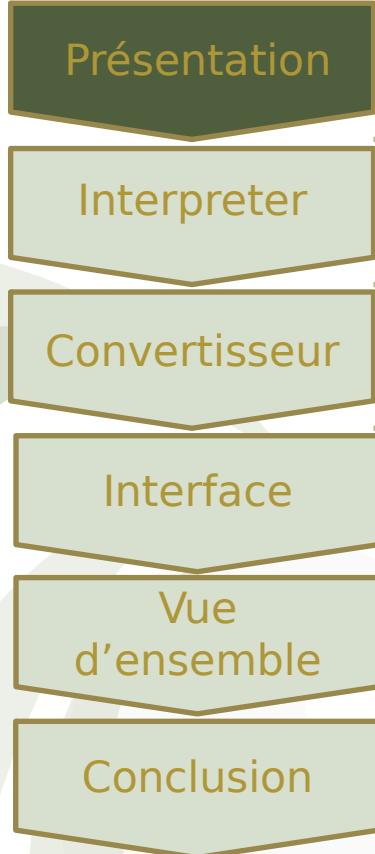
Objectif



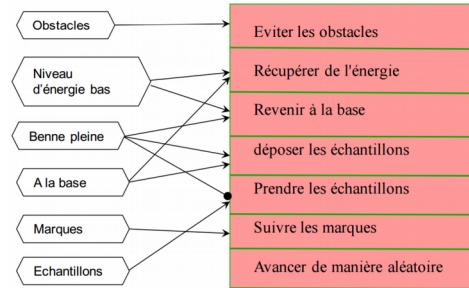
Objectif



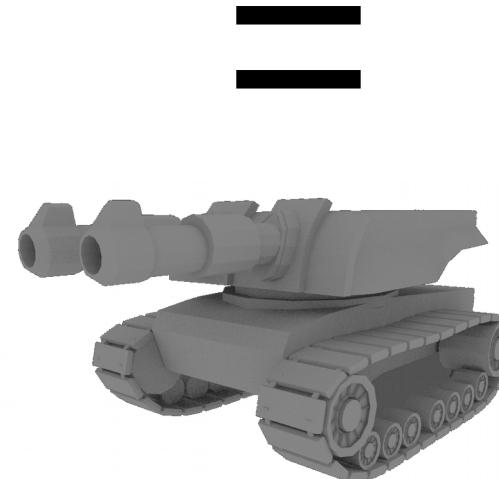
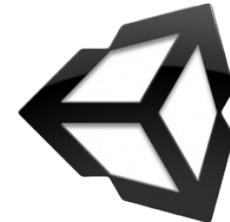
Objectif



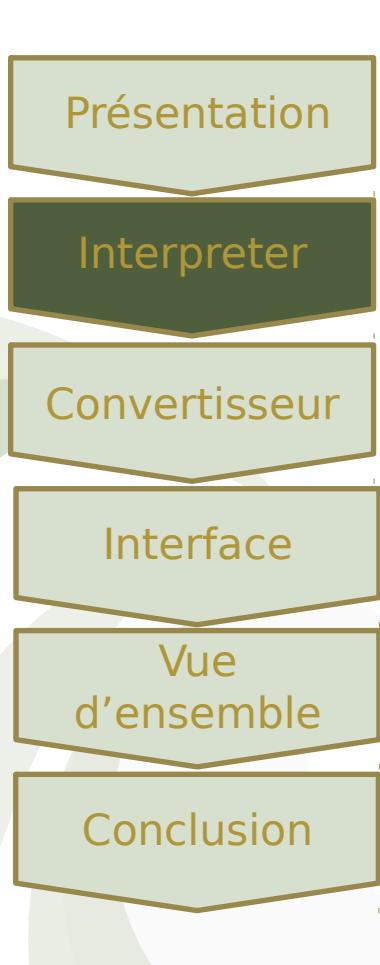
+



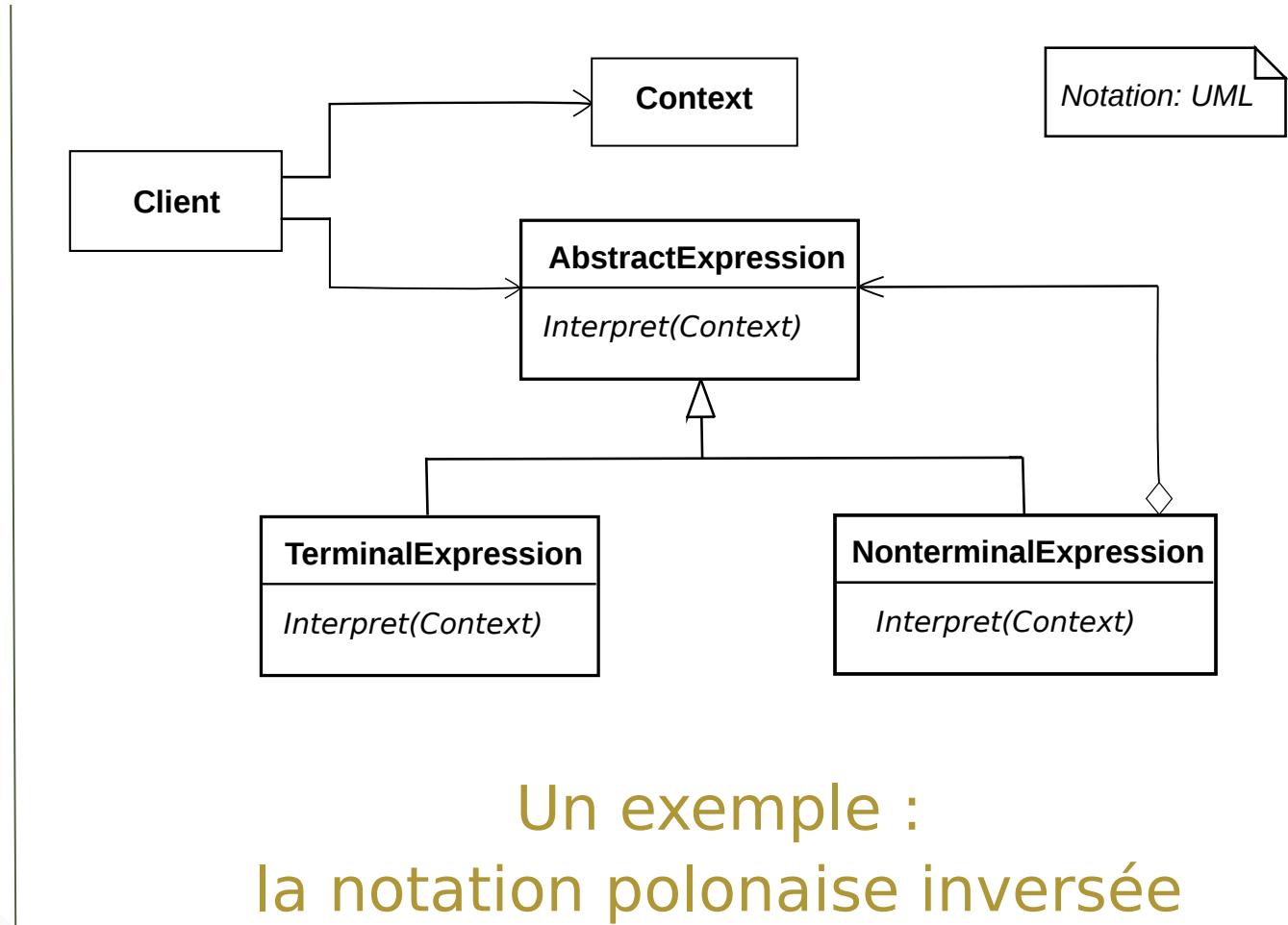
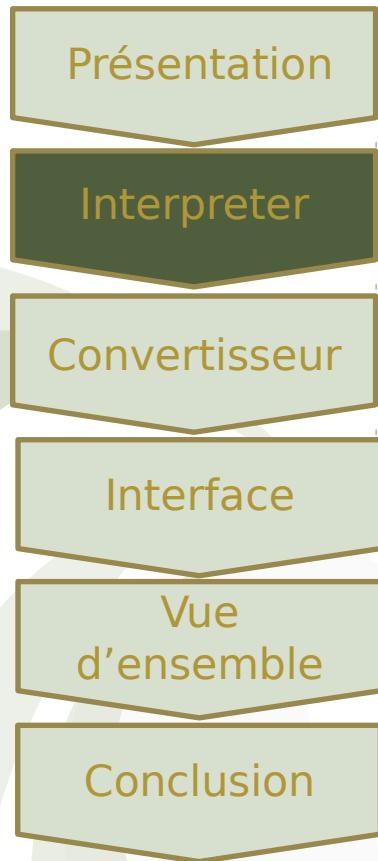
+



Design Pattern Interpreter

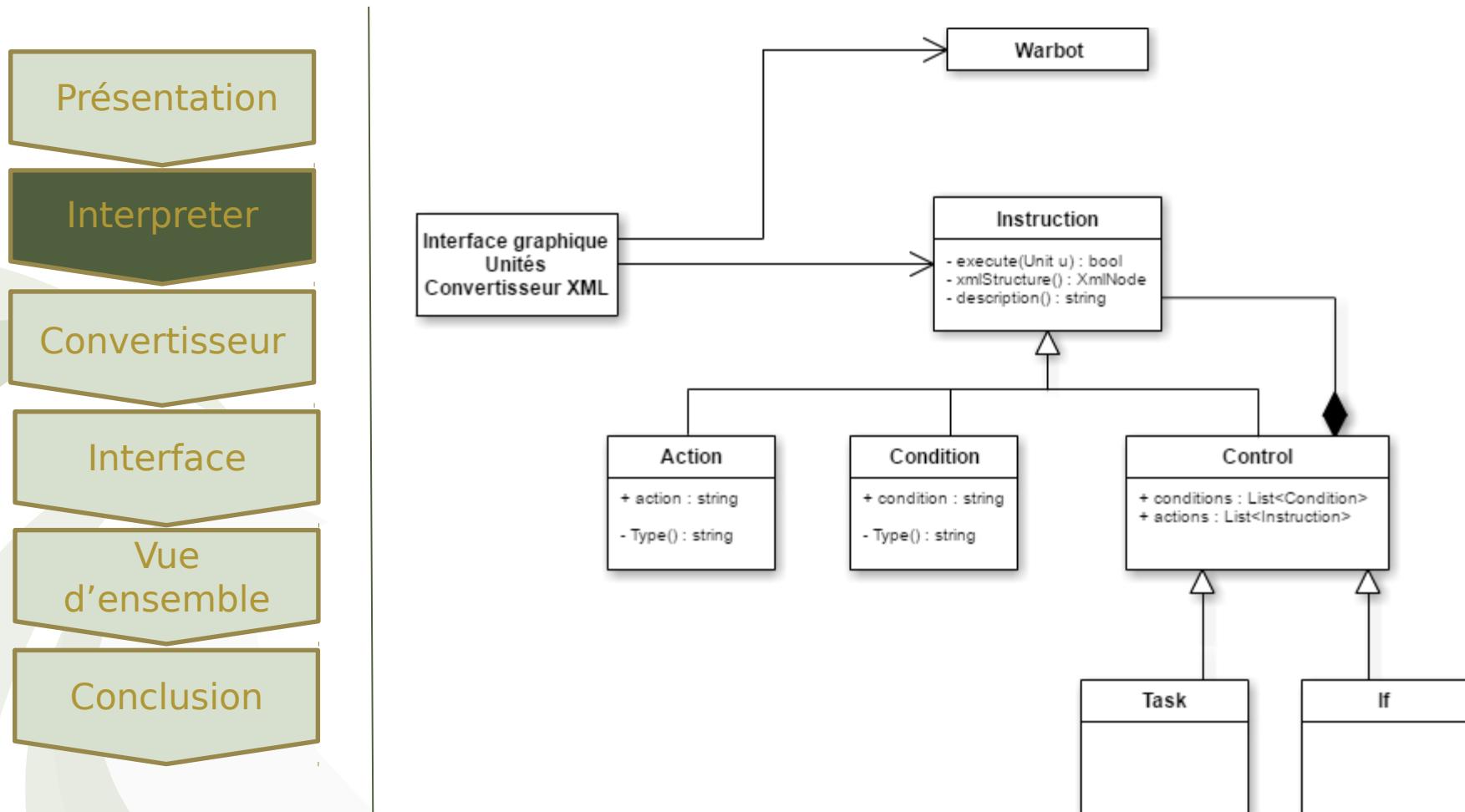


Design Pattern Interpreter



Un exemple :
la notation polonaise inversée

Design Pattern Interpreter



Design Pattern Interpreter

Présentation

Interpréteur

Convertisseur

Interface

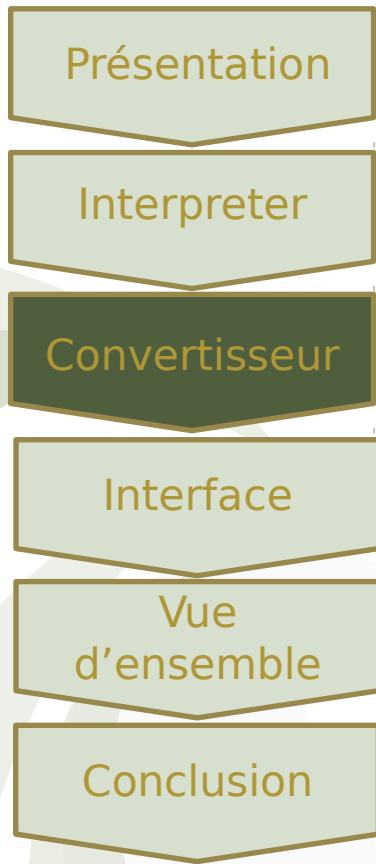
Vue
d'ensemble

Conclusion

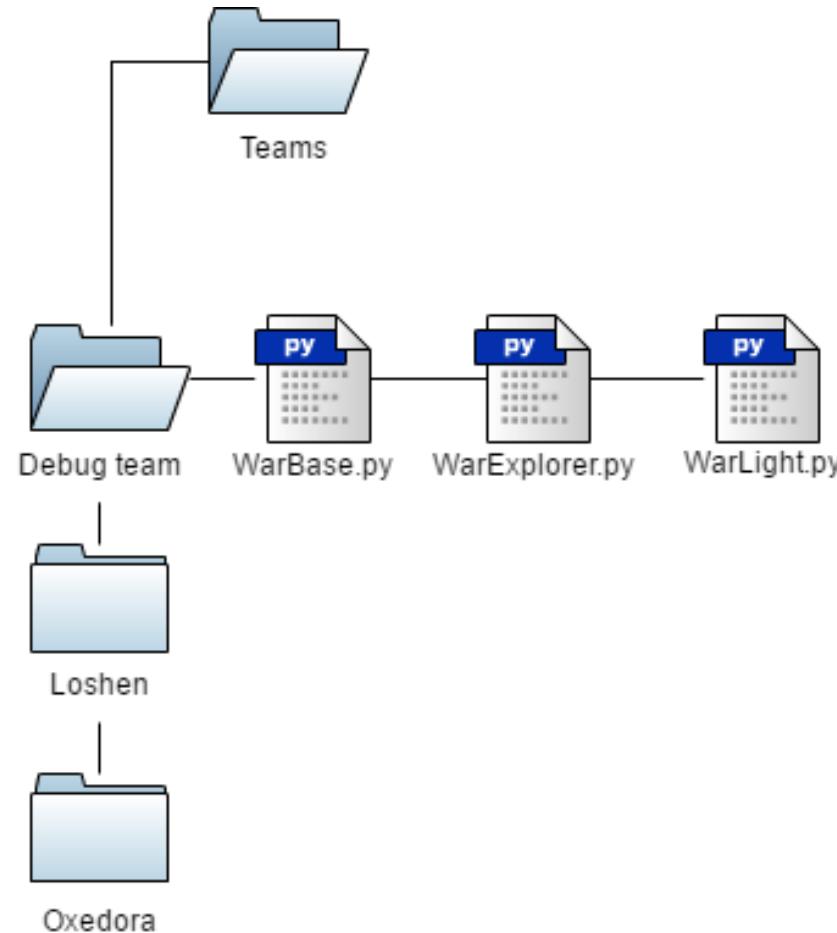
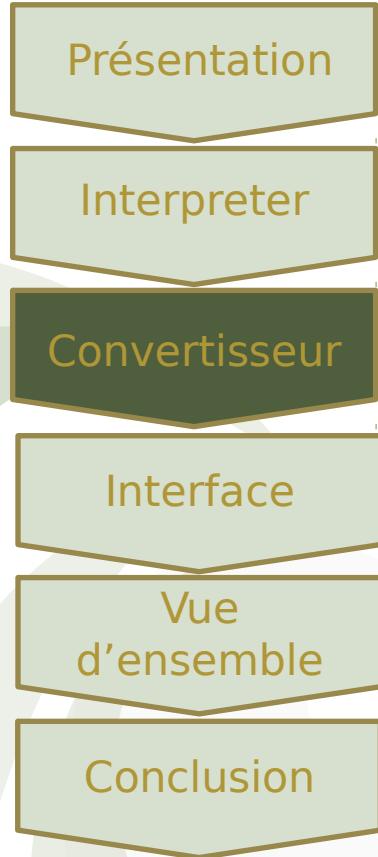
```
// Specifie le type de primitive (action ou condition)
[PrimitiveType(PRIMITIVE_TYPE.ACTION)]

// Liste des unités pouvant utiliser cette primitive
[UnitAllowed(WarBots.BotType.WarHeavy)]
[UnitAllowed(WarBots.BotType.WarExplorer)]
[UnitAllowed(WarBots.BotType.WarEngineer)]
[PrimitiveDescription("Fait avancer l'unité (termine l' action si réussi)")]
    public bool Walk()
{
    // ...
}
```

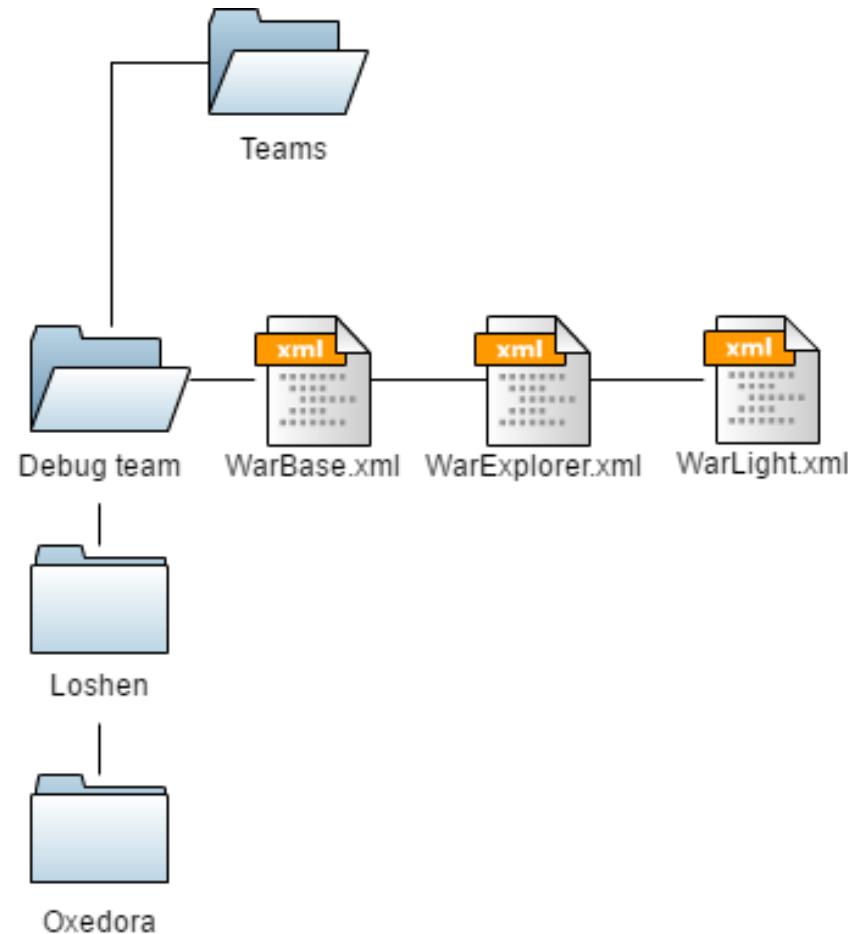
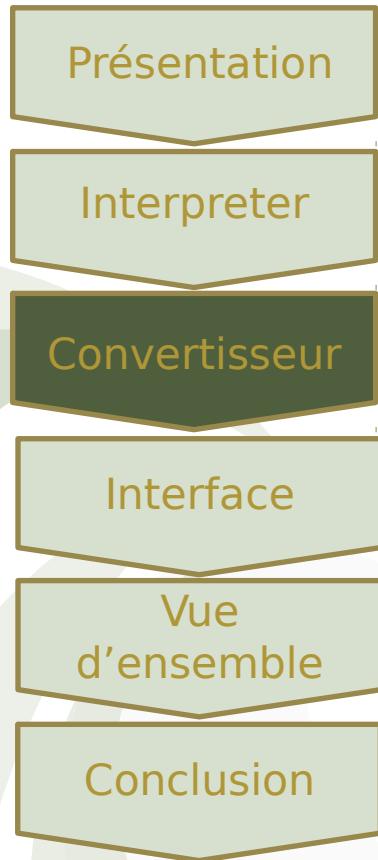
Convertisseur XML



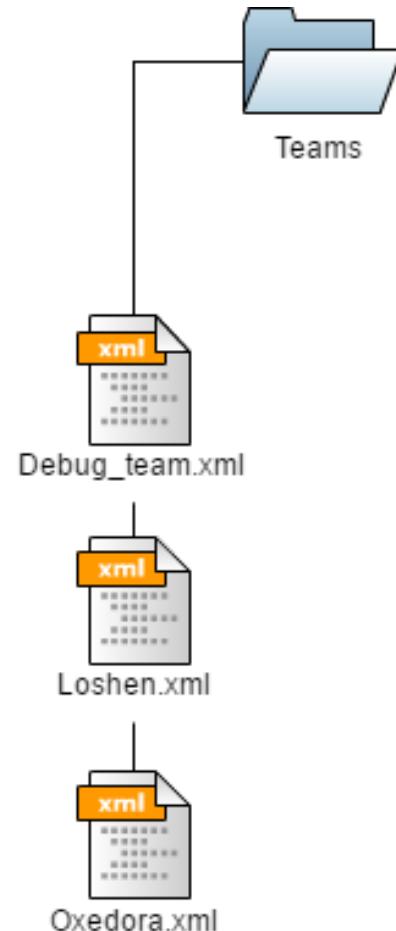
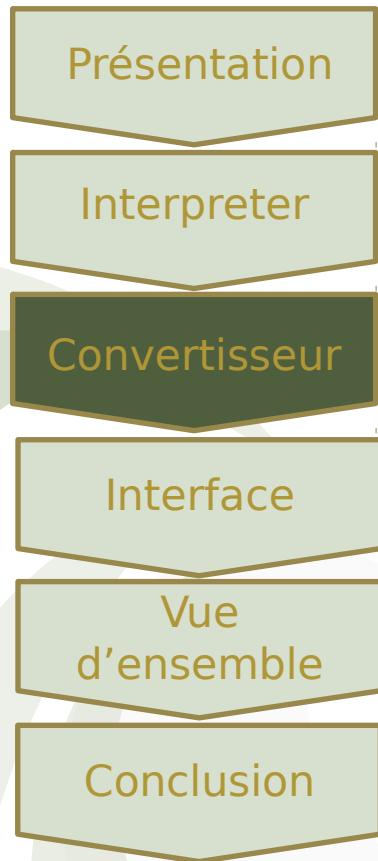
Convertisseur XML



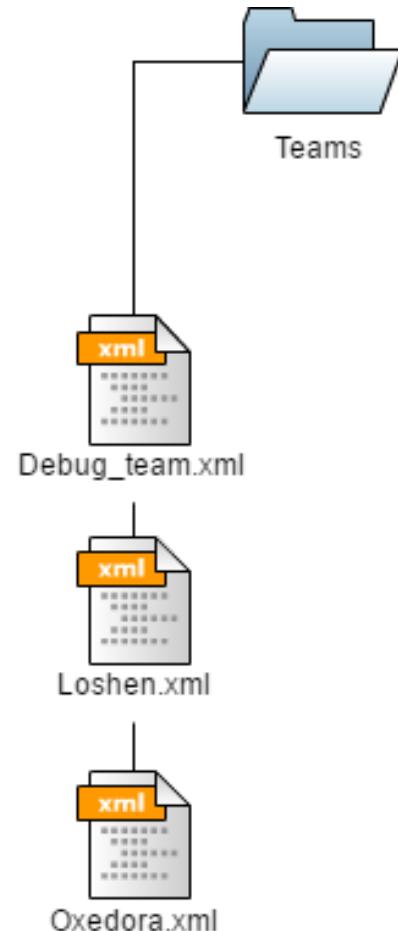
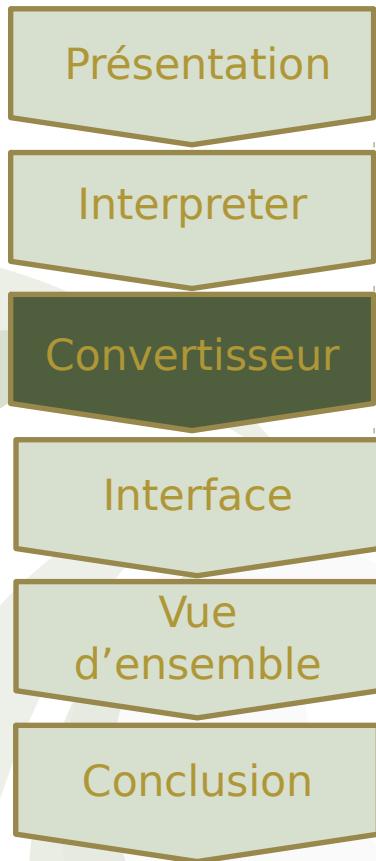
Convertisseur XML



Convertisseur XML

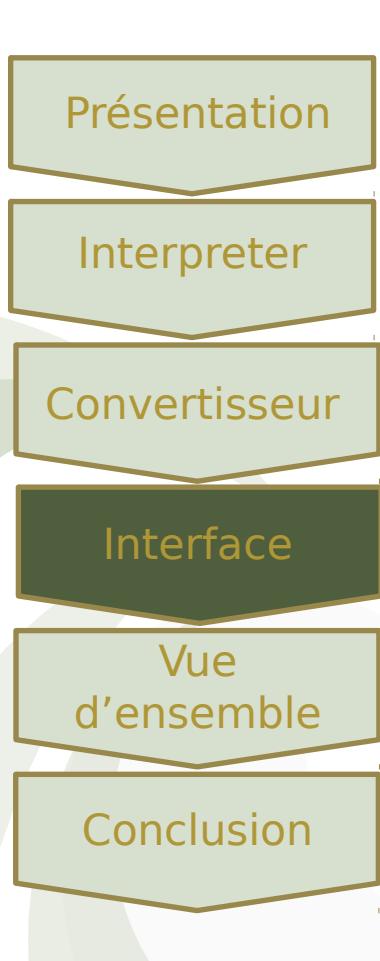


Convertisseur XML



```
<-<behavior>
  <teamName>Debug Team</teamName>
-<unit name="WarExplorer">
  -<Task>
    -<parameters>
      <NearRessources/>
    </parameters>
    -<actions>
      <TargetNearestRessource/>
      <Turn/>
      <Walk/>
    </actions>
  </Task>
  <Walk/>
-</unit>
-<unit name="WarBase">
  -<If>
    -<parameters>
      <CanCreate/>
    </parameters>
    -<actions>
      <SelectRandomUnit/>
      <CreateUnit/>
    </actions>
    -<elseActions>
      <Idle/>
    </elseActions>
  </If>
  <Idle/>
-</unit>
</behavior>
```

Interface graphique



Interface graphique

Présentation

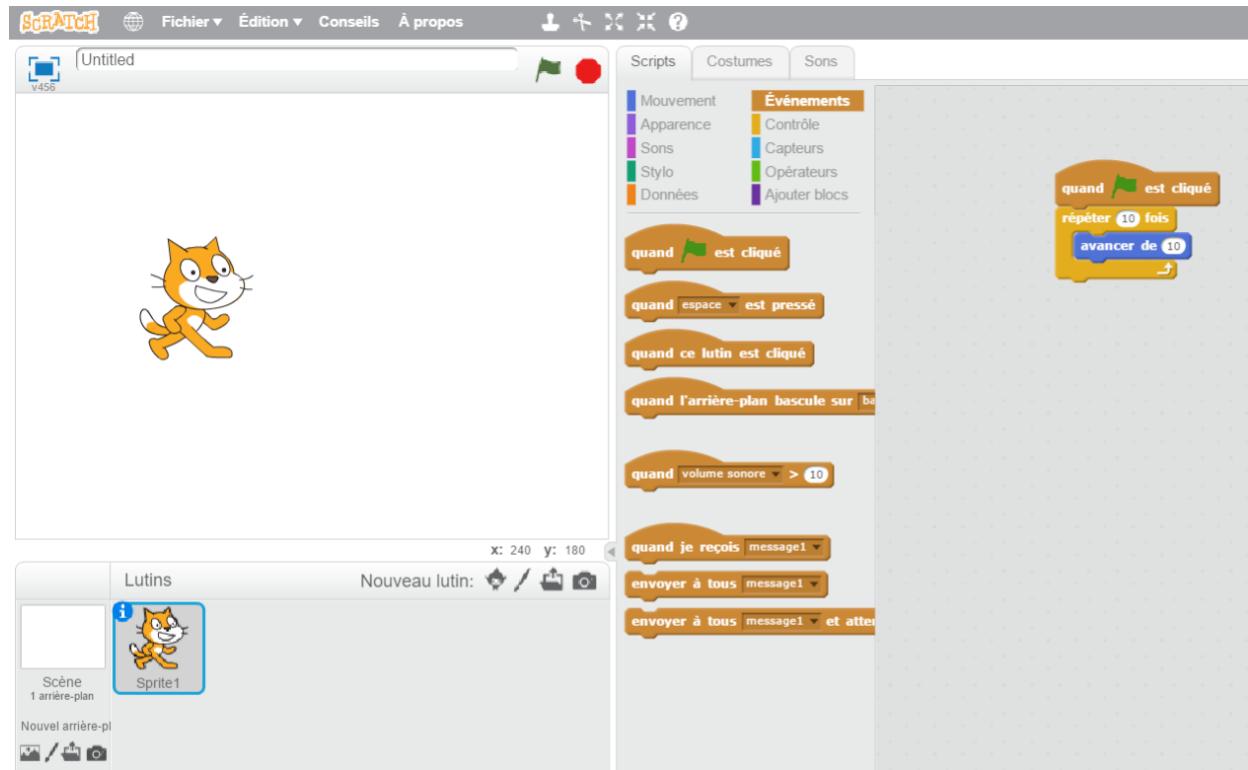
Interpréter

Convertisseur

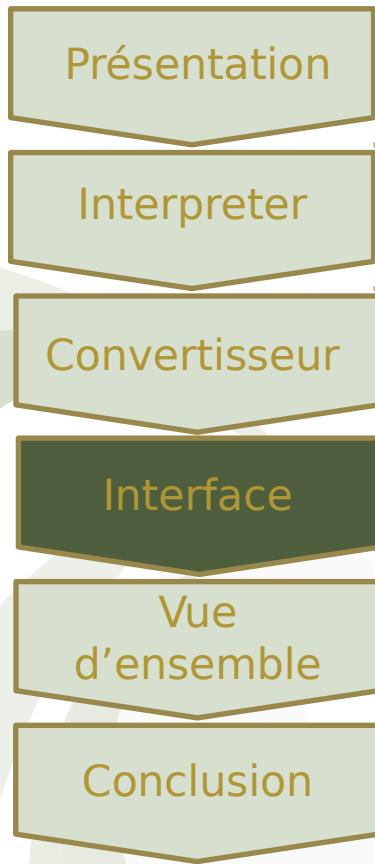
Interface

Vue
d'ensemble

Conclusion

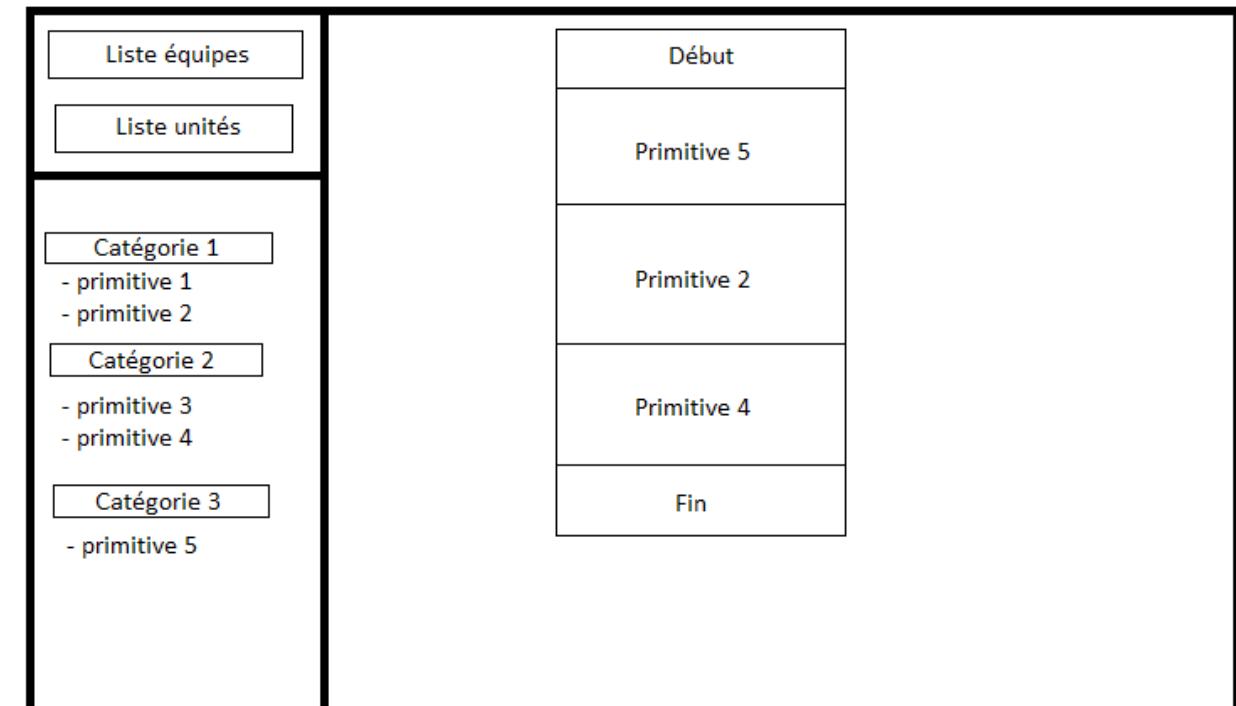
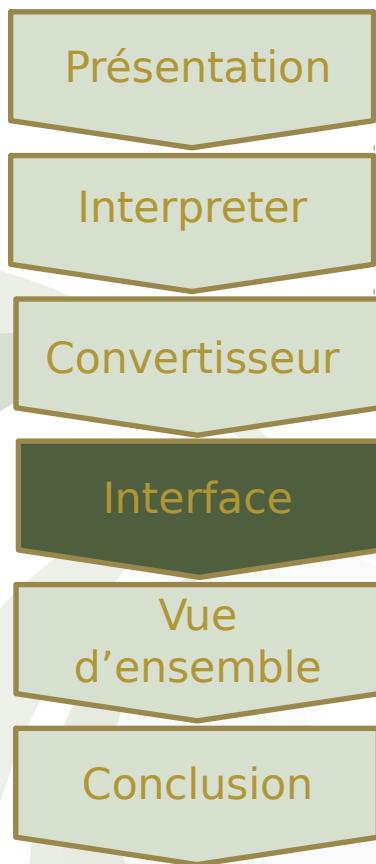


Interface graphique

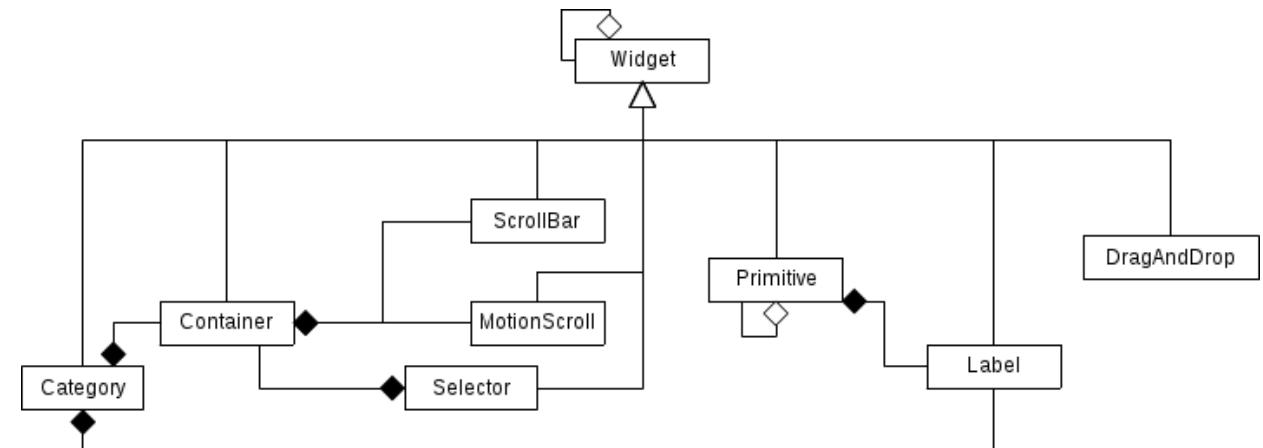
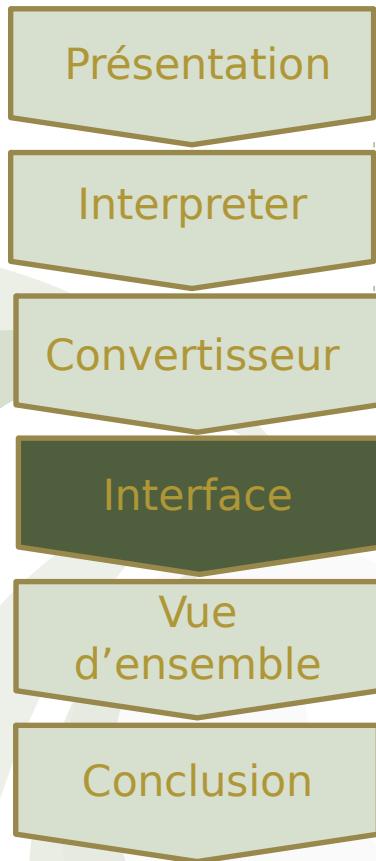


Liste équipes	Catégorie 1 Catégorie 2 Catégorie 3 Catégorie 4 ...	
WarBase WarHeavy WarExplorer WarEngineer WarTurret	Primitive 1 Primitive 2 Primitive 3 ...	

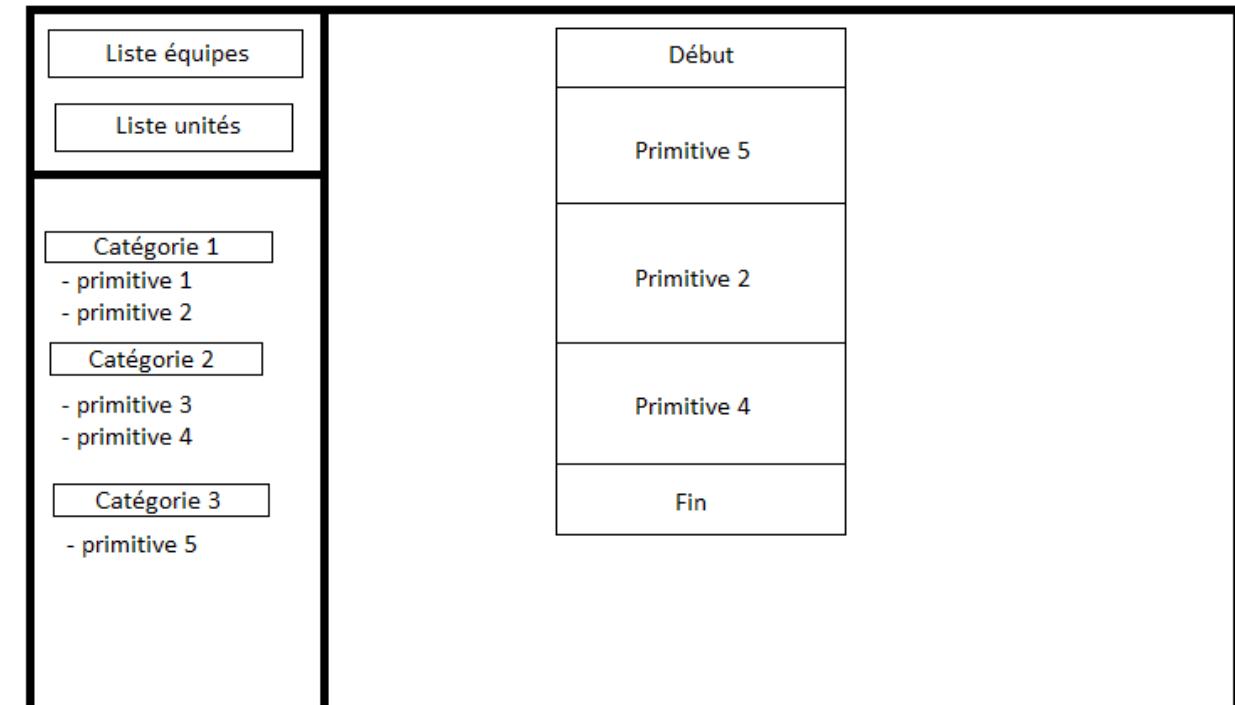
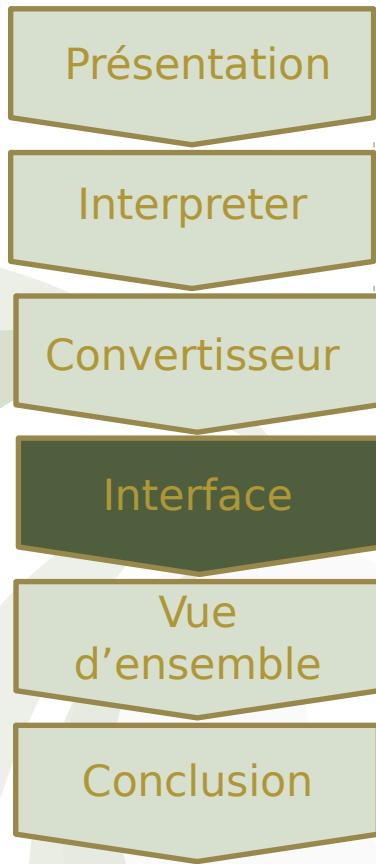
Interface graphique



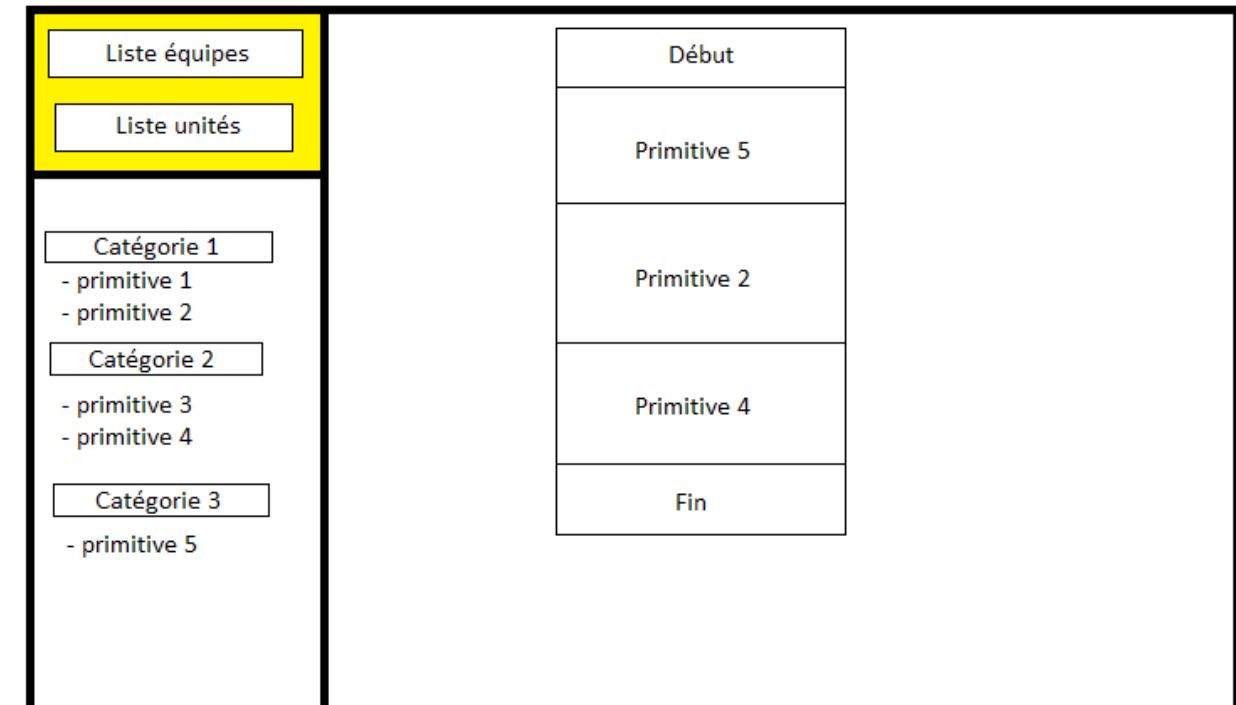
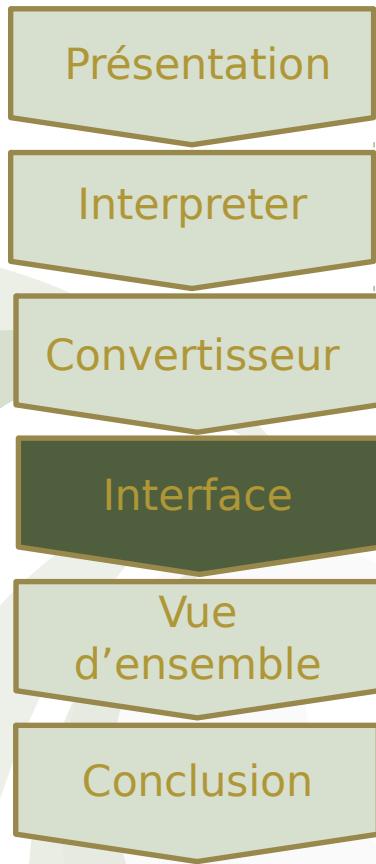
Interface graphique



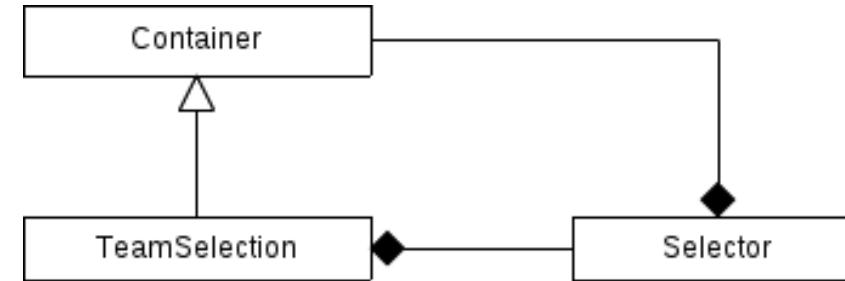
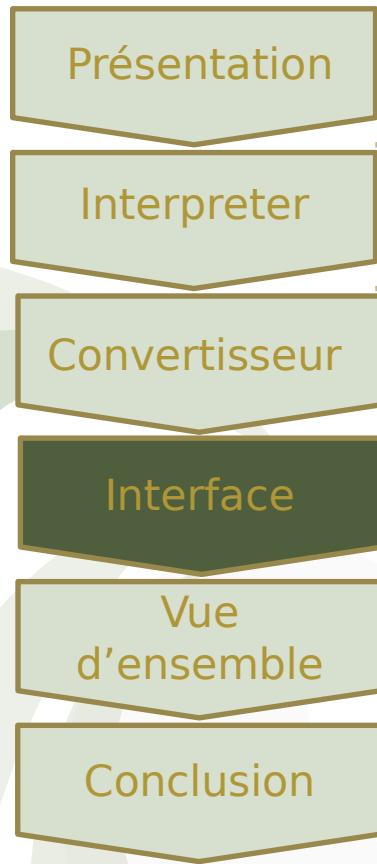
Interface graphique



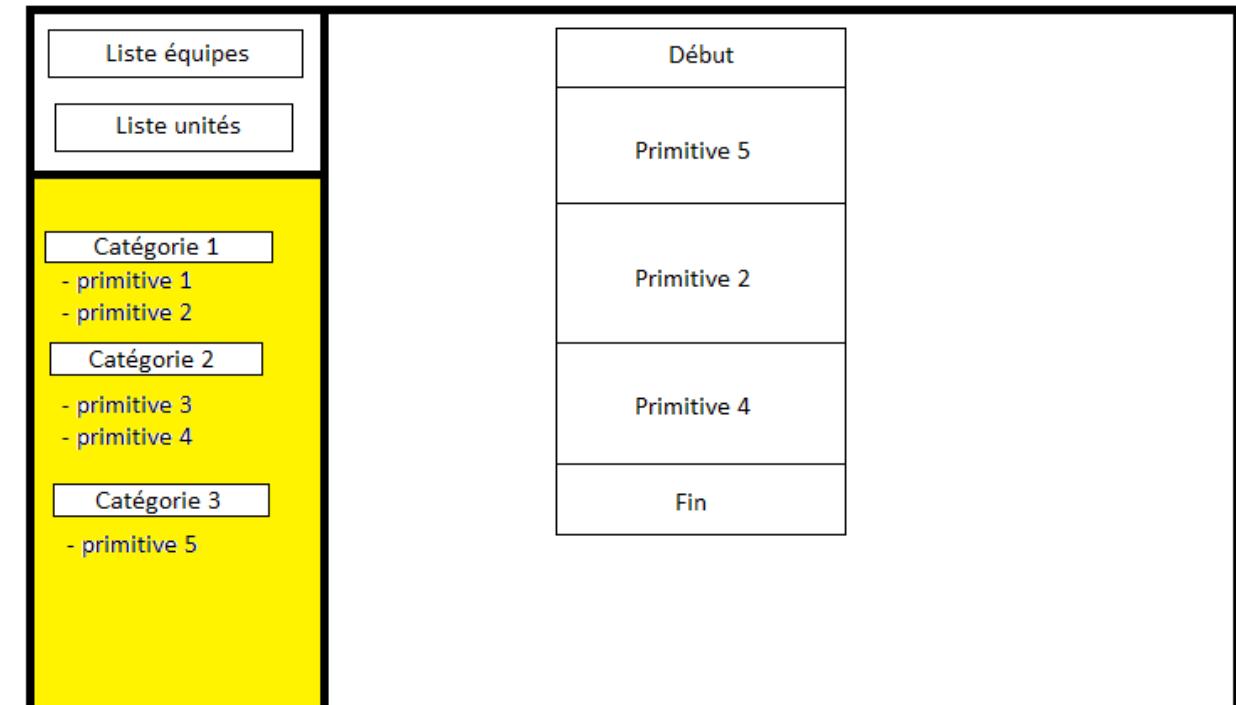
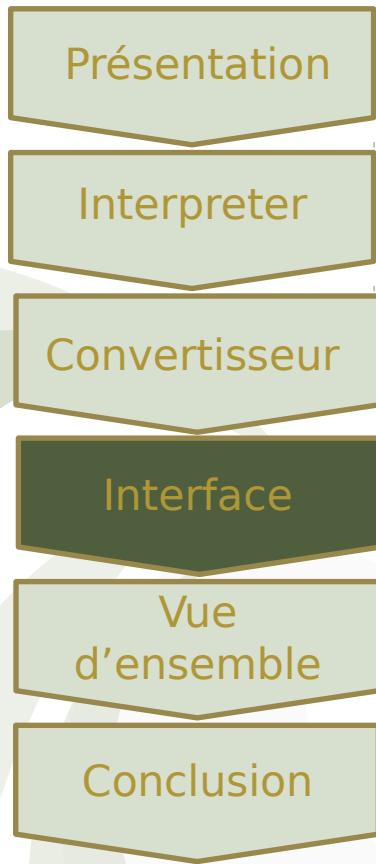
Interface graphique



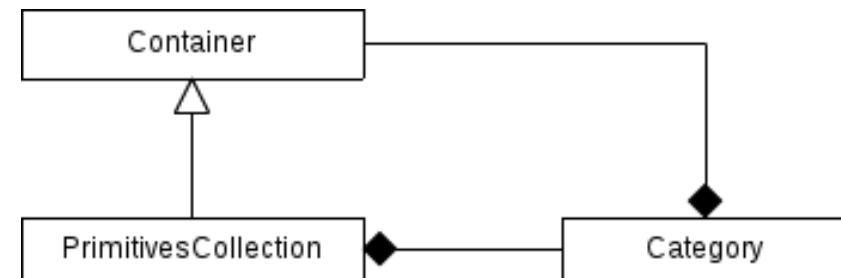
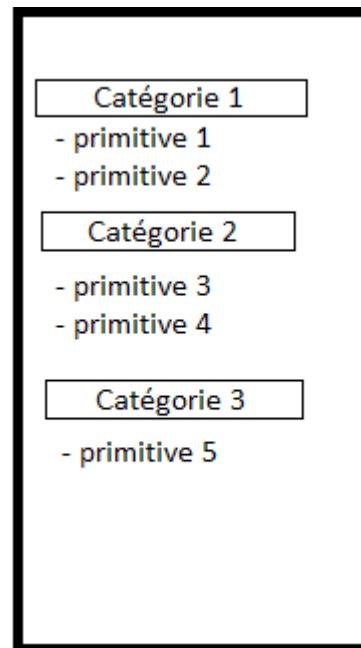
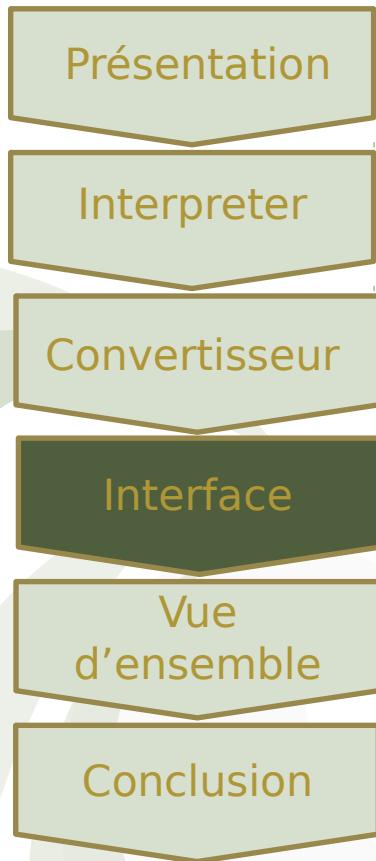
Interface graphique



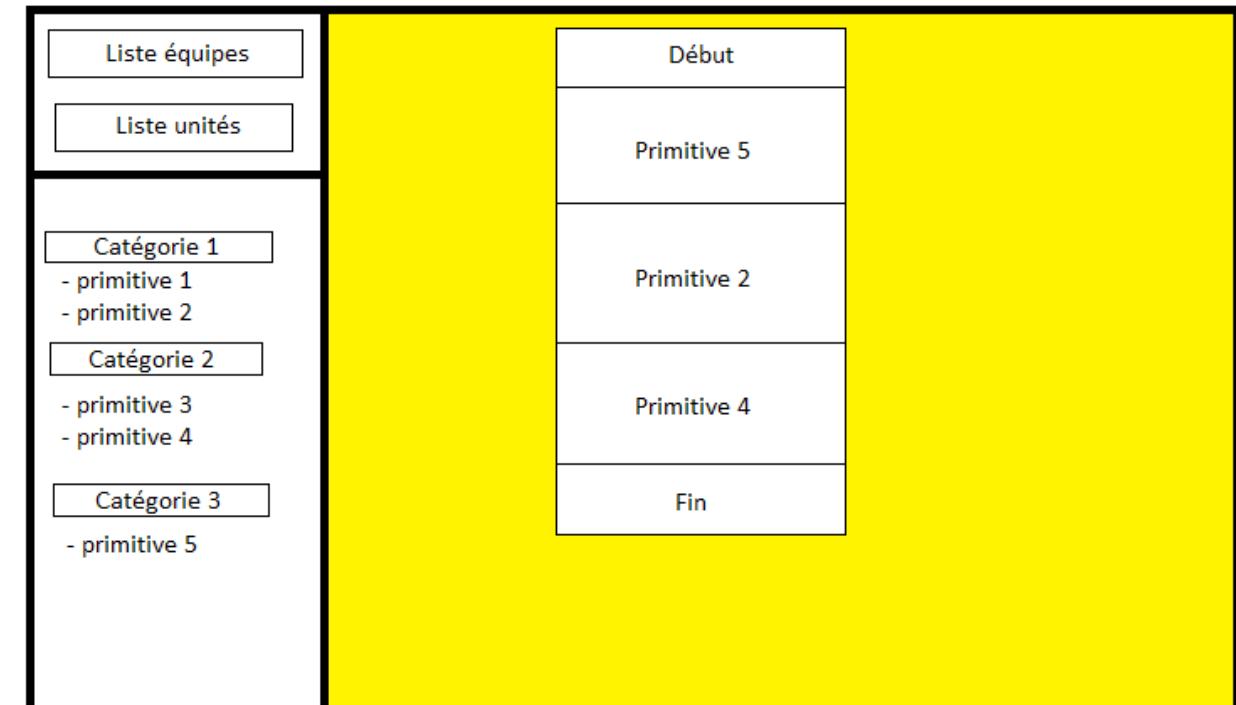
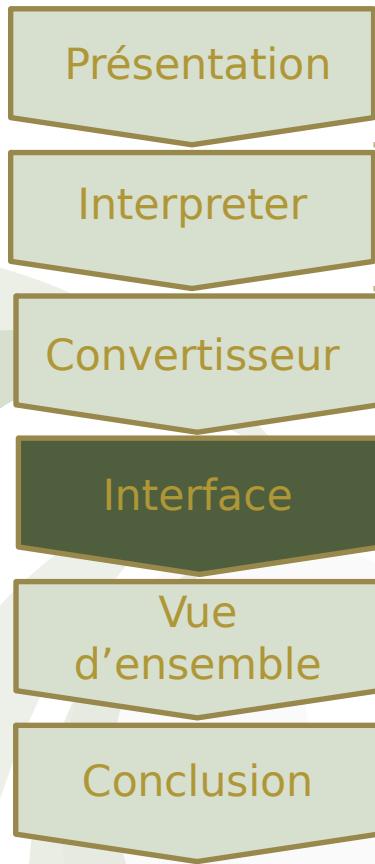
Interface graphique



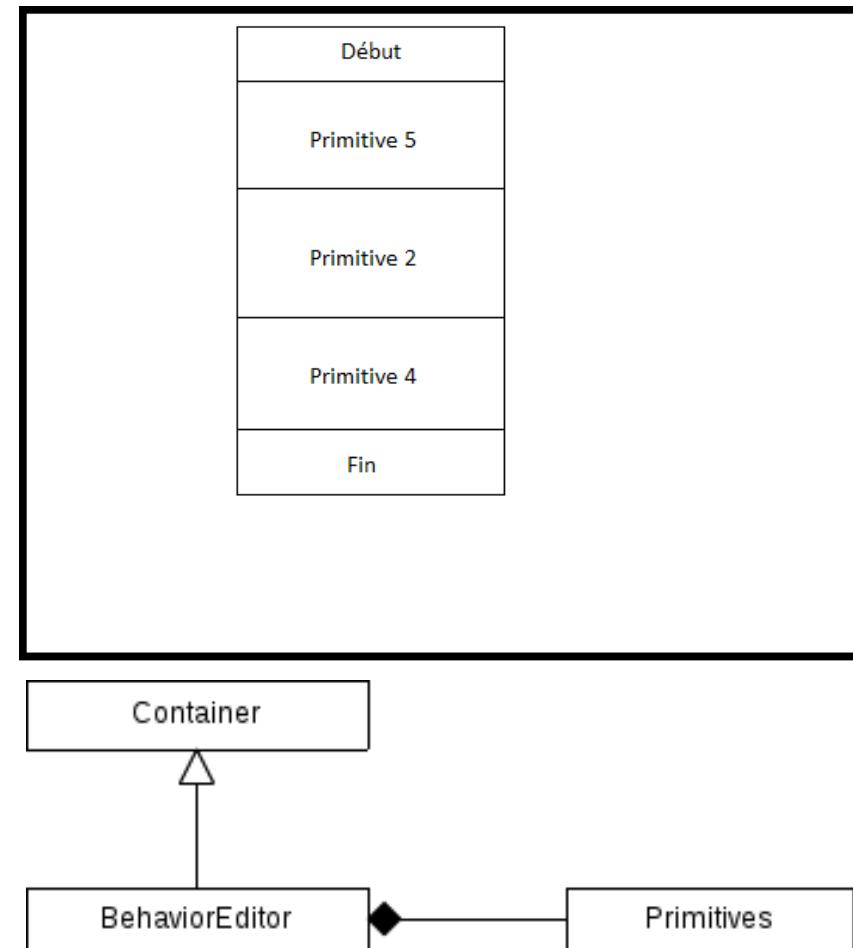
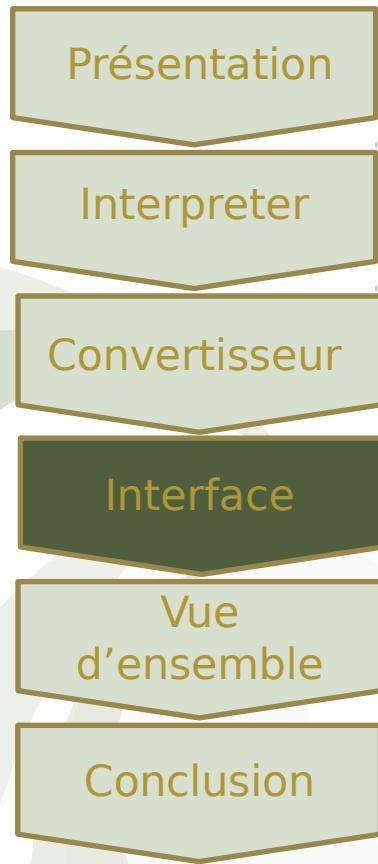
Interface graphique



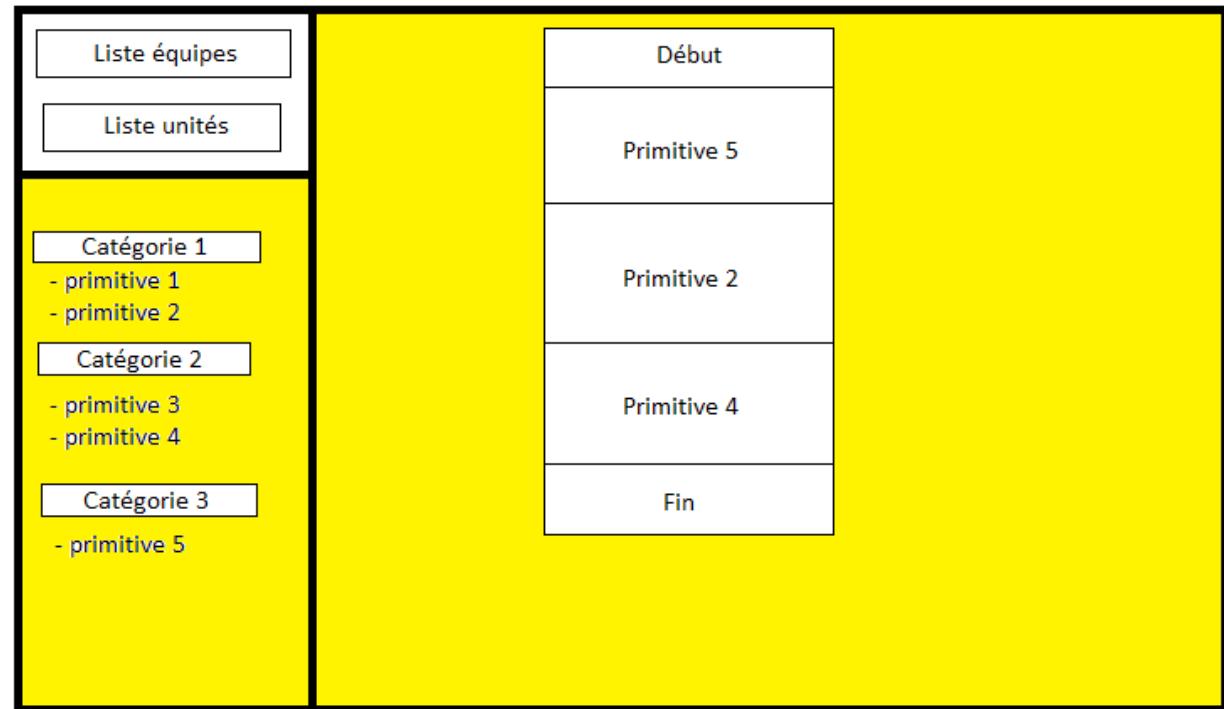
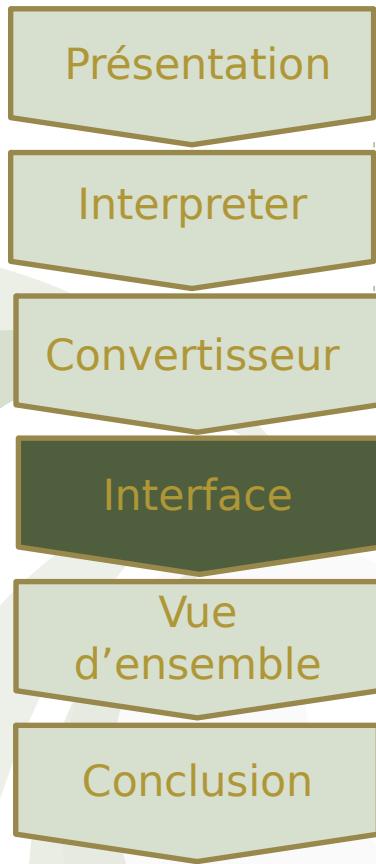
Interface graphique



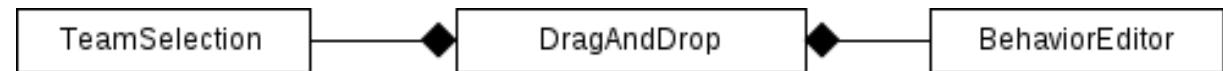
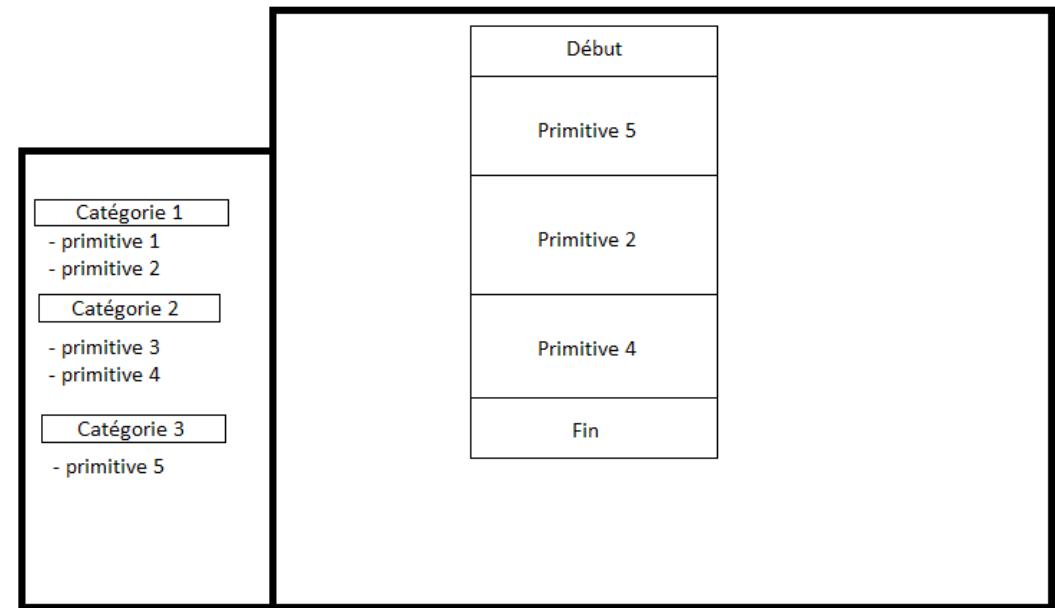
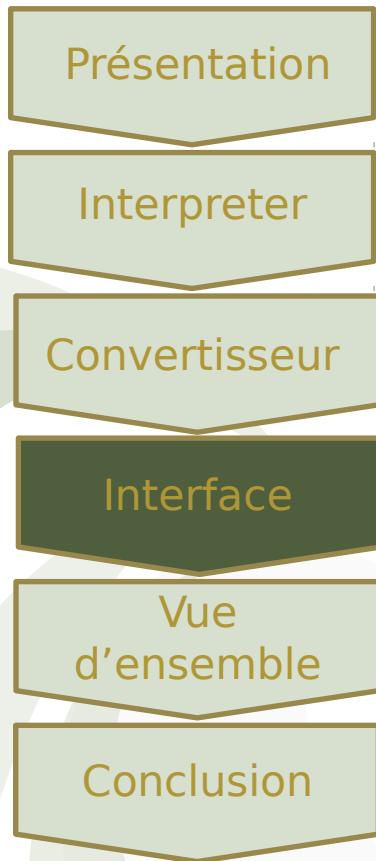
Interface graphique



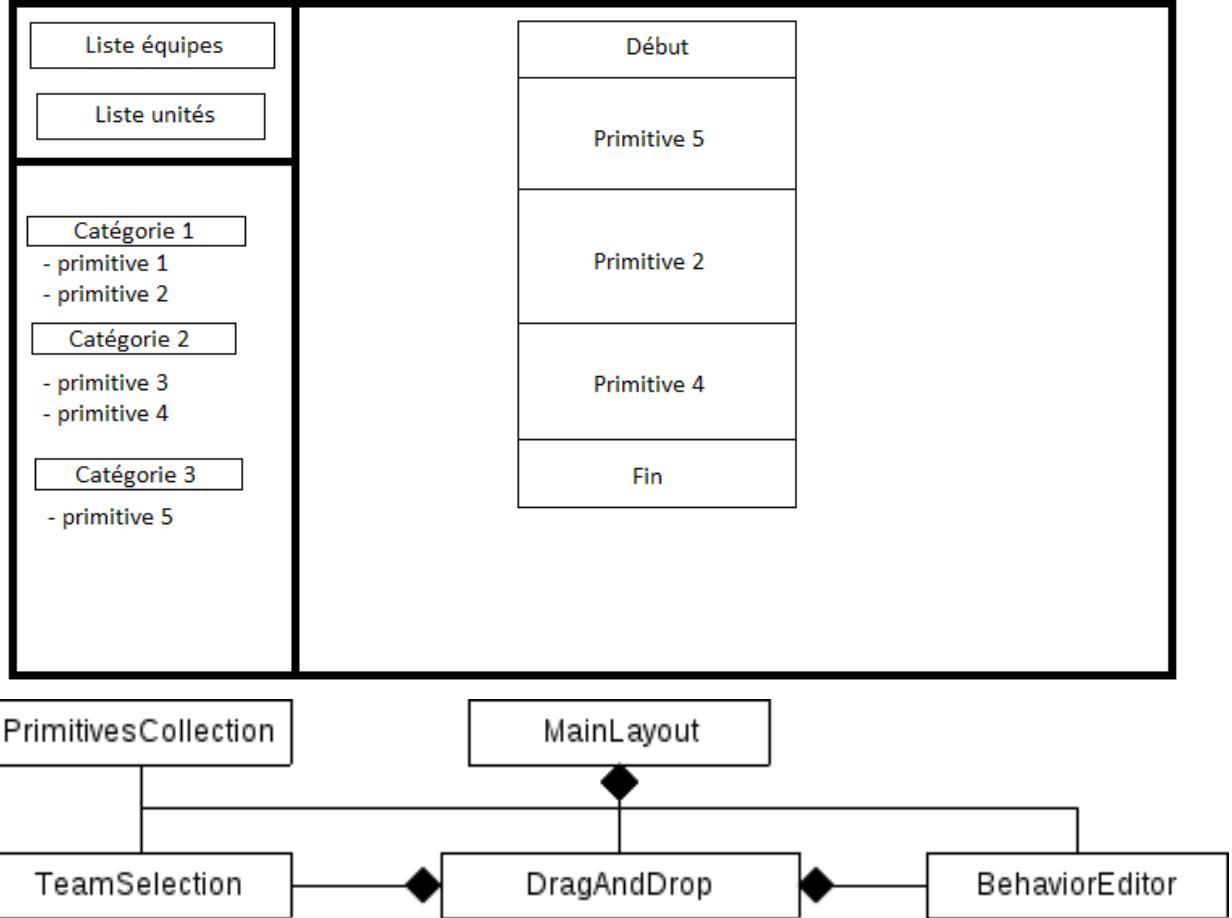
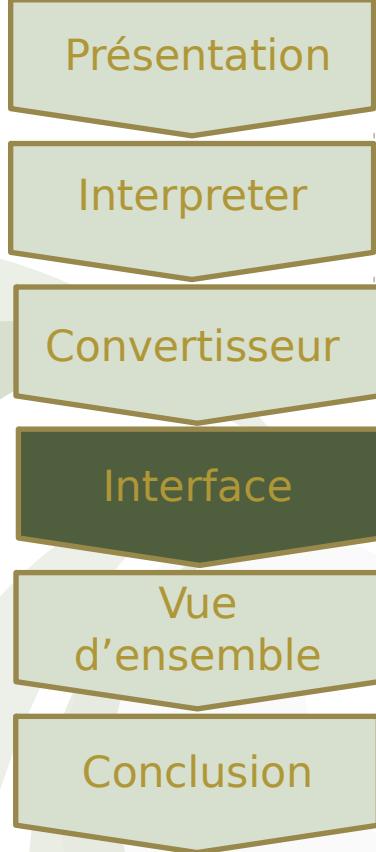
Interface graphique



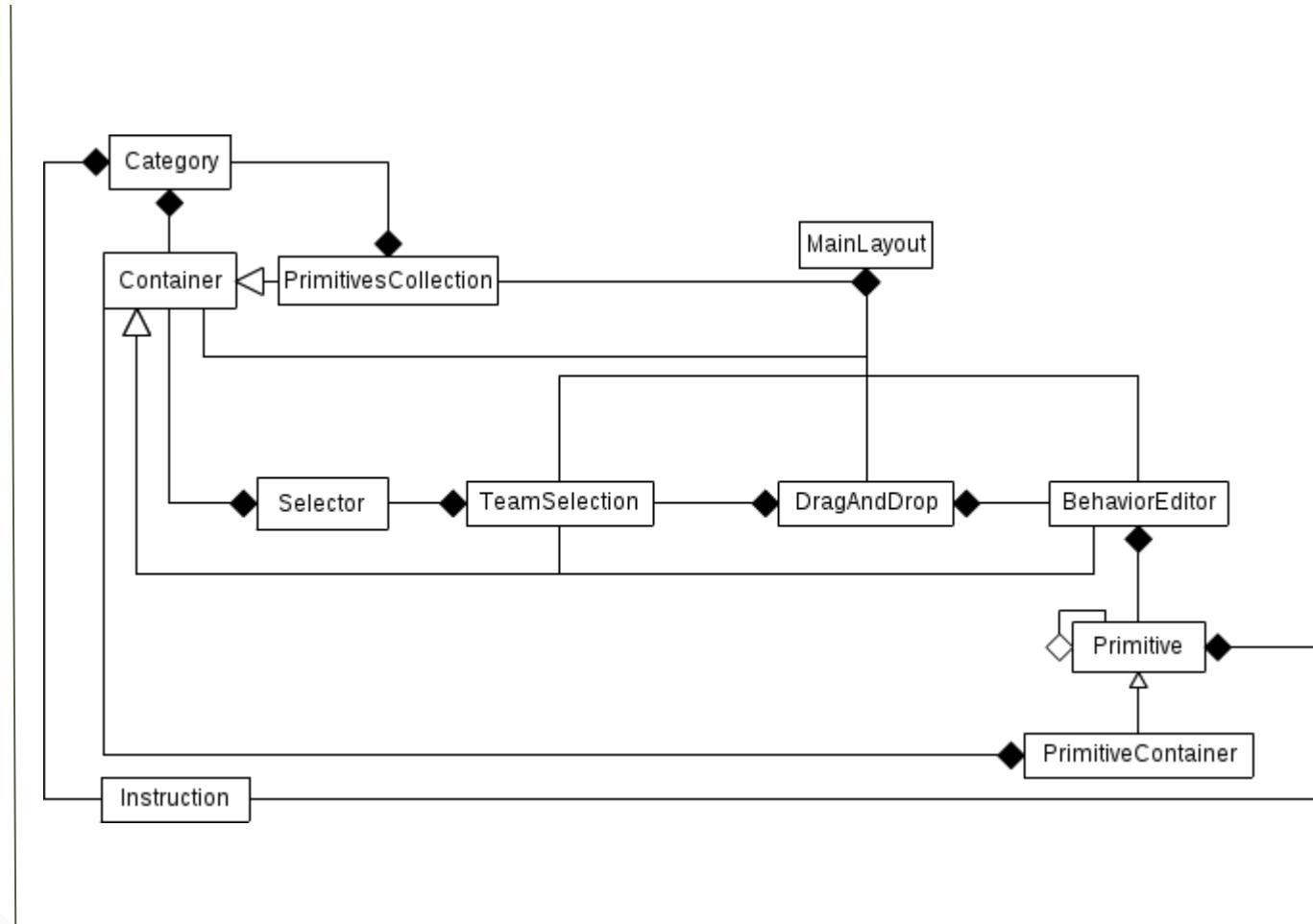
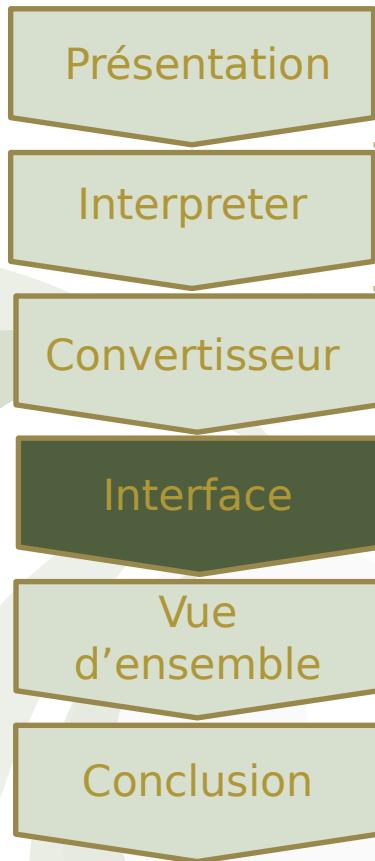
Interface graphique



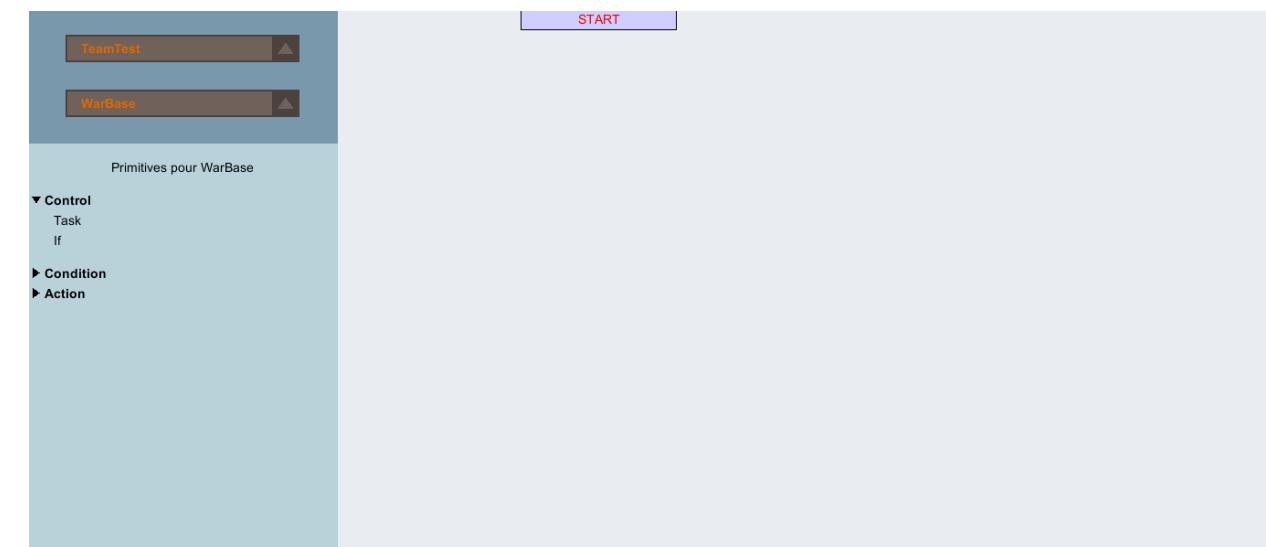
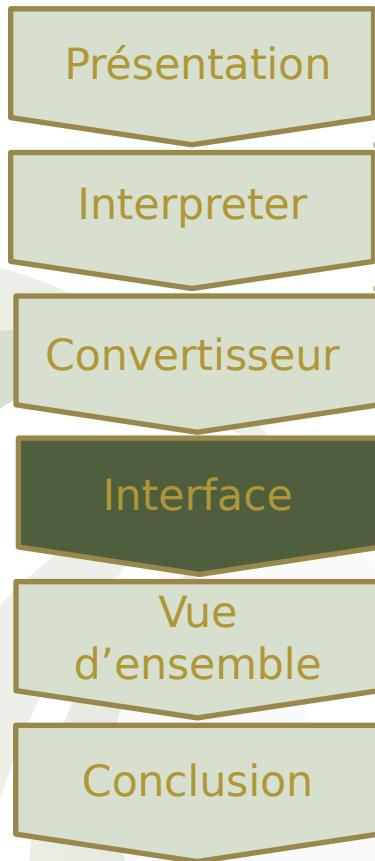
Interface graphique



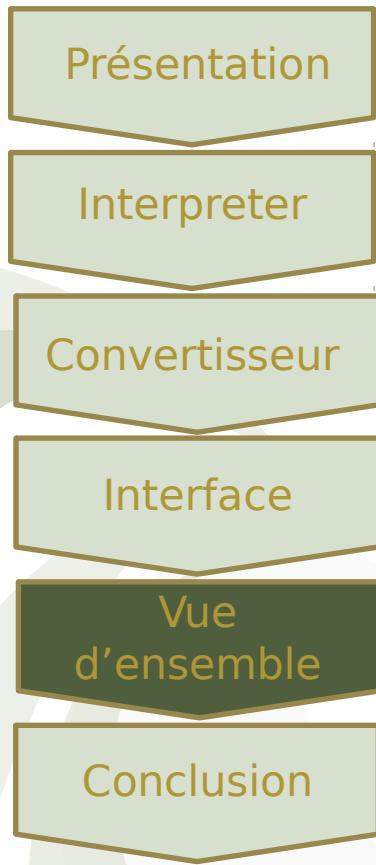
Interface graphique



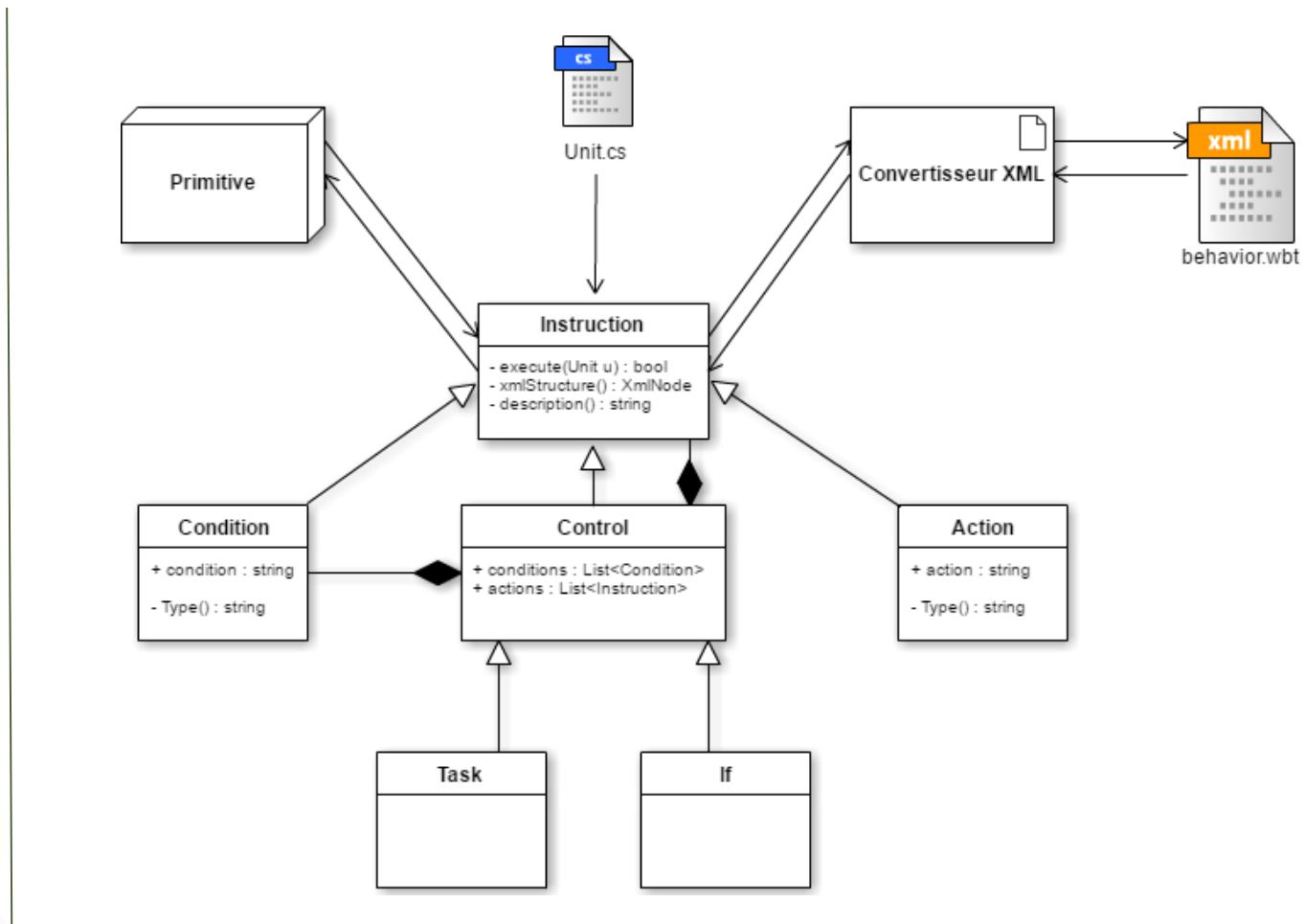
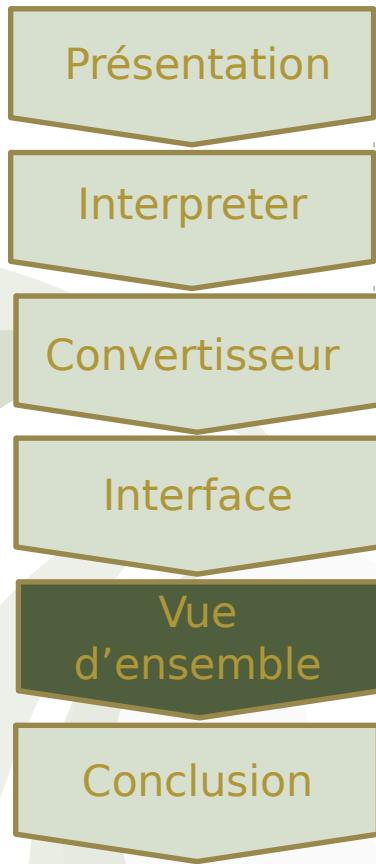
Interface graphique



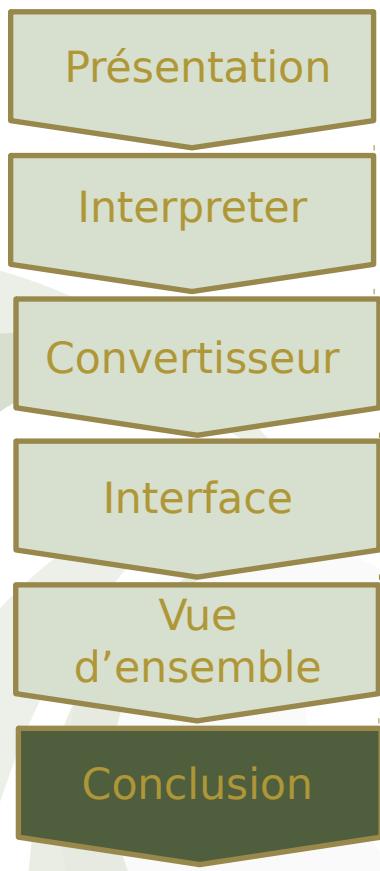
Vue d'ensemble



Vue d'ensemble

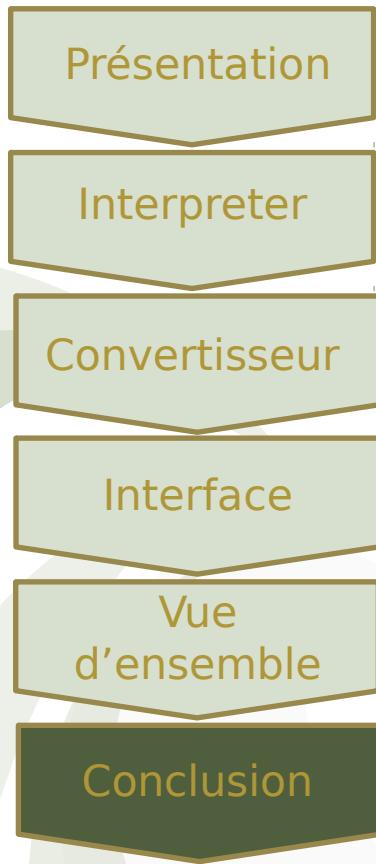


Conclusion

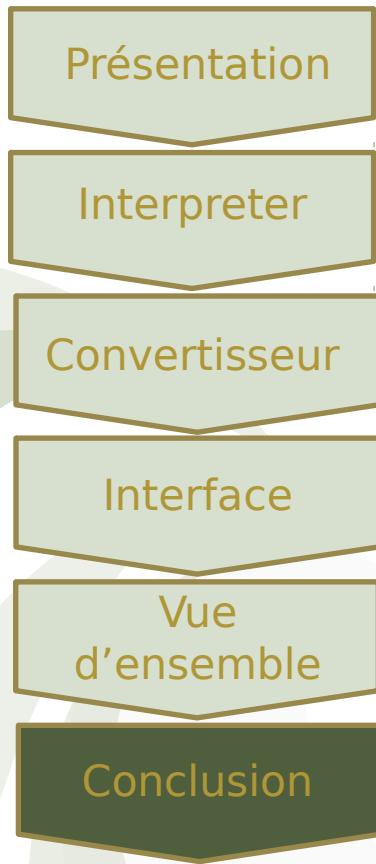


Conclusion

- Choix d'OpenGL plutôt qu'Unity

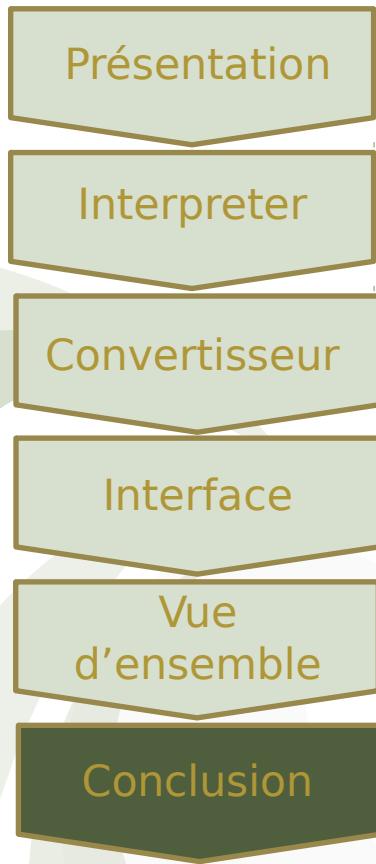


Conclusion



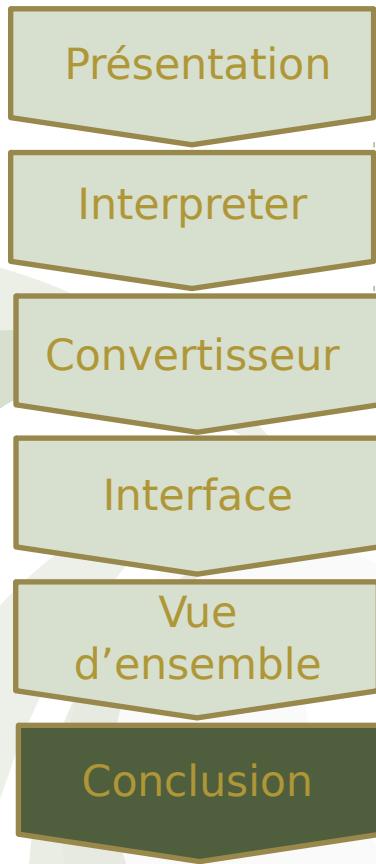
- Choix d'OpenGL plutôt qu'Unity
- Développement et maintenance plus souples

Conclusion



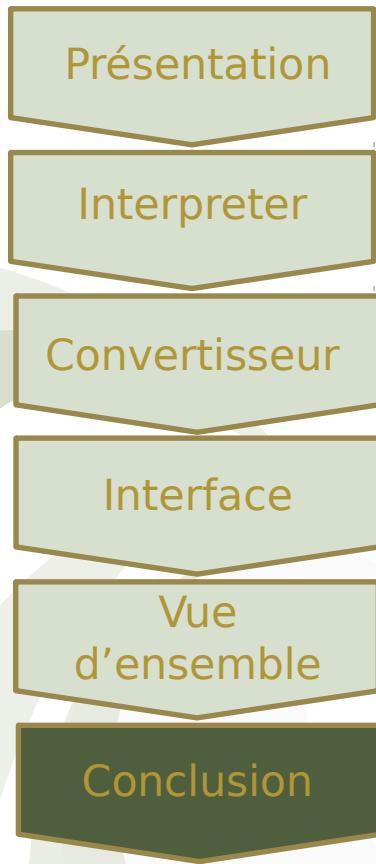
- Choix d'OpenGL plutôt qu'Unity
- Développement et maintenance plus souples
- Structure plus légère

Conclusion



- Choix d'OpenGL plutôt qu'Unity
- Développement et maintenance plus souples
- Structure plus légère
- Intégration au projet Warbot réussie

Conclusion



- Choix d'OpenGL plutôt qu'Unity
- Développement et maintenance plus souples
- Structure plus légère
- Intégration au projet Warbot réussie
- Éditeur accessible directement depuis le jeu



UNIVERSITÉ
DE MONTPELLIER

Merci de votre attention

Mercredi 31 Mai 2017

Éditeur de Comportement

Warbot sous Unity

Groupe Losh'Dora
Édouard BREUILLE
Célia ROUQUAIROL

Sous la direction de Jacques FERBER

Année universitaire 2016 - 2017