



UNIVERSITÉ
DE MONTPELLIER

Soutenance de projet

Mercredi 31 Mai 2017

Éditeur de Comportement

Warbot sous Unity

Groupe Losh'Dora
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Sous la direction de Jacques FERBER

Année universitaire 2016 - 2017

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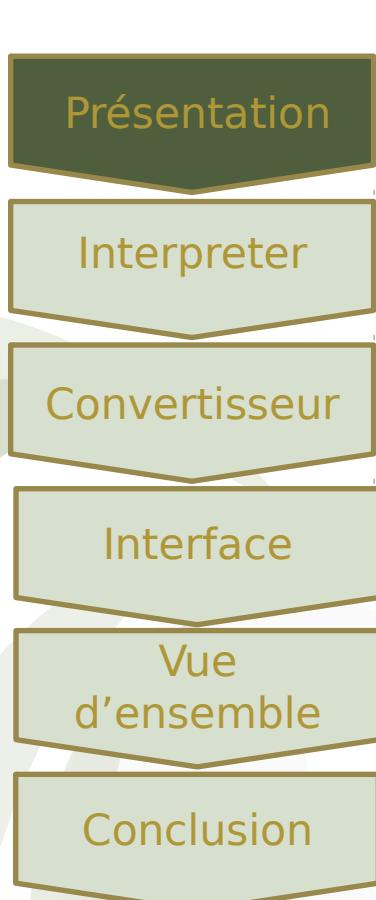
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Présentation de Warbot



Présentation de Warbot

Présentation

Interpréter

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Interface

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d'ensemble

Conclusion



Amasser des ressources

Présentation de Warbot

Présentation

Interpréter

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Vue
d'ensemble

Conclusion



Créer des unités

Présentation de Warbot

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Conclusion



Détruire la base adverse

Présentation de Warbot

Présentation

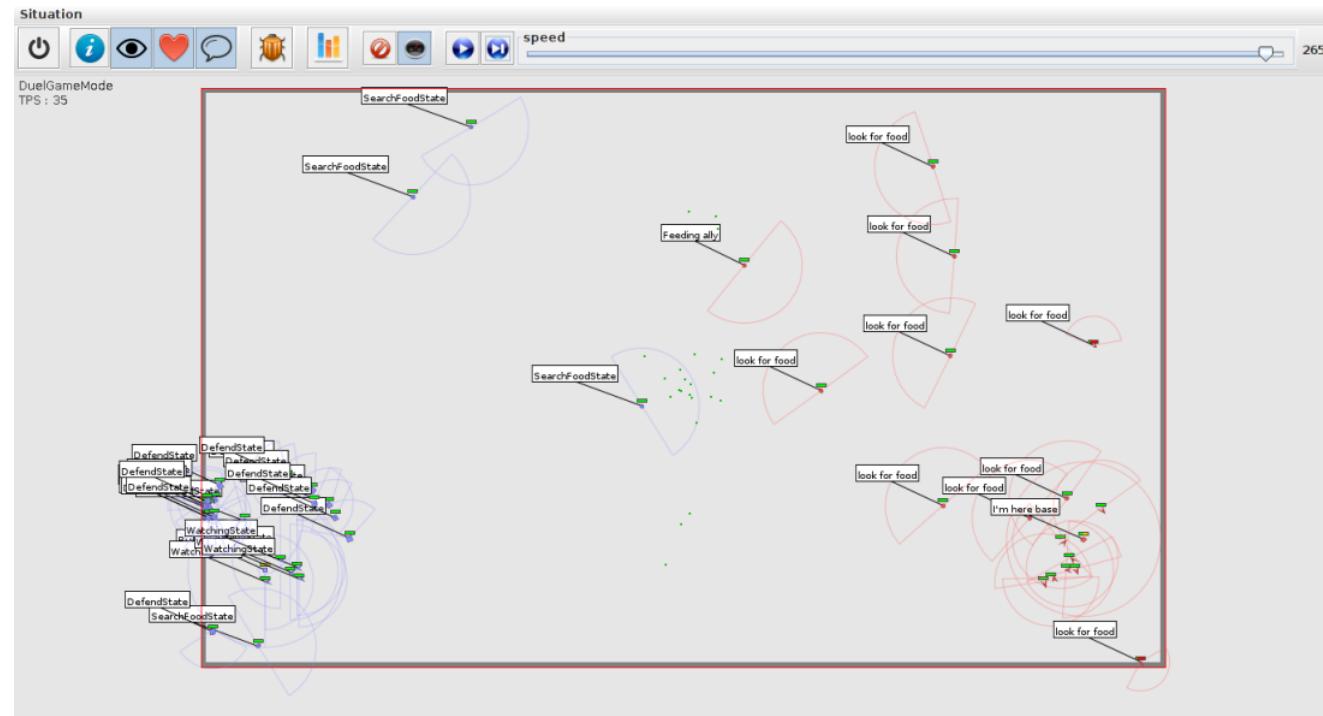
Interpréteur

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Interface

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Conclusion



Présentation de Warbot

Présentation

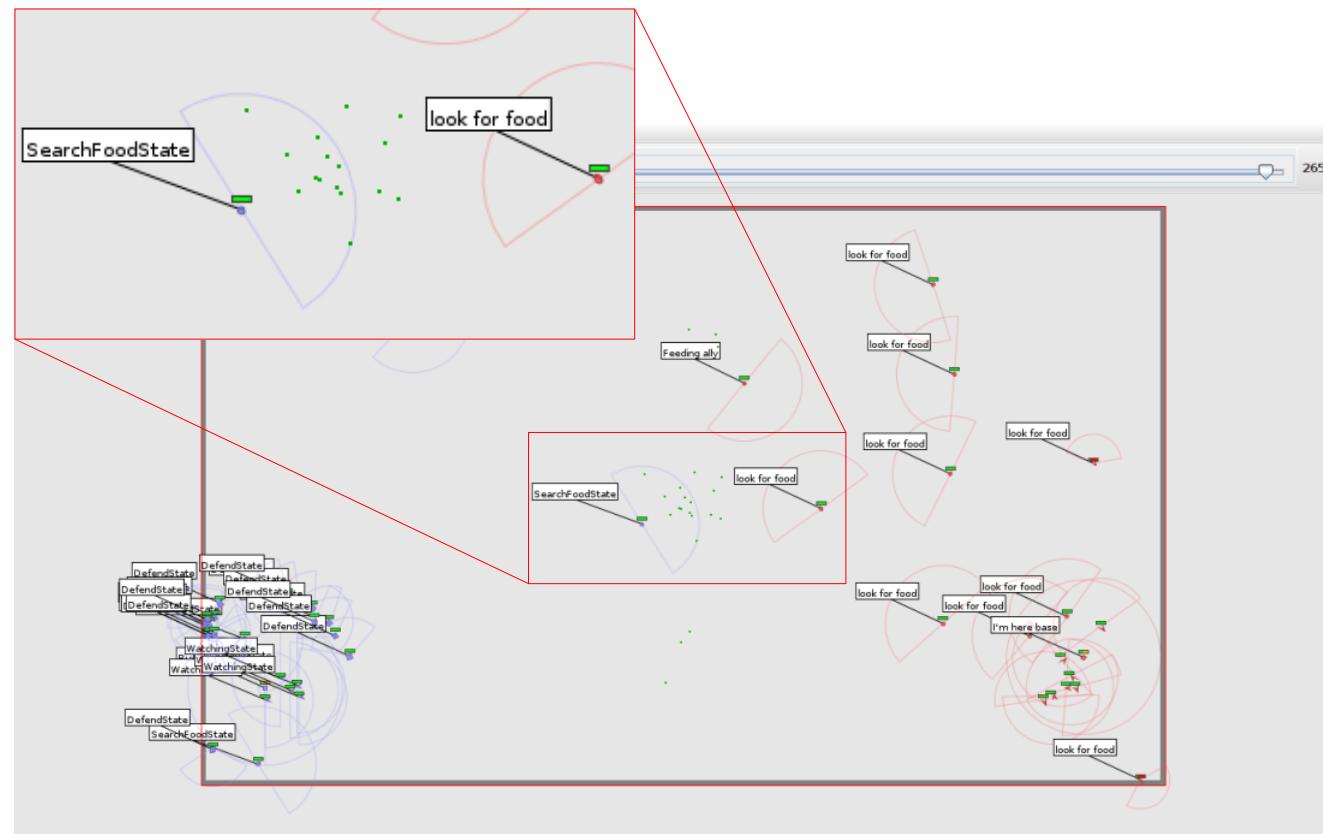
Interpréteur

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Présentation de Warbot

Présentation

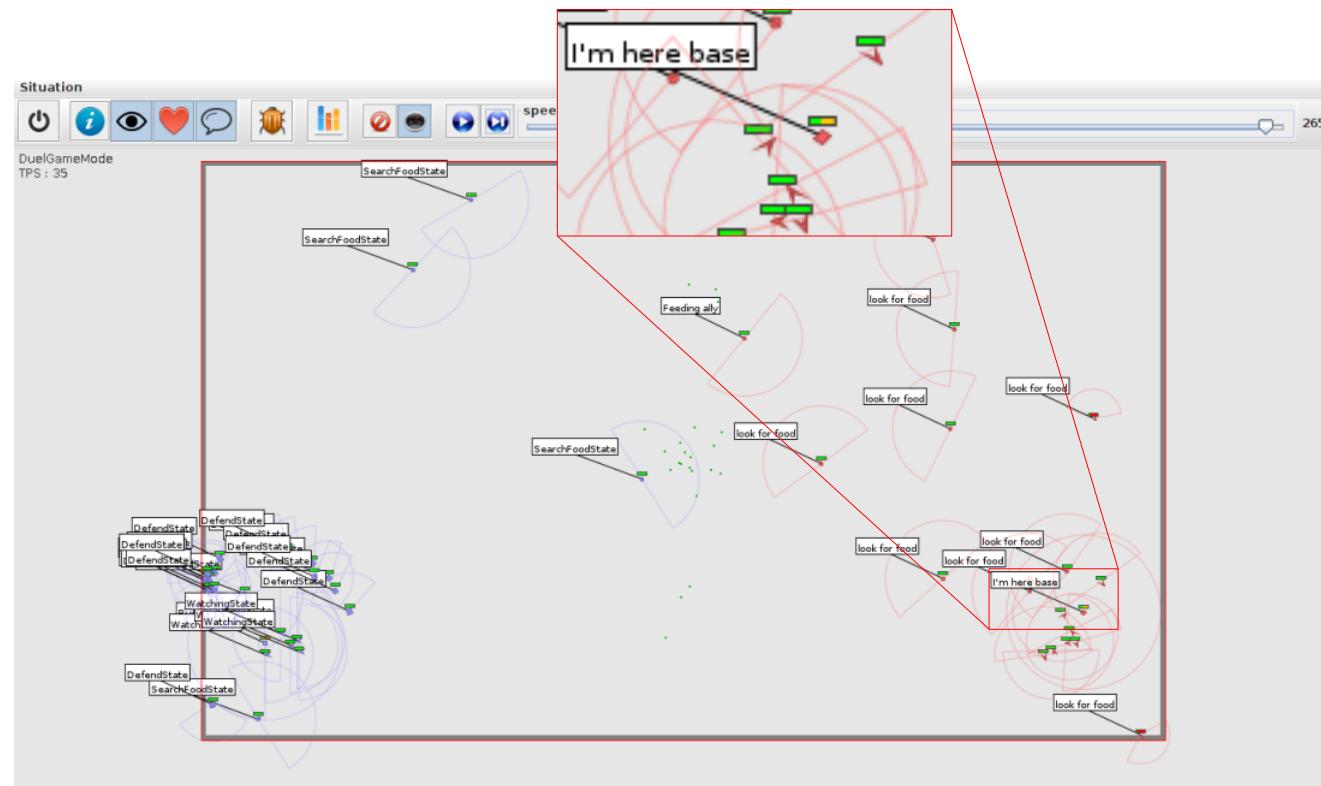
Interpréteur

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Conclusion



Présentation de Warbot

Présentation

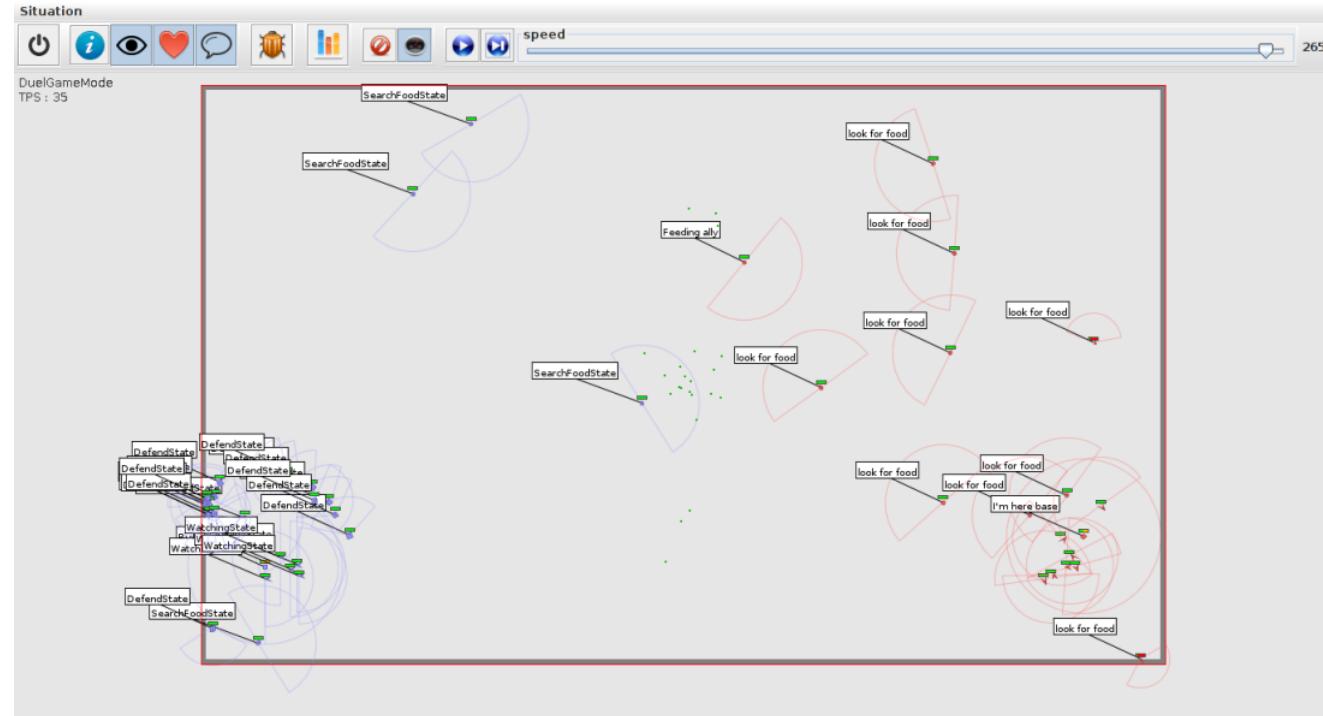
Interpréter

Convertisseur

Interface

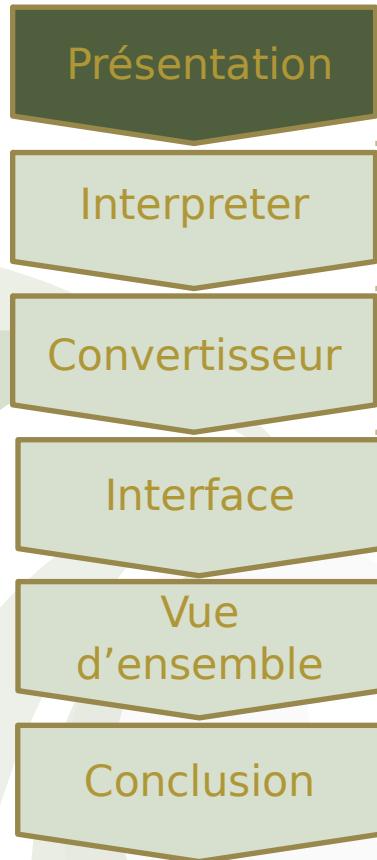
Vue
d'ensemble

Conclusion



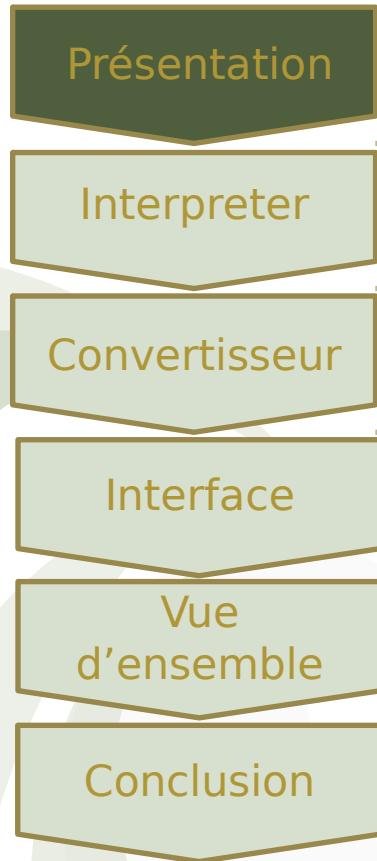
Réflexion plutôt que réflexes

Présentation de Warbot



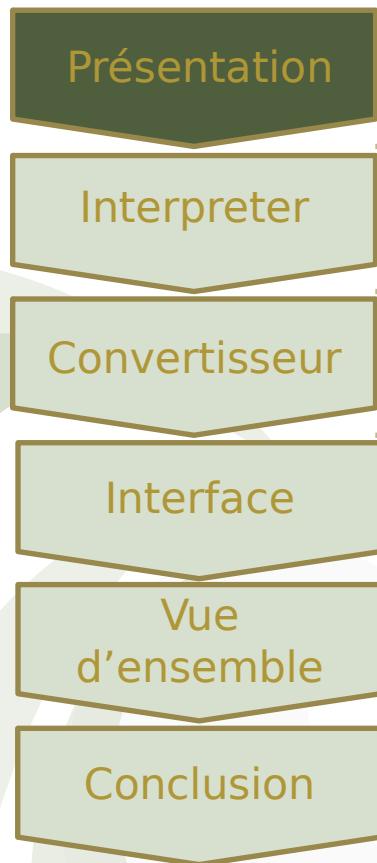
- Création en 2002

Présentation de Warbot



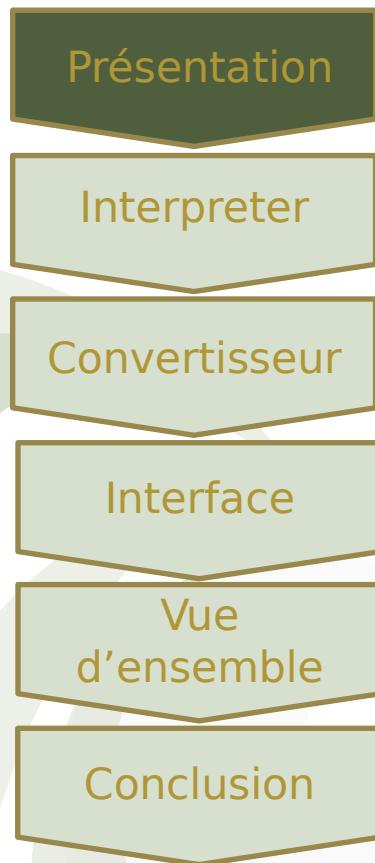
- Création en 2002
- Système multi-agents

Présentation de Warbot



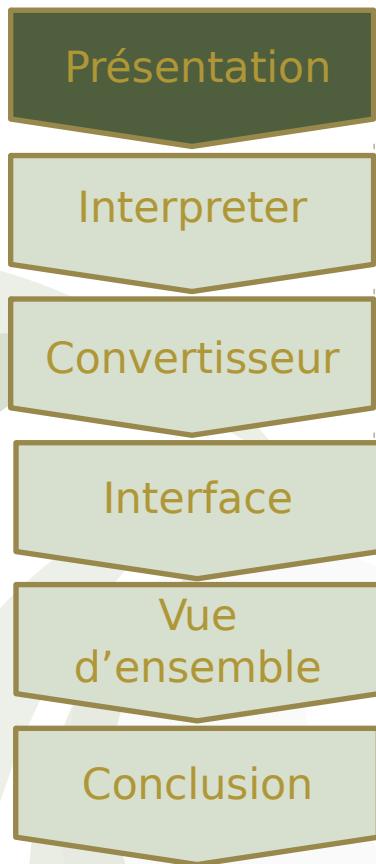
- Création en 2002
- Système multi-agents
- NetLogo / Java

Présentation de Warbot

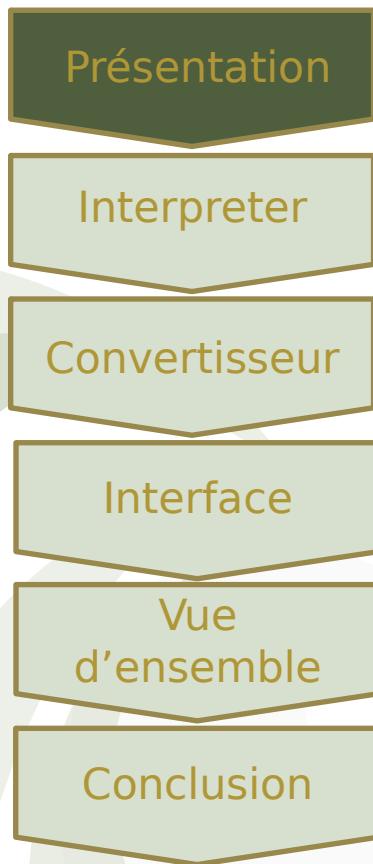


- Création en 2002
- Système multi-agents
- NetLogo / Java
- MadKit / TurtleKit

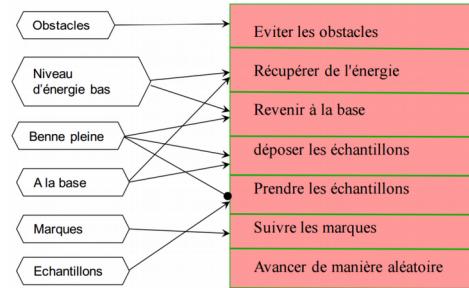
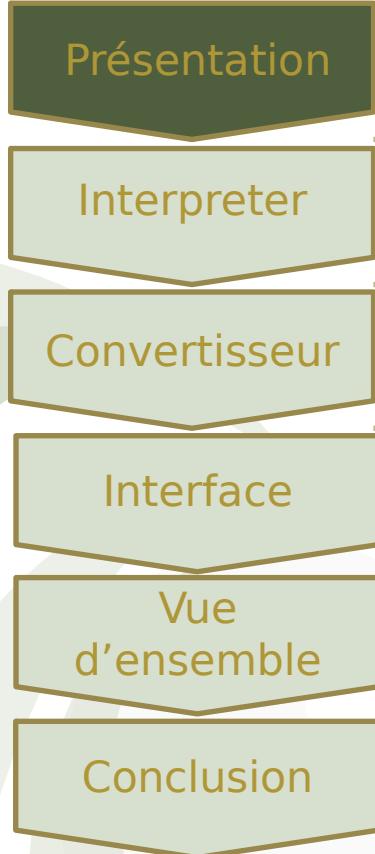
Objectif



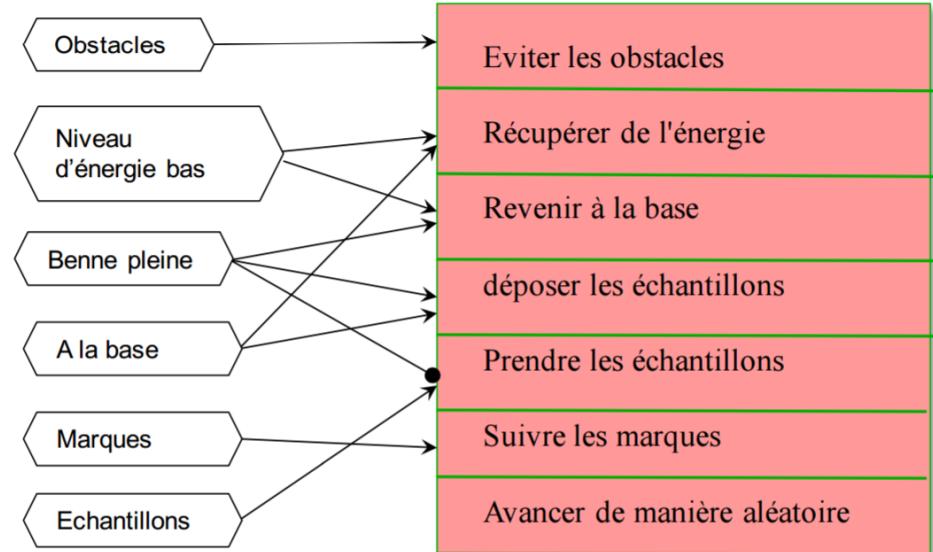
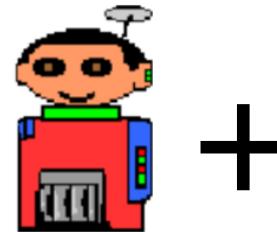
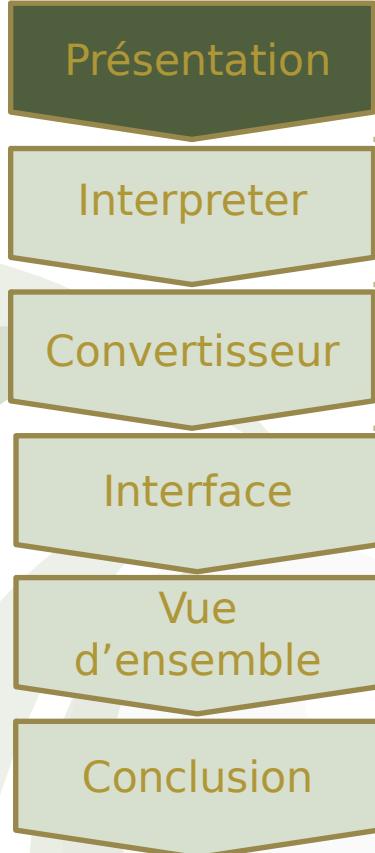
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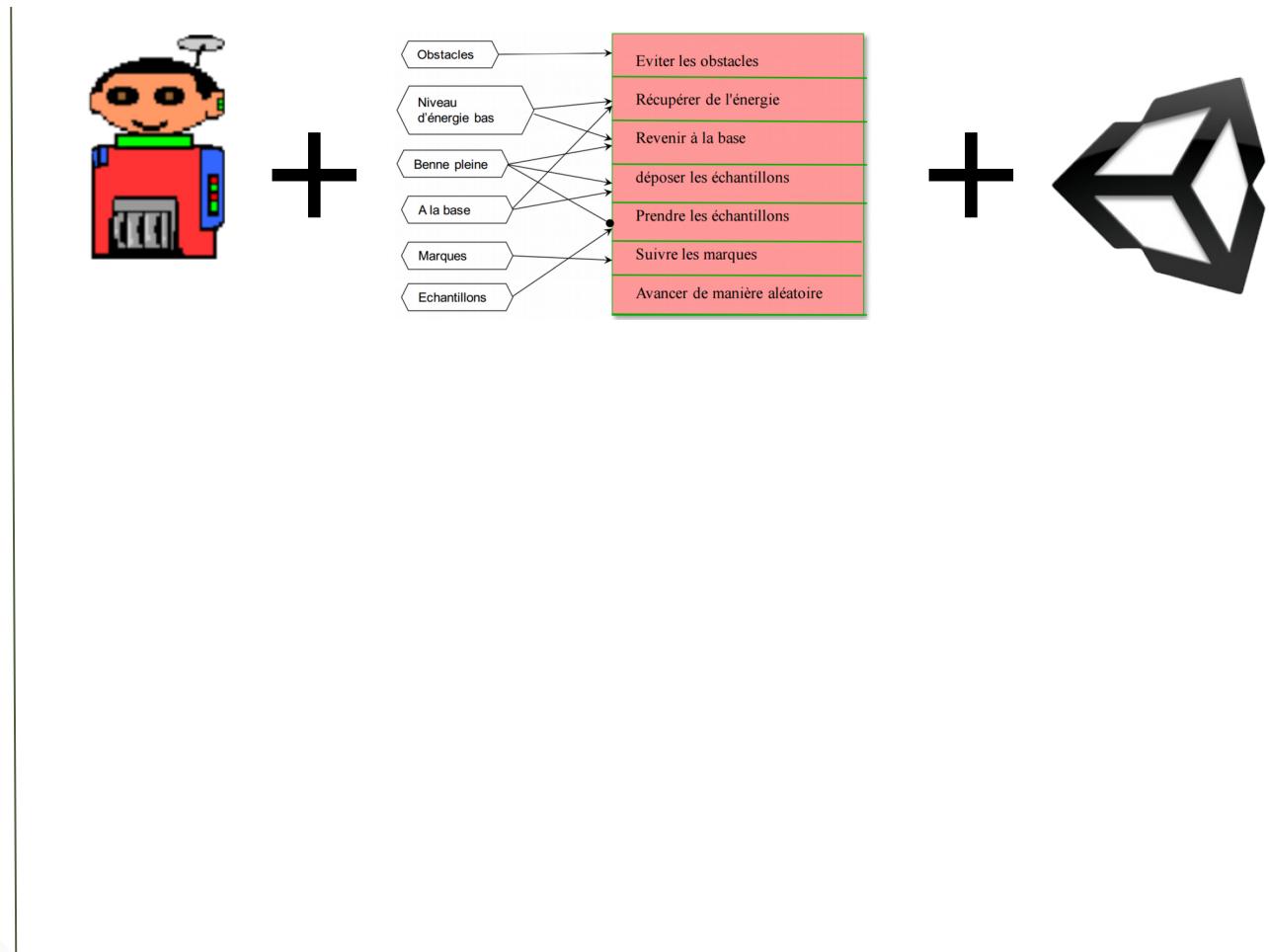
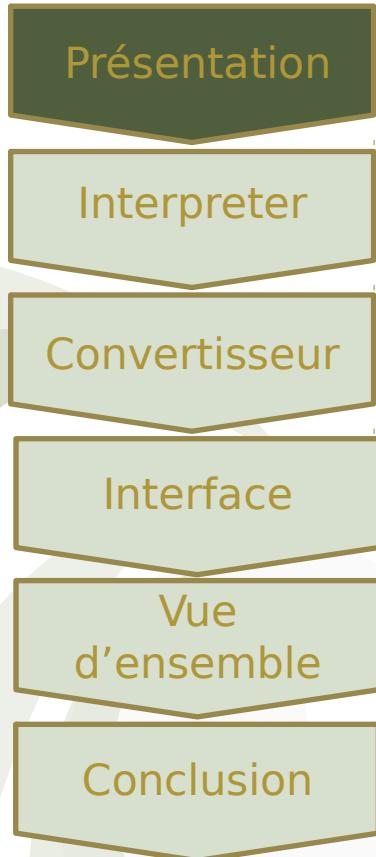
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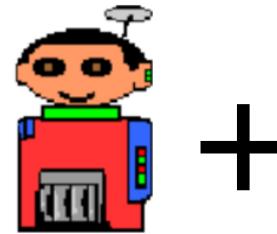
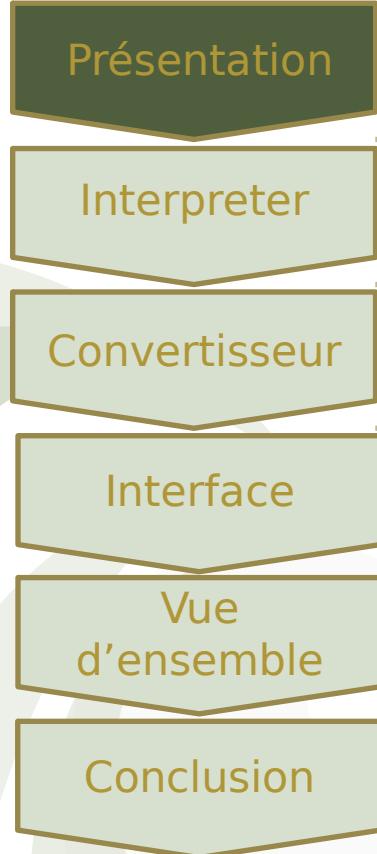
Objectif



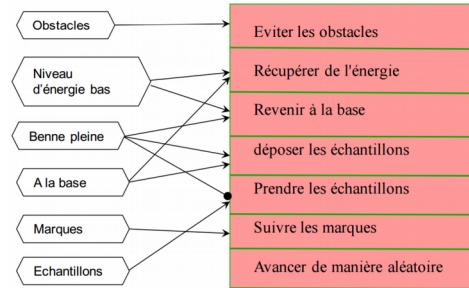
Objectif



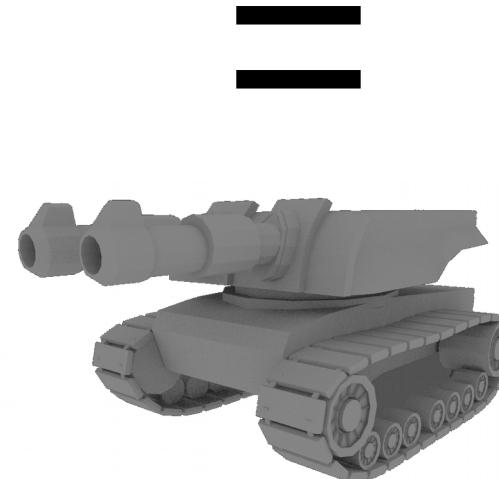
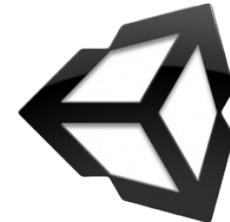
Objectif



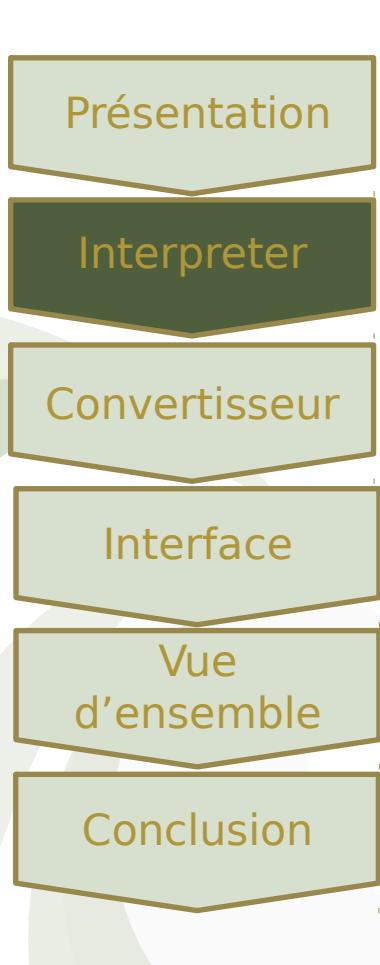
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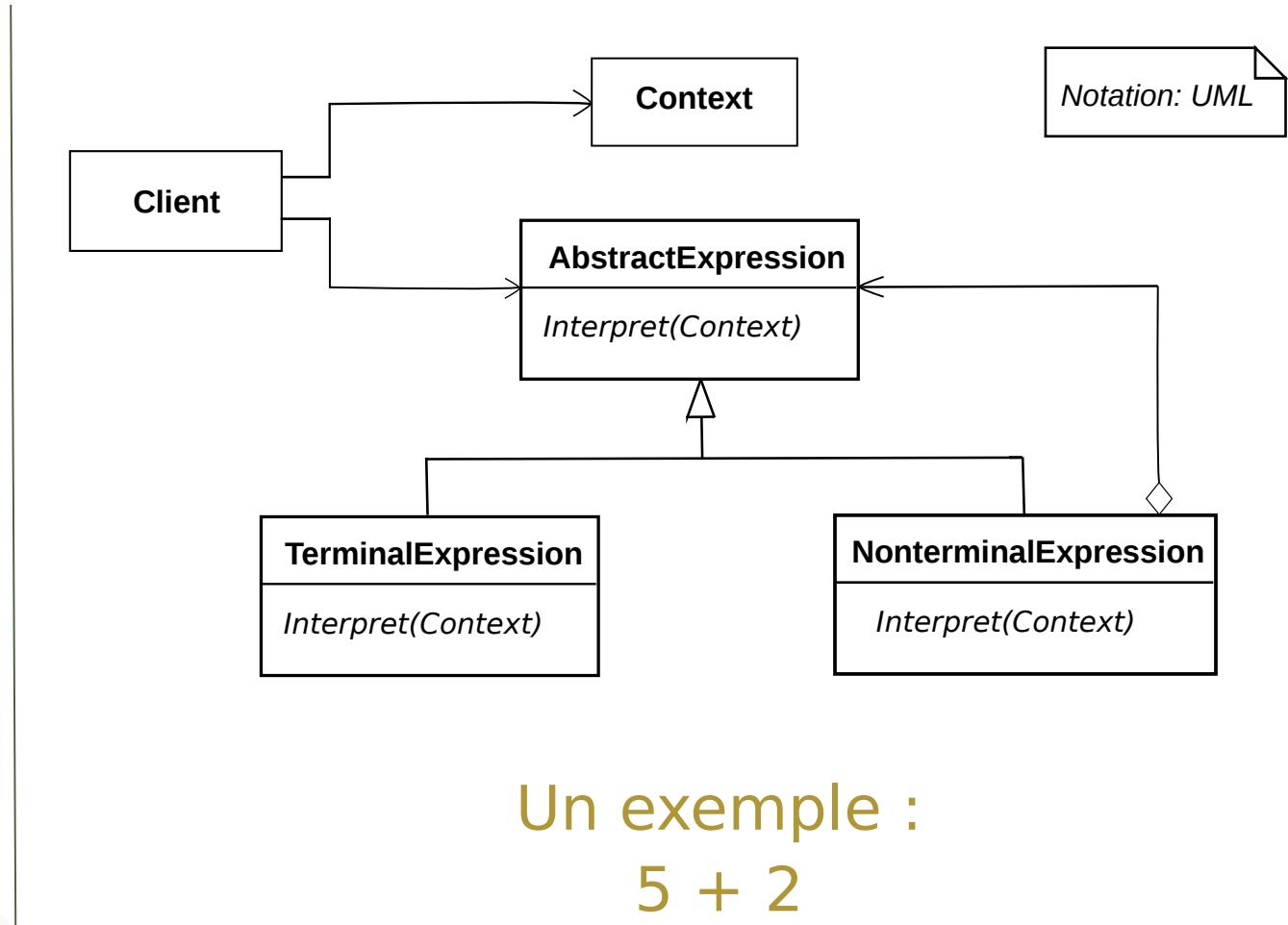
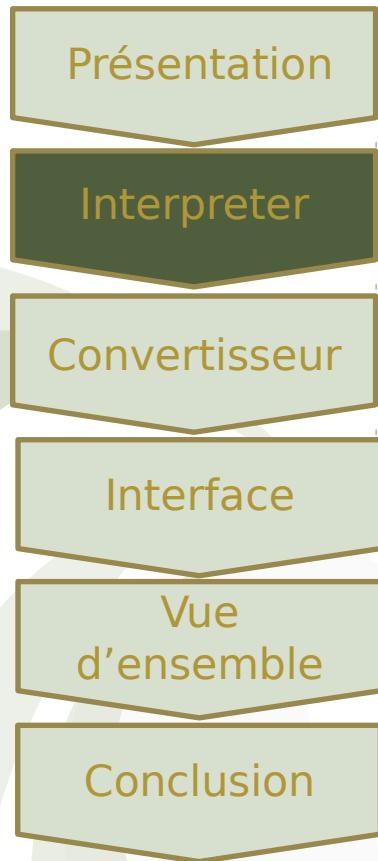
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Design Pattern Interpreter

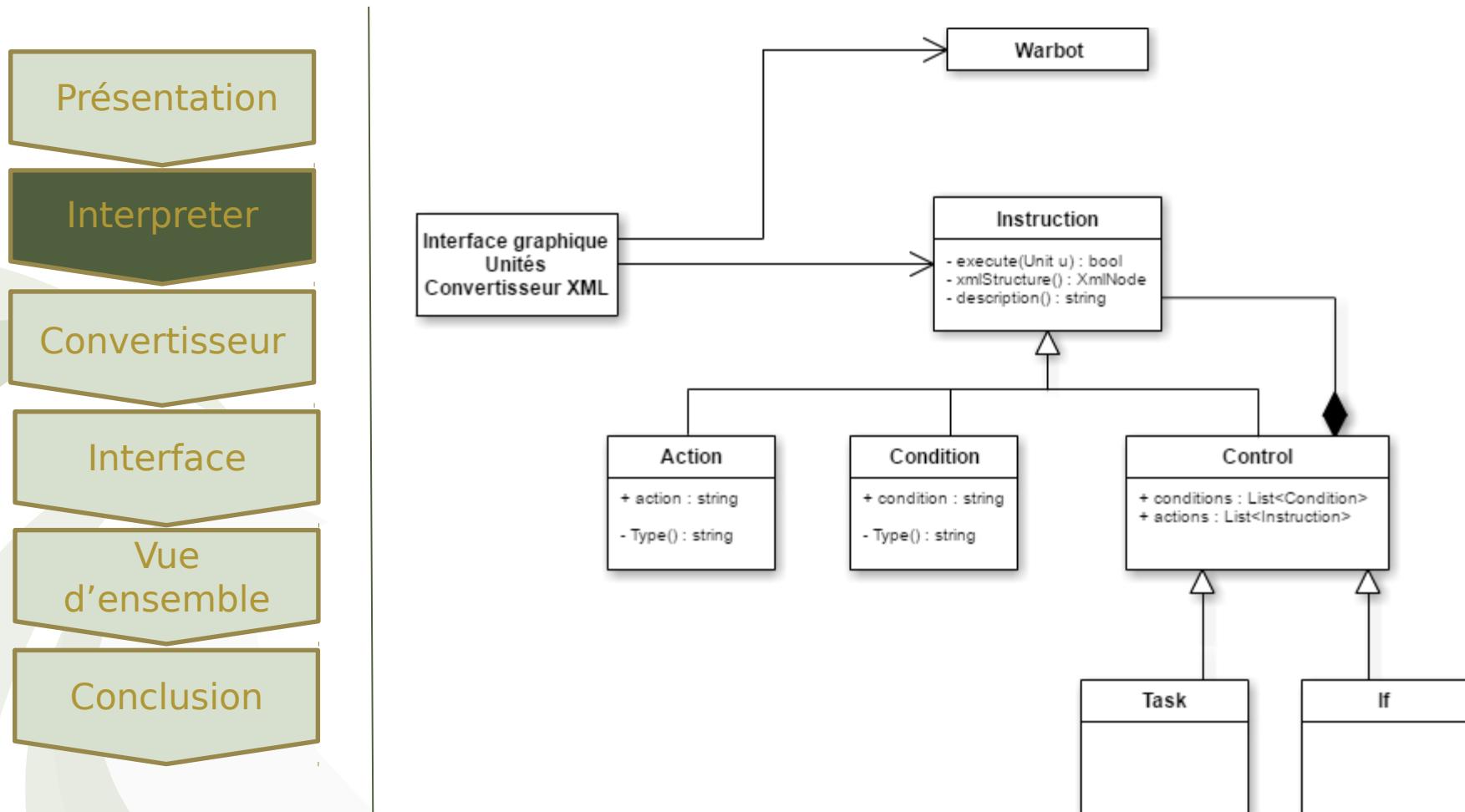


Design Pattern Interpreter



Un exemple :
 $5 + 2$

Design Pattern Interpreter



Design Pattern Interpreter

Présentation

Interpréteur

Convertisseur

Interface

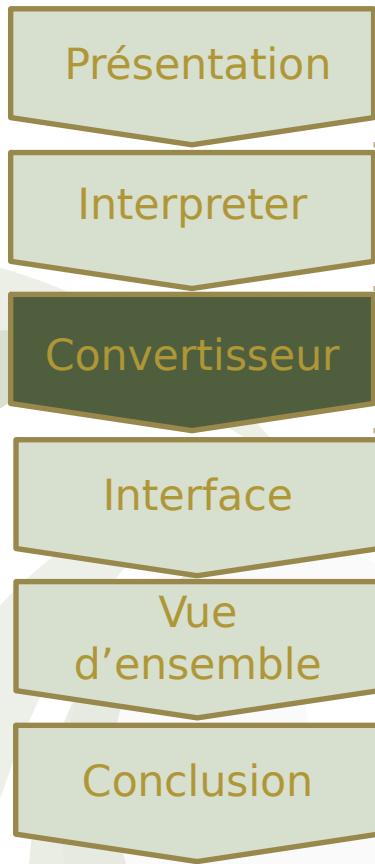
Vue
d'ensemble

Conclusion

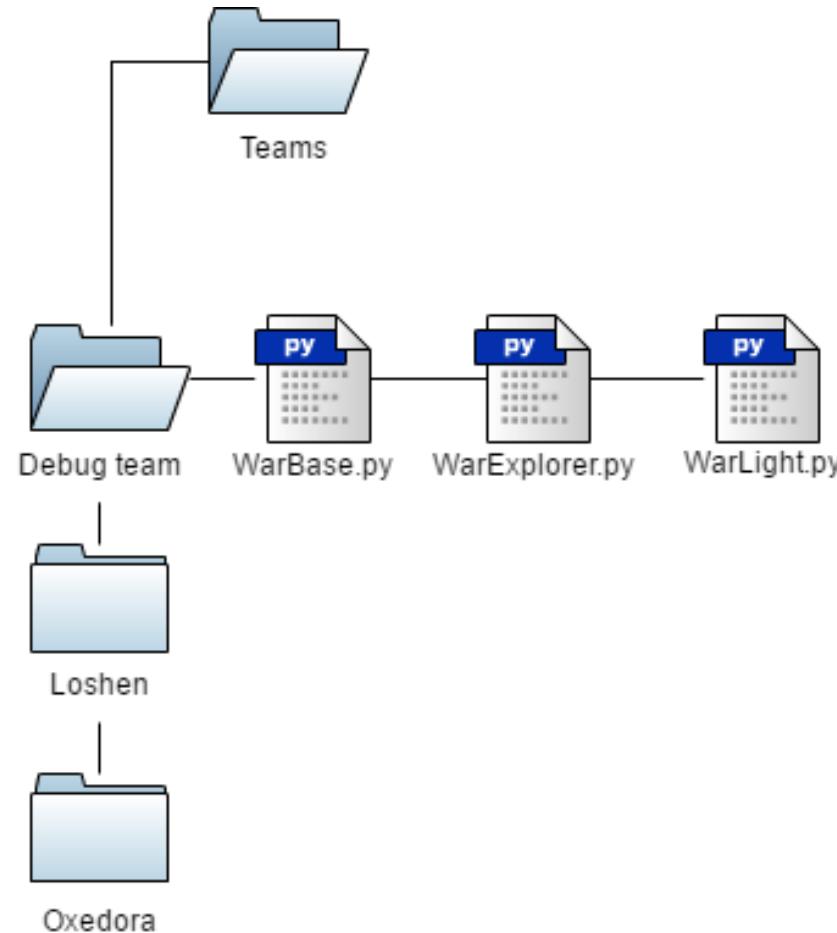
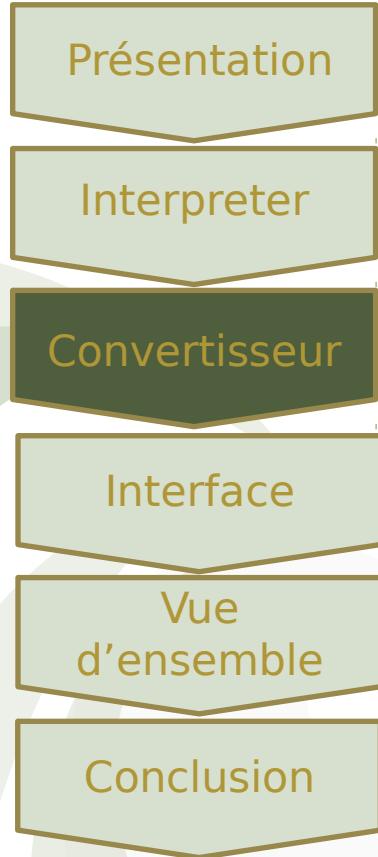
```
// Specifie le type de primitive (action ou condition)
[PrimitiveType(PRIMITIVE_TYPE.ACTION)]

// 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()
{
    // ...
}
```

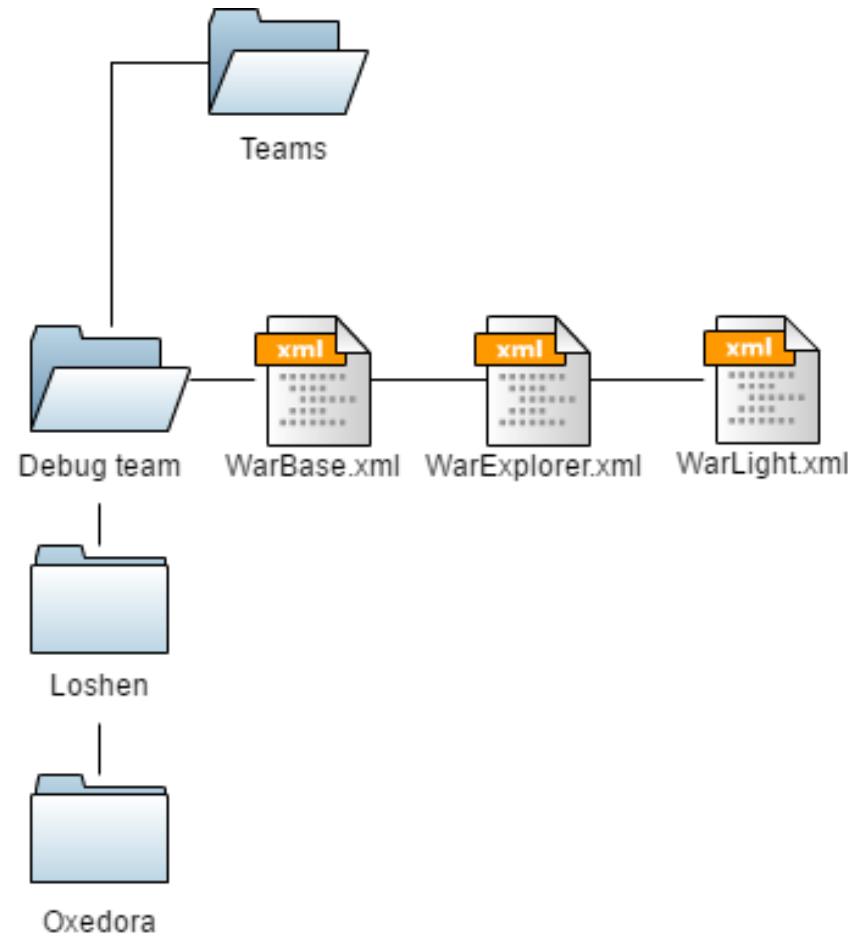
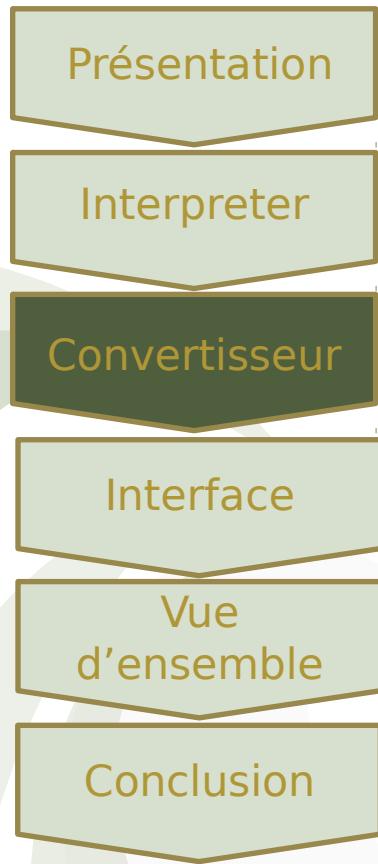
Convertisseur XML



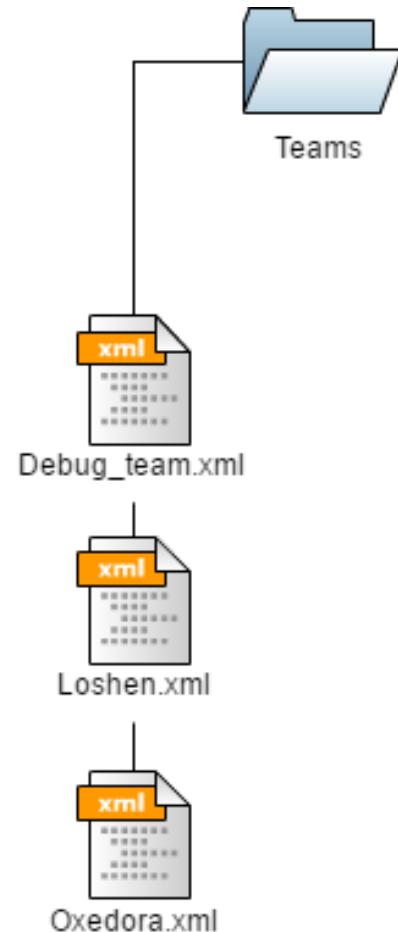
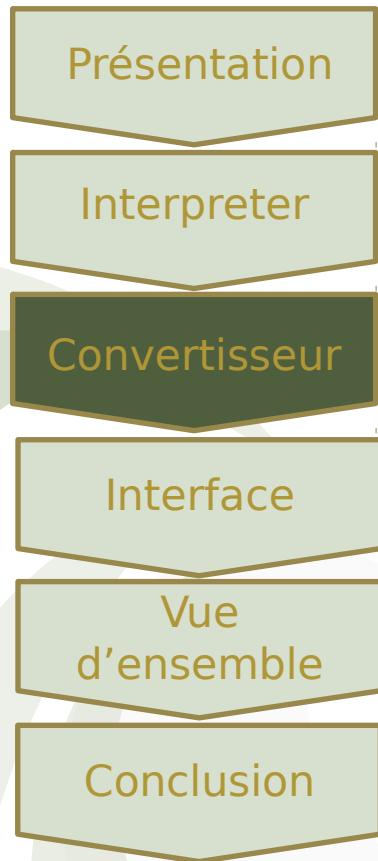
Convertisseur XML



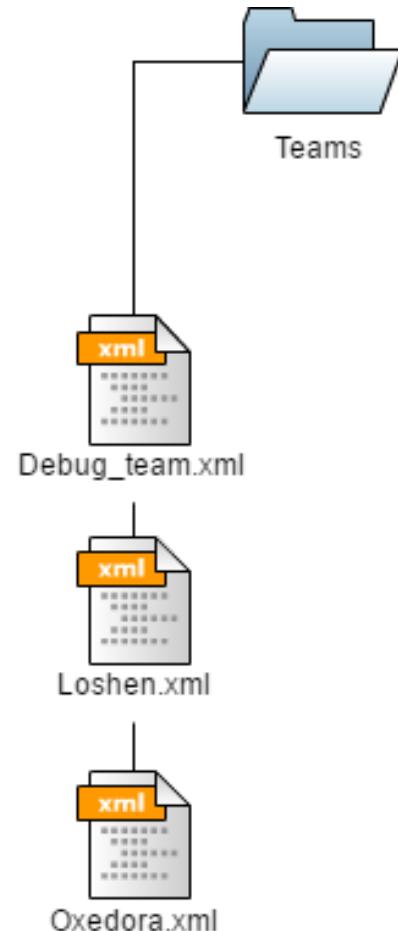
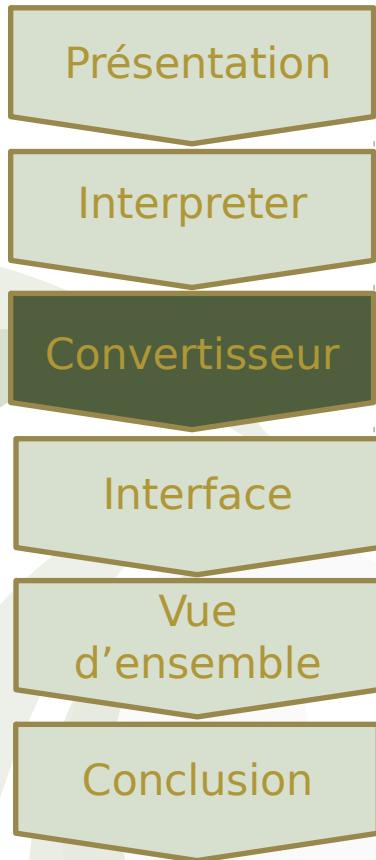
Convertisseur XML



Convertisseur XML

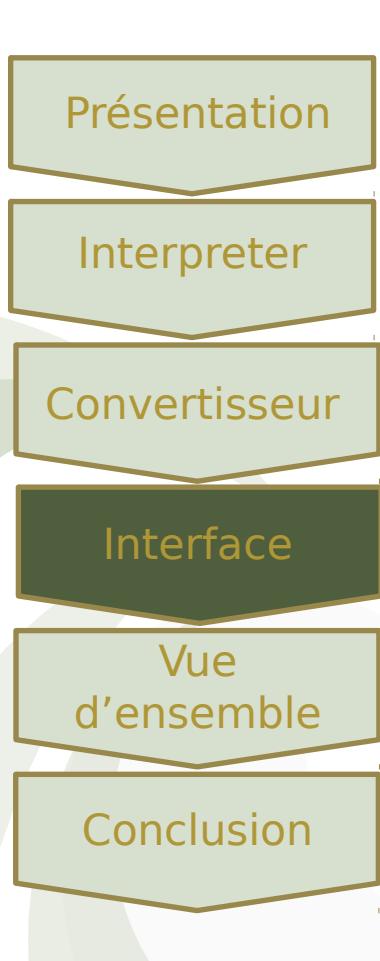


Convertisseur XML



```
<-<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

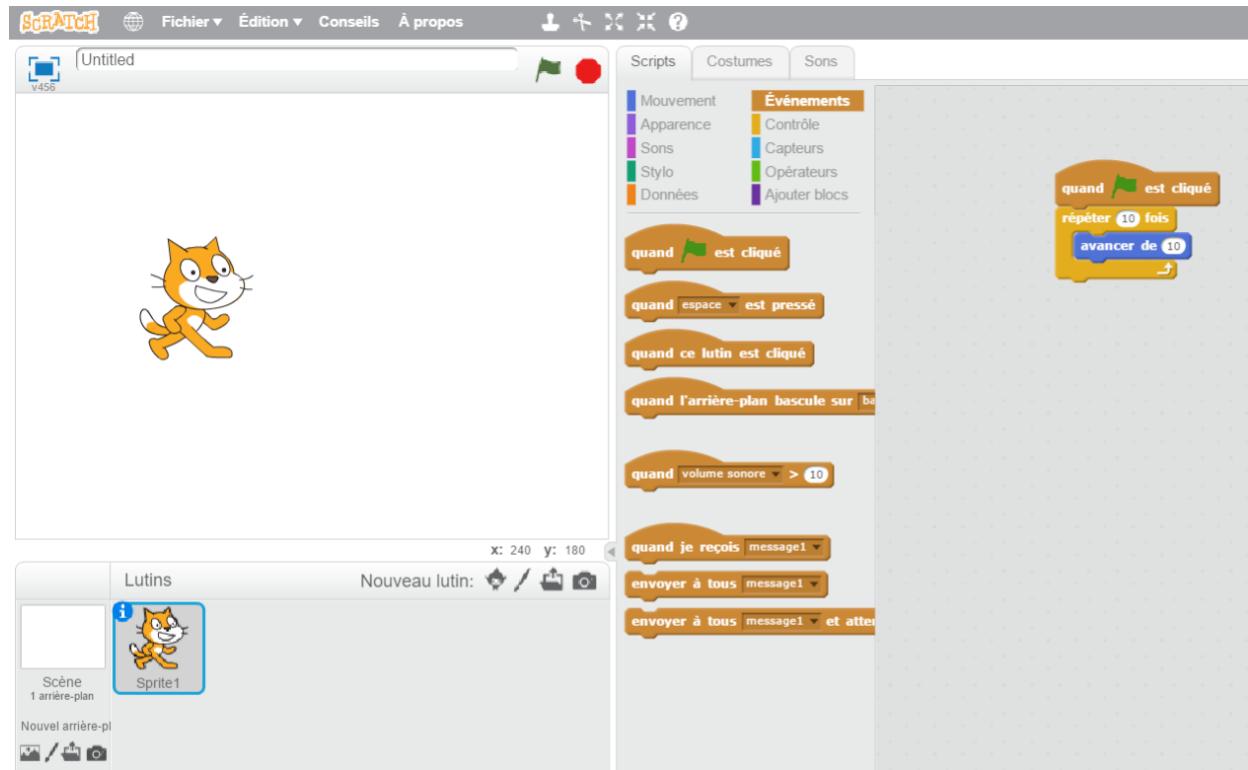
Interpréter

Convertisseur

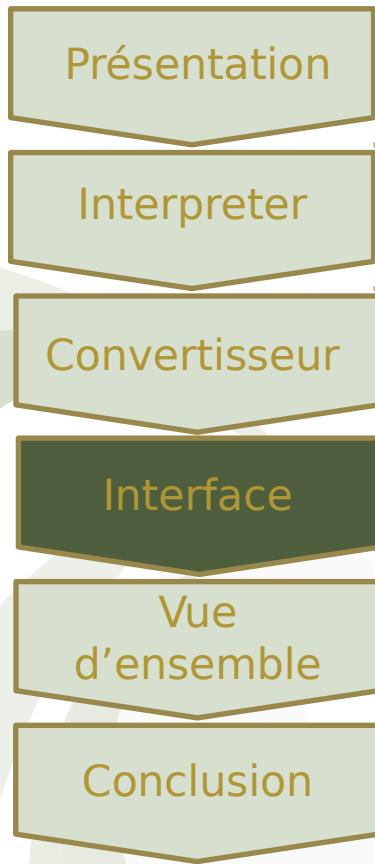
Interface

Vue
d'ensemble

Conclusion

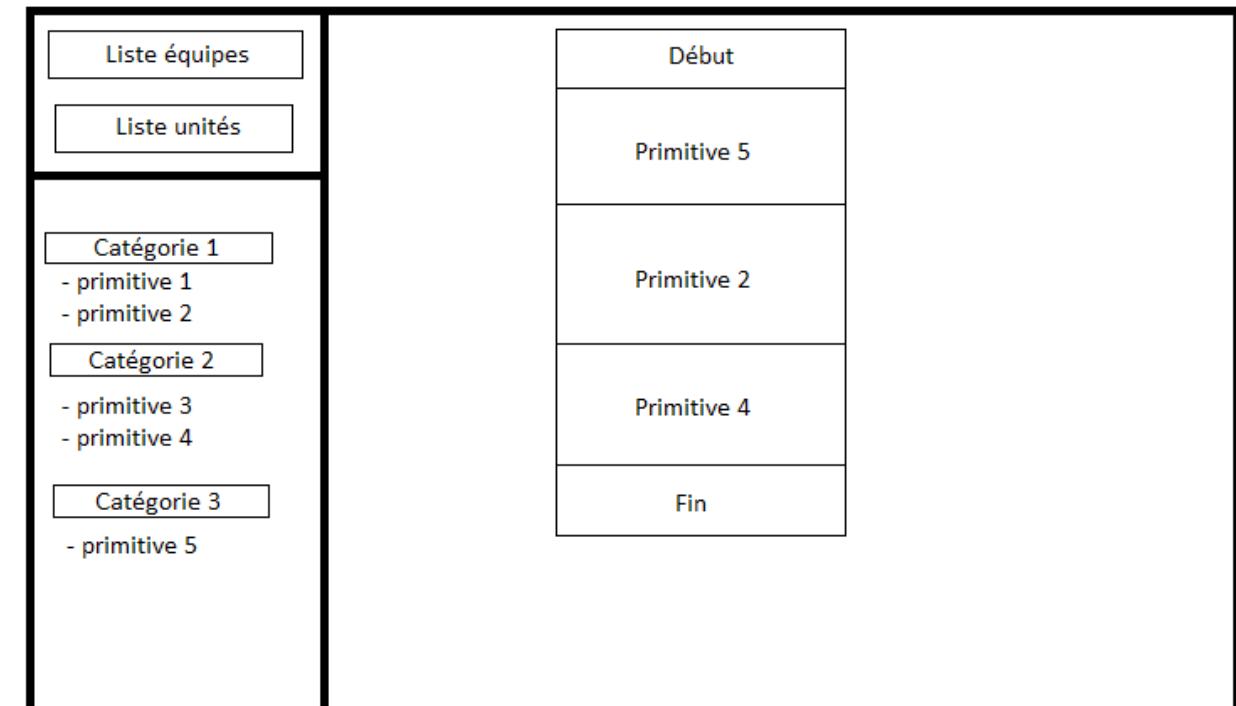
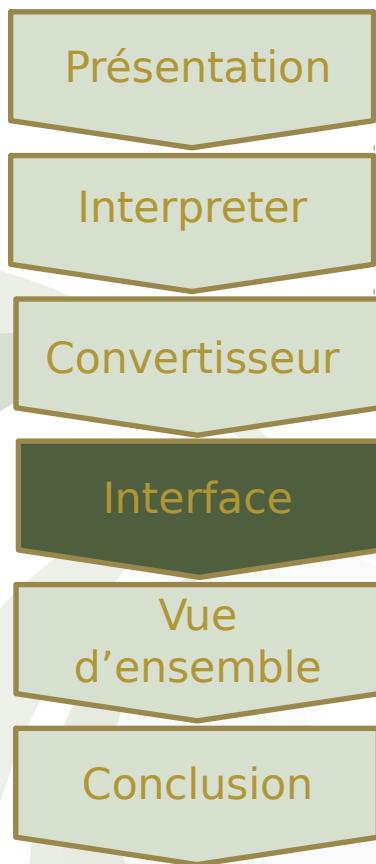


Interface graphique

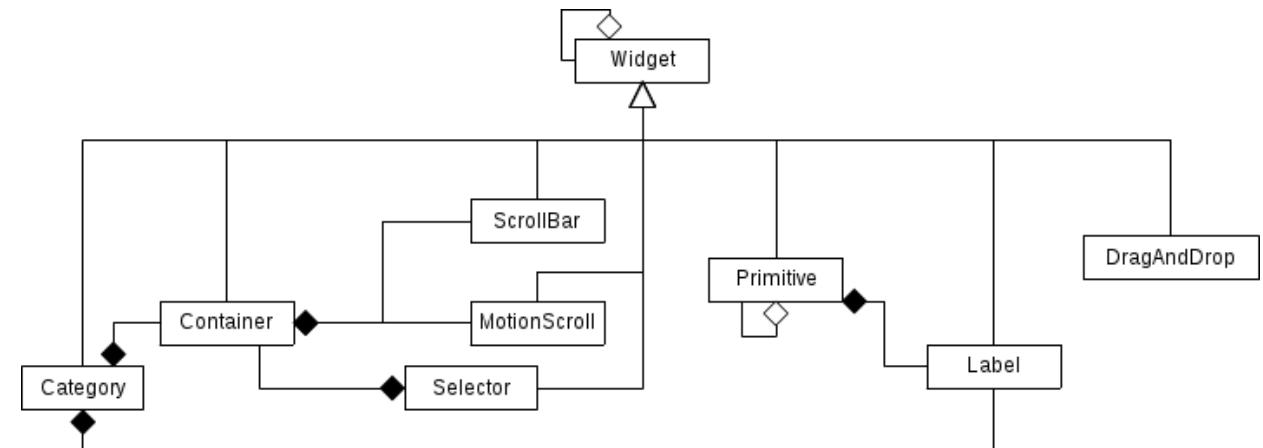
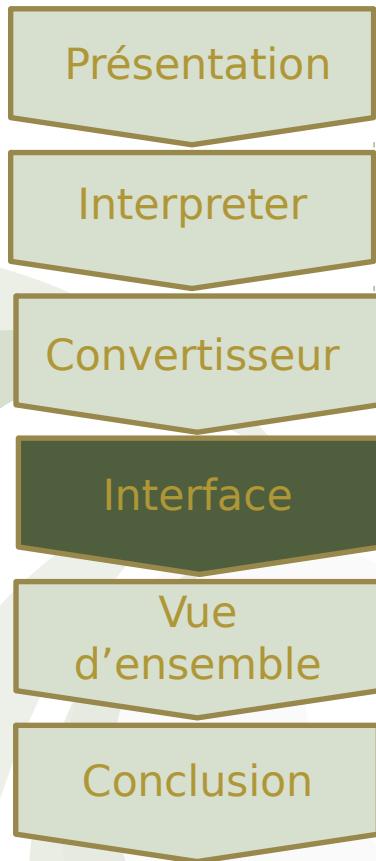


<p>Liste équipes</p>	<p>Catégorie 1 Catégorie 2 Catégorie 3 Catégorie 4 ...</p>	
<p>WarBase WarHeavy WarExplorer WarEngineer WarTurret</p>	<p>Primitive 1 Primitive 2 Primitive 3 ...</p>	

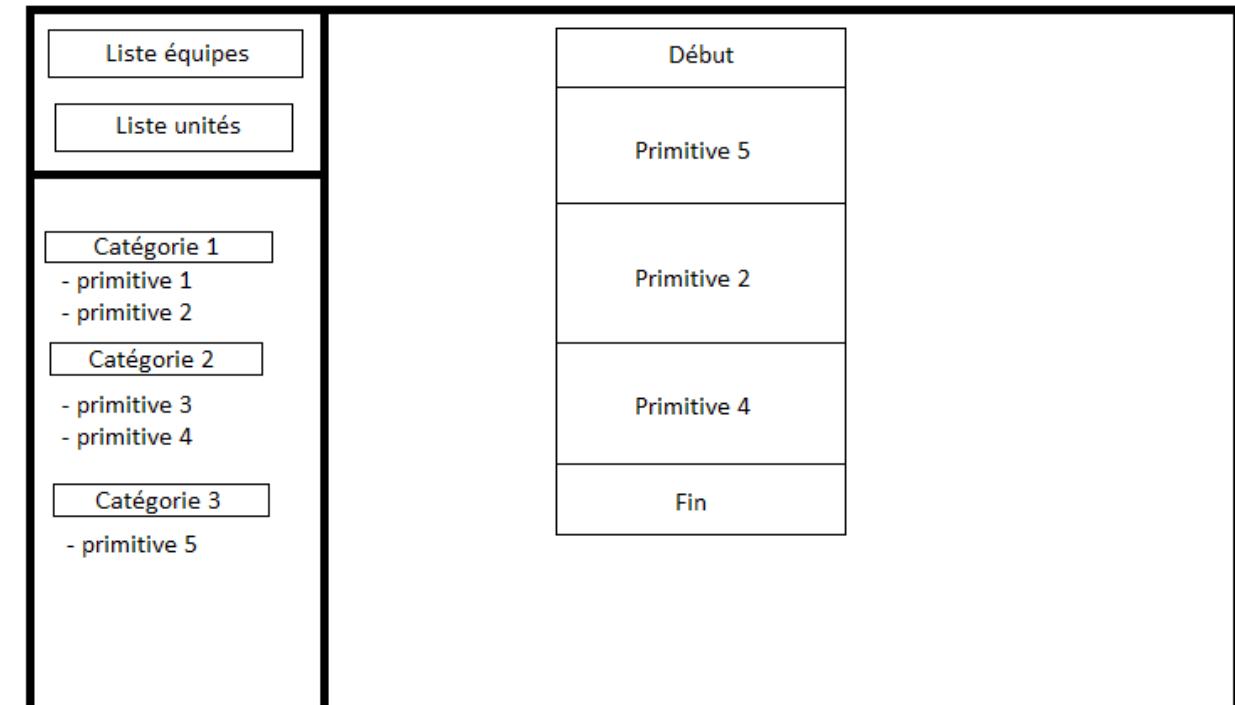
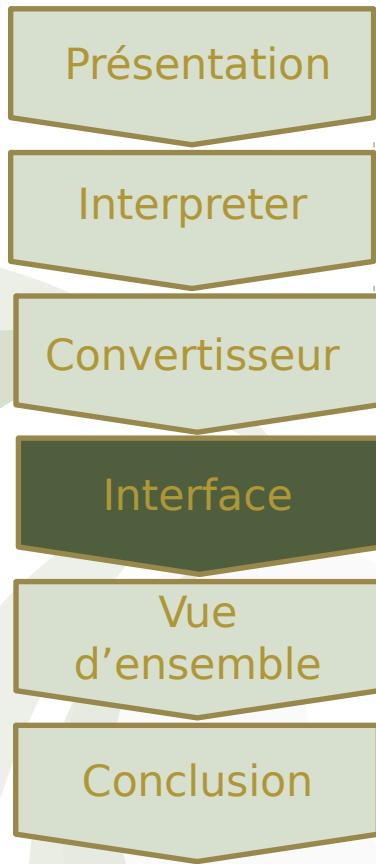
Interface graphique



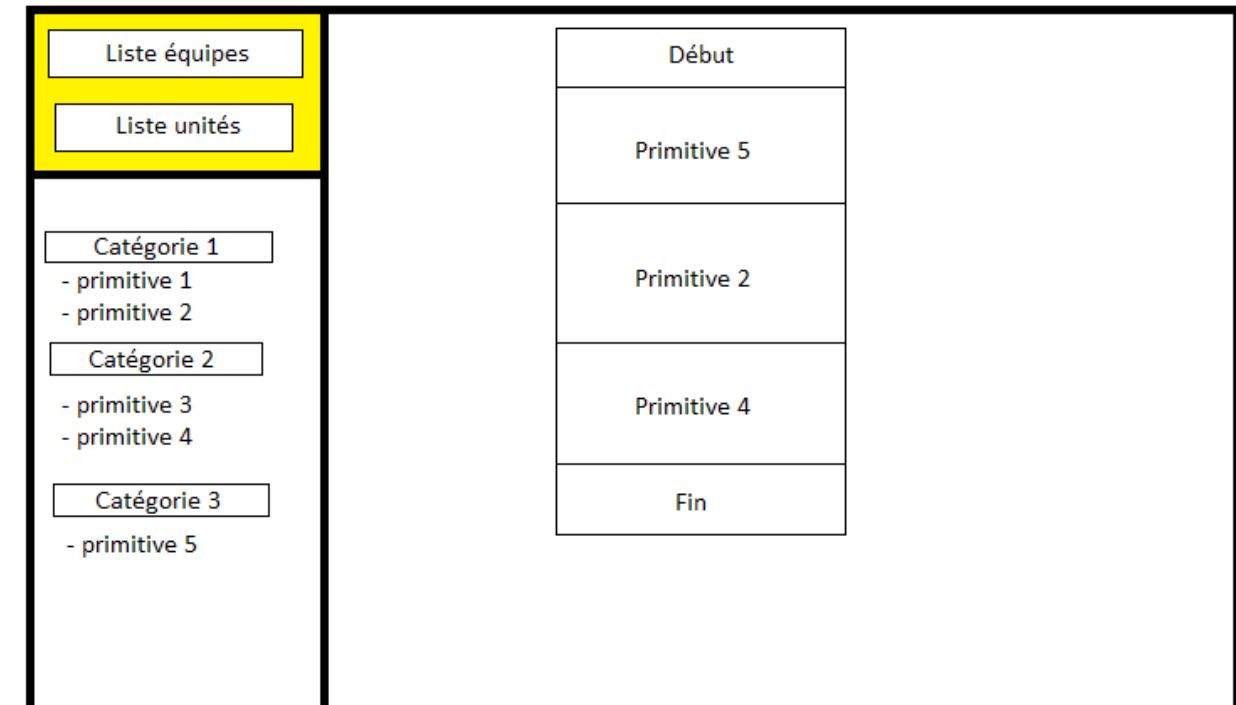
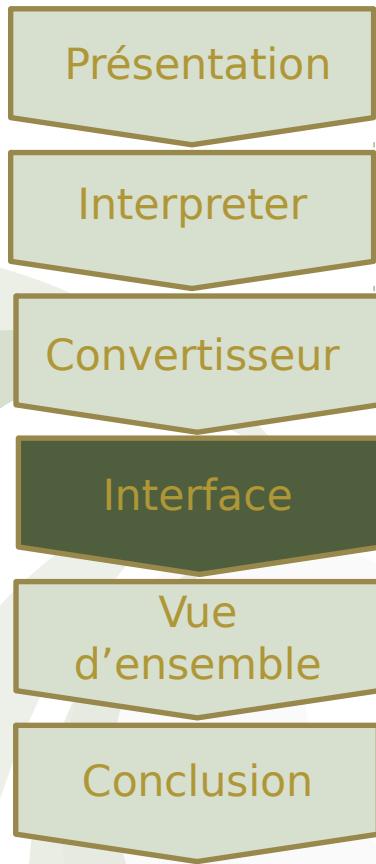
Interface graphique



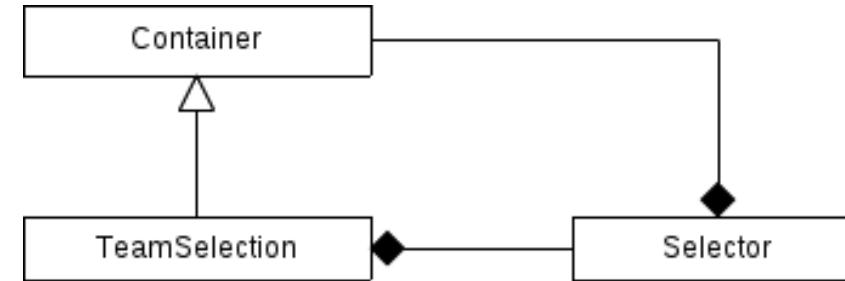
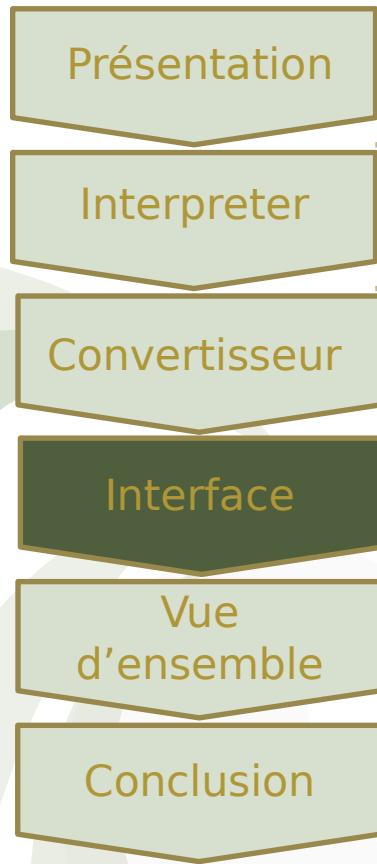
Interface graphique



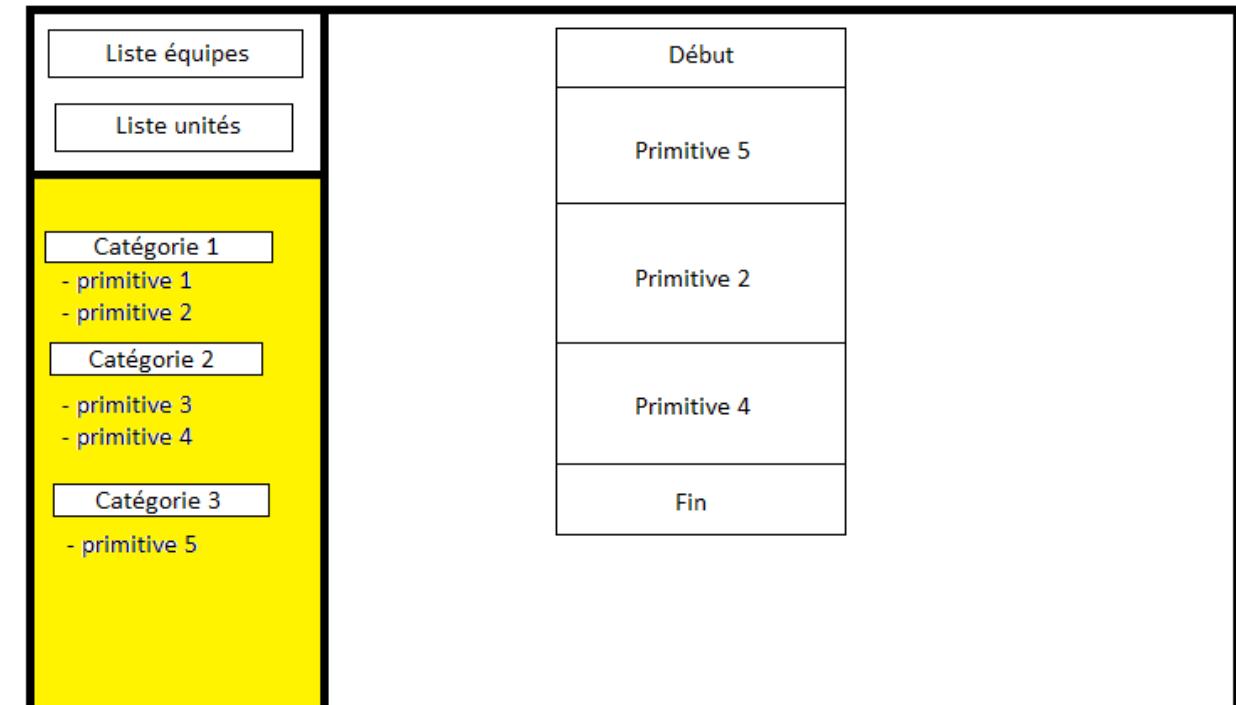
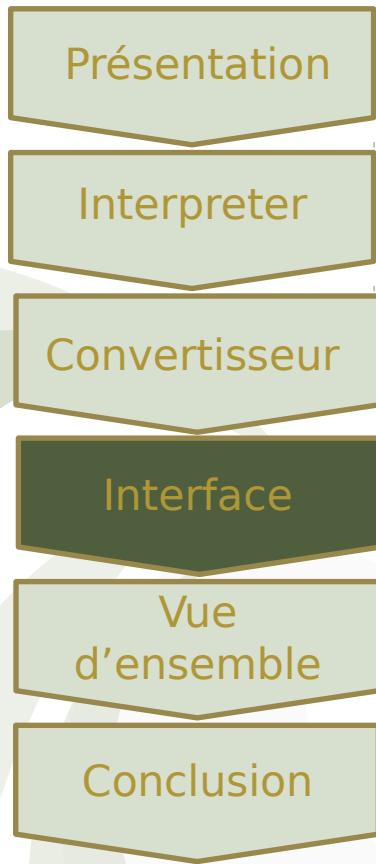
Interface graphique



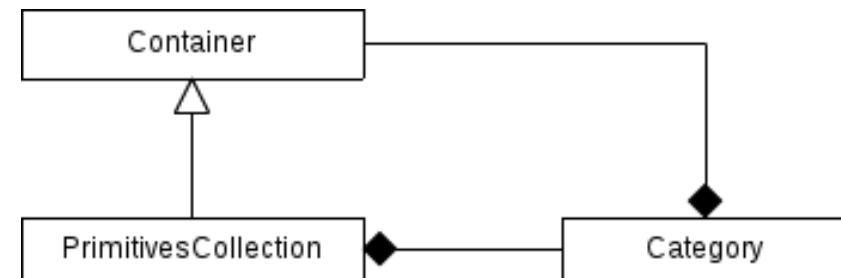
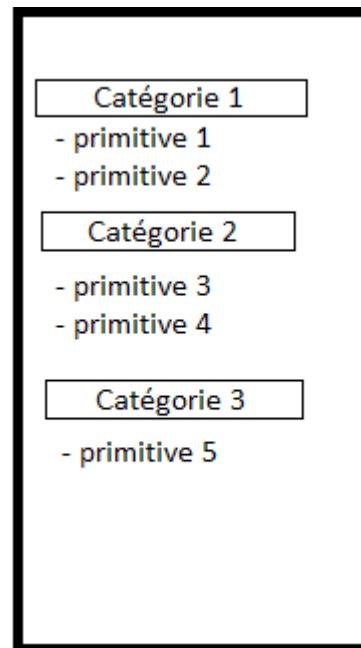
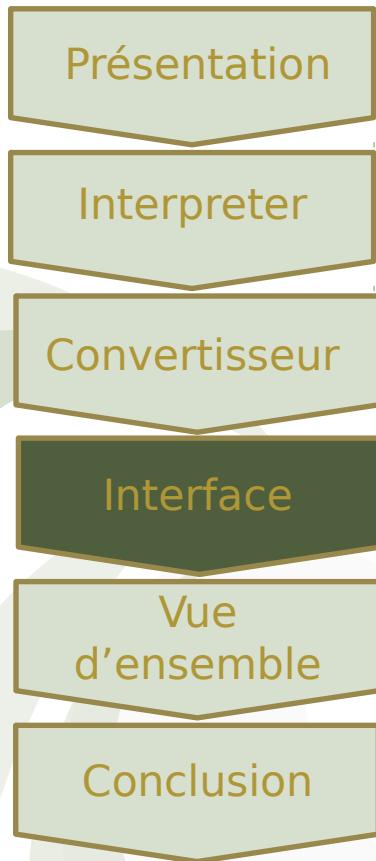
Interface graphique



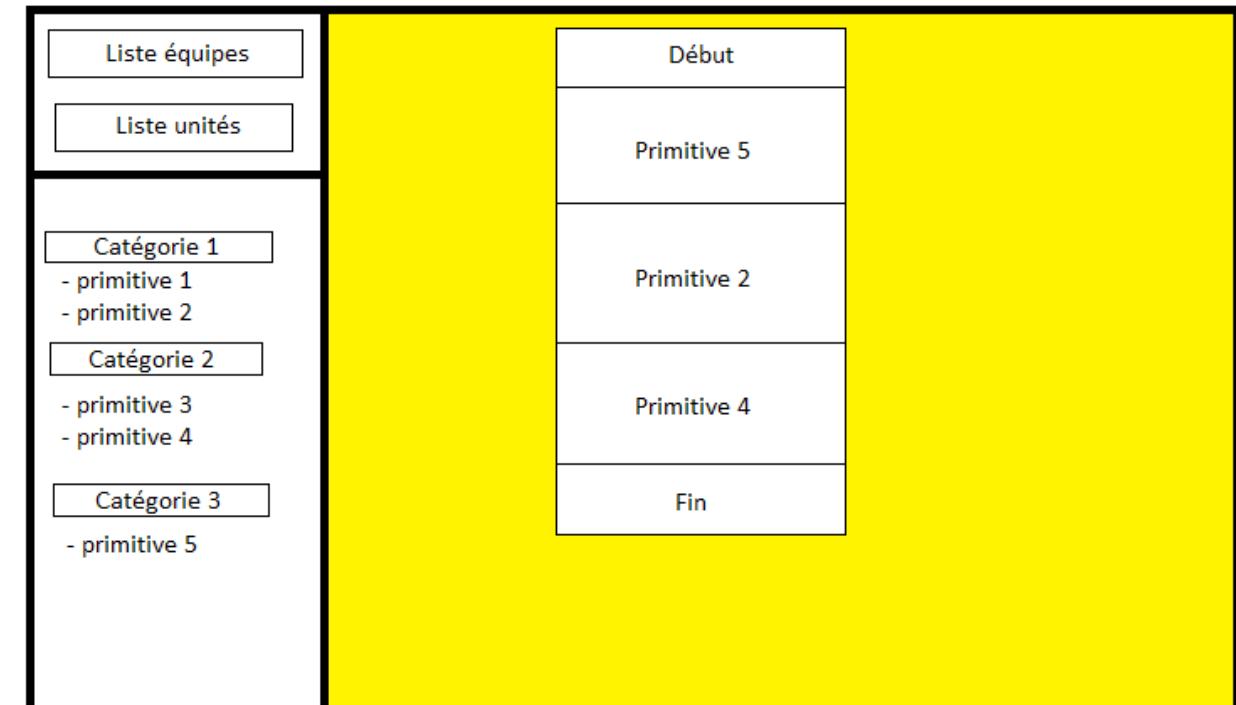
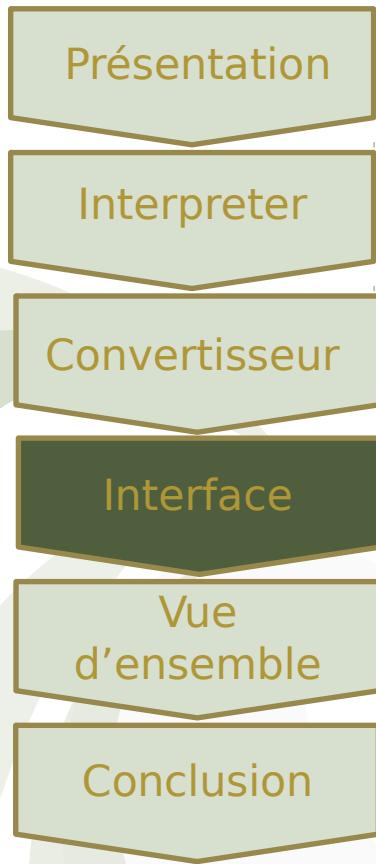
Interface graphique



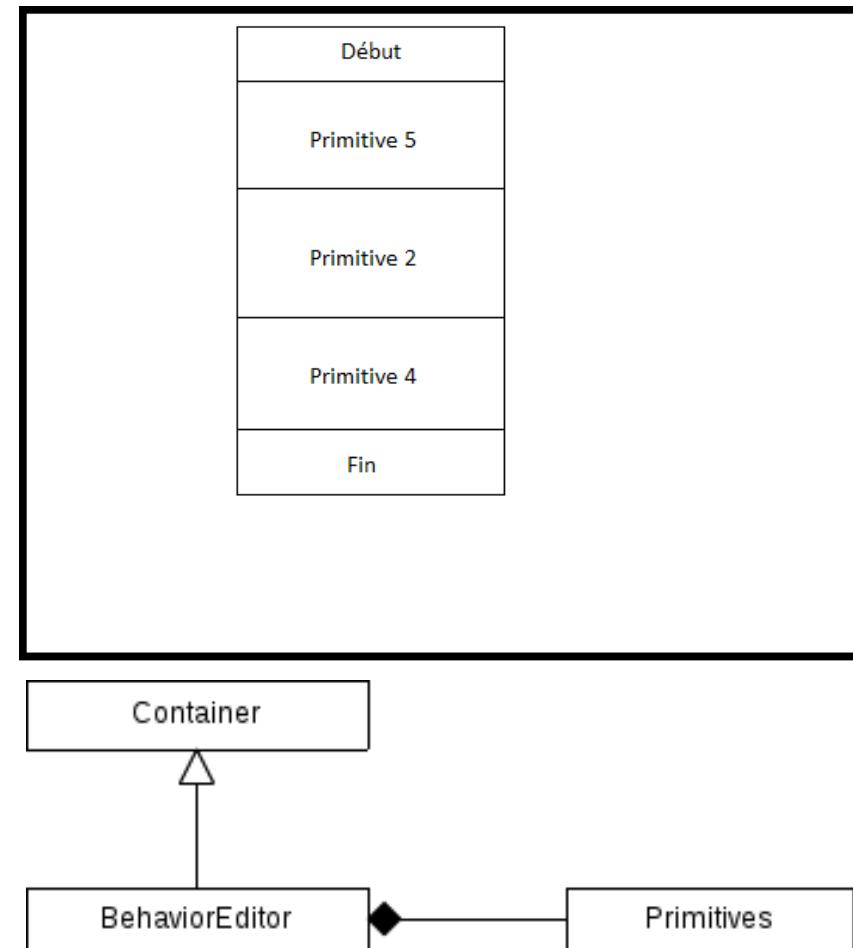
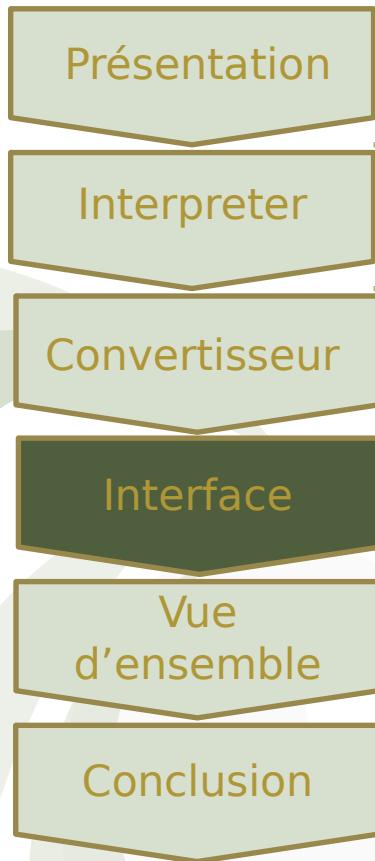
Interface graphique



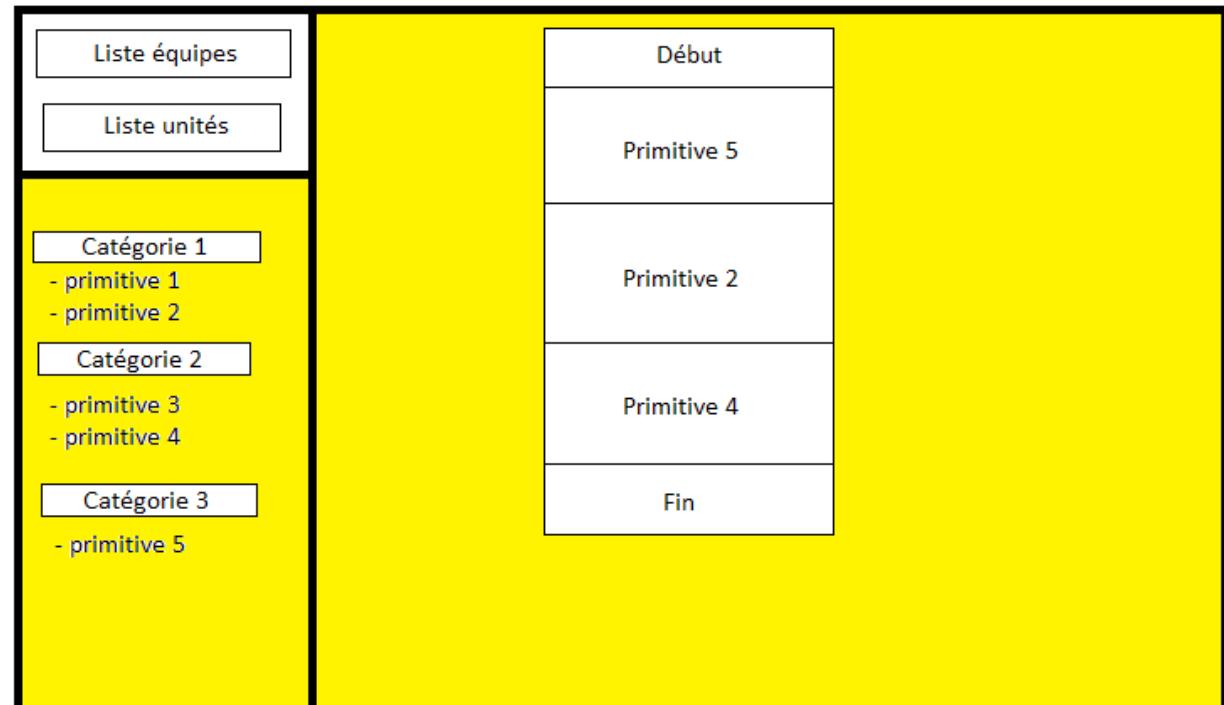
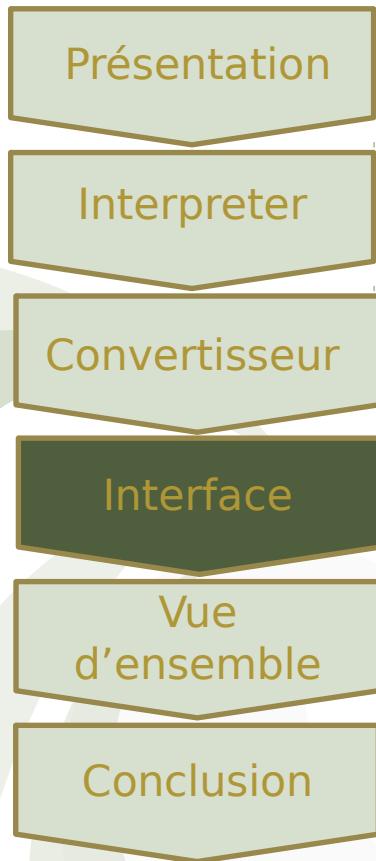
Interface graphique



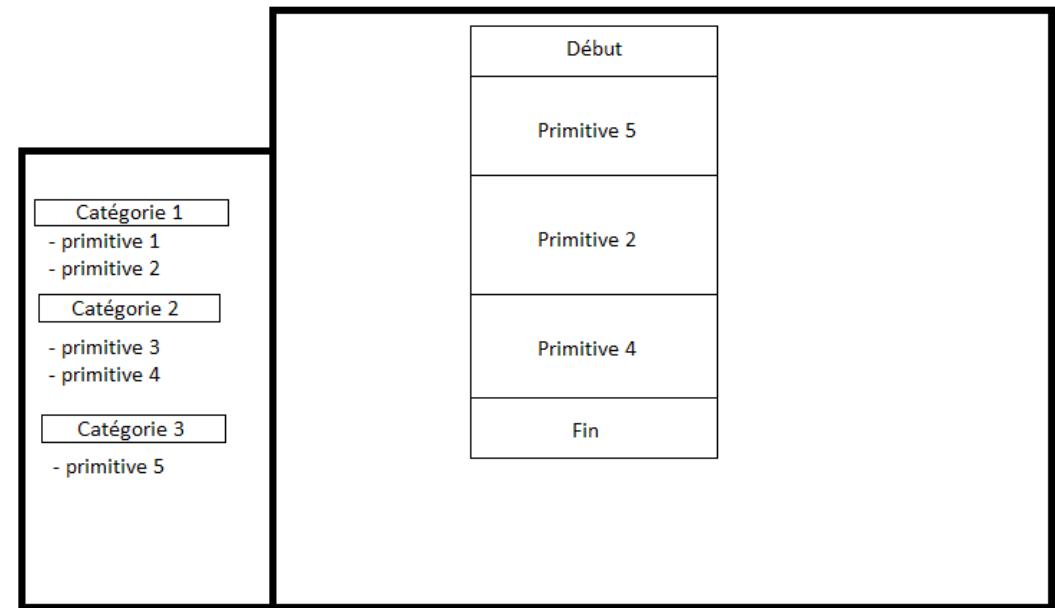
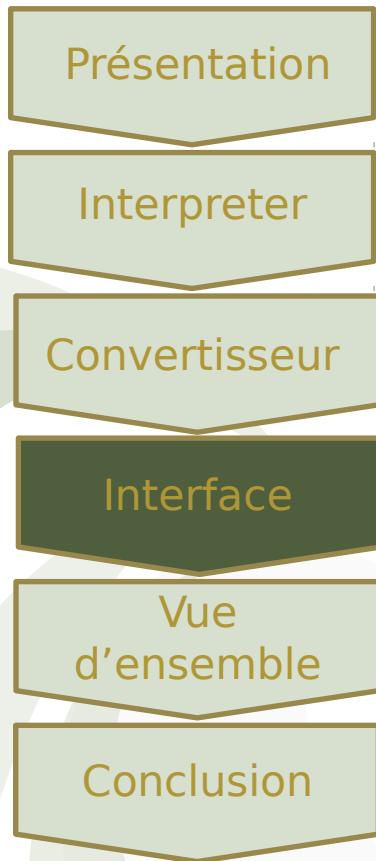
Interface graphique



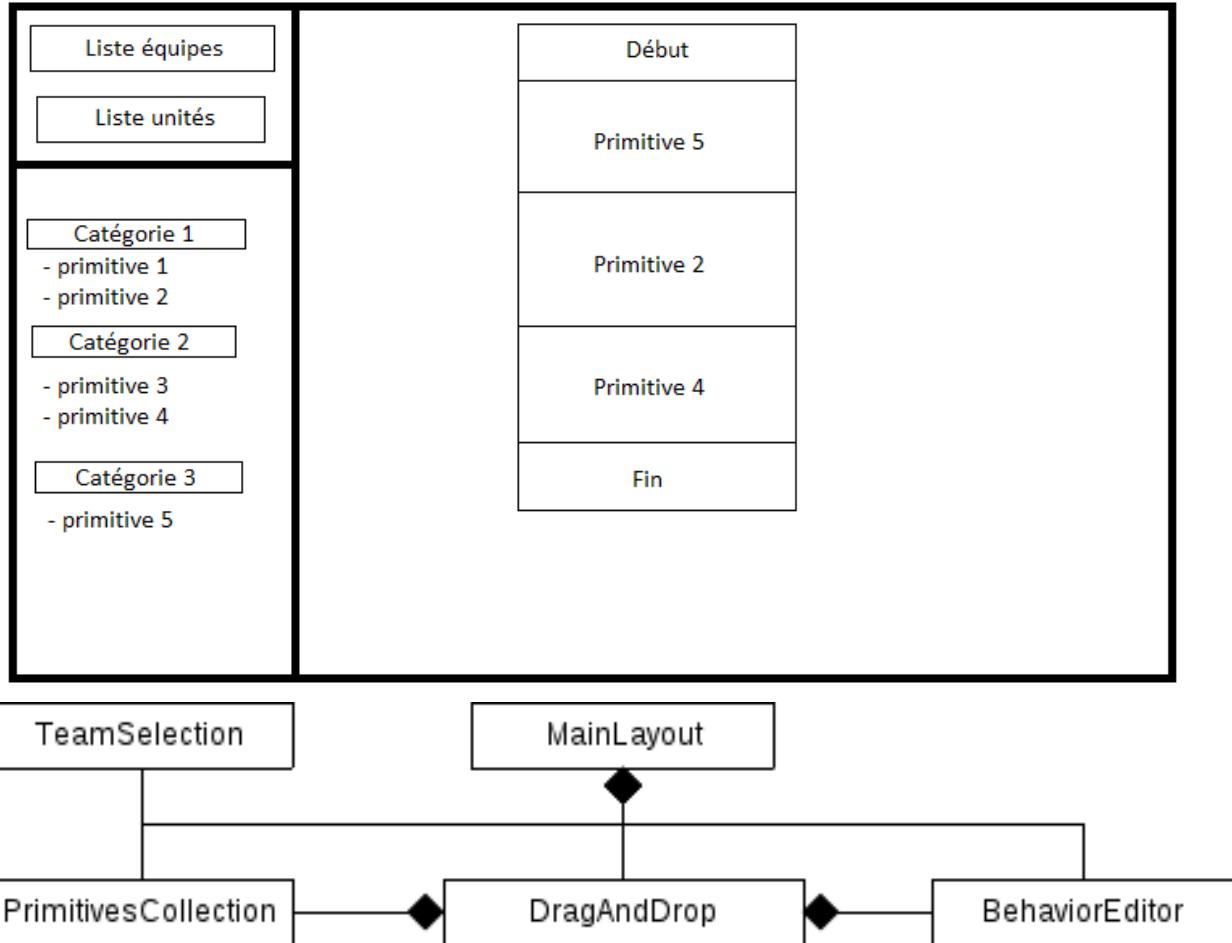
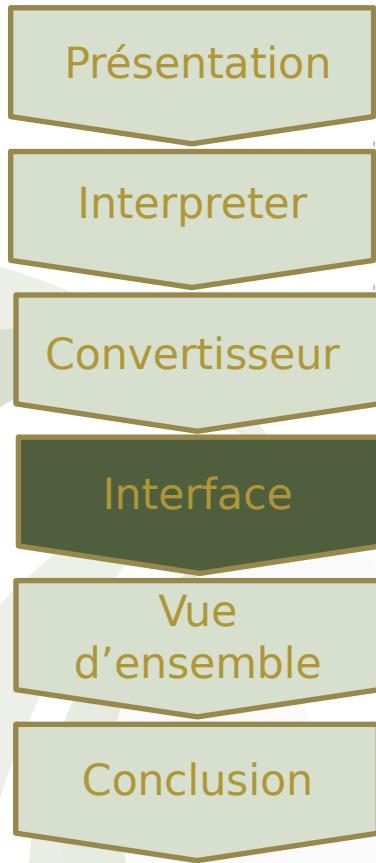
Interface graphique



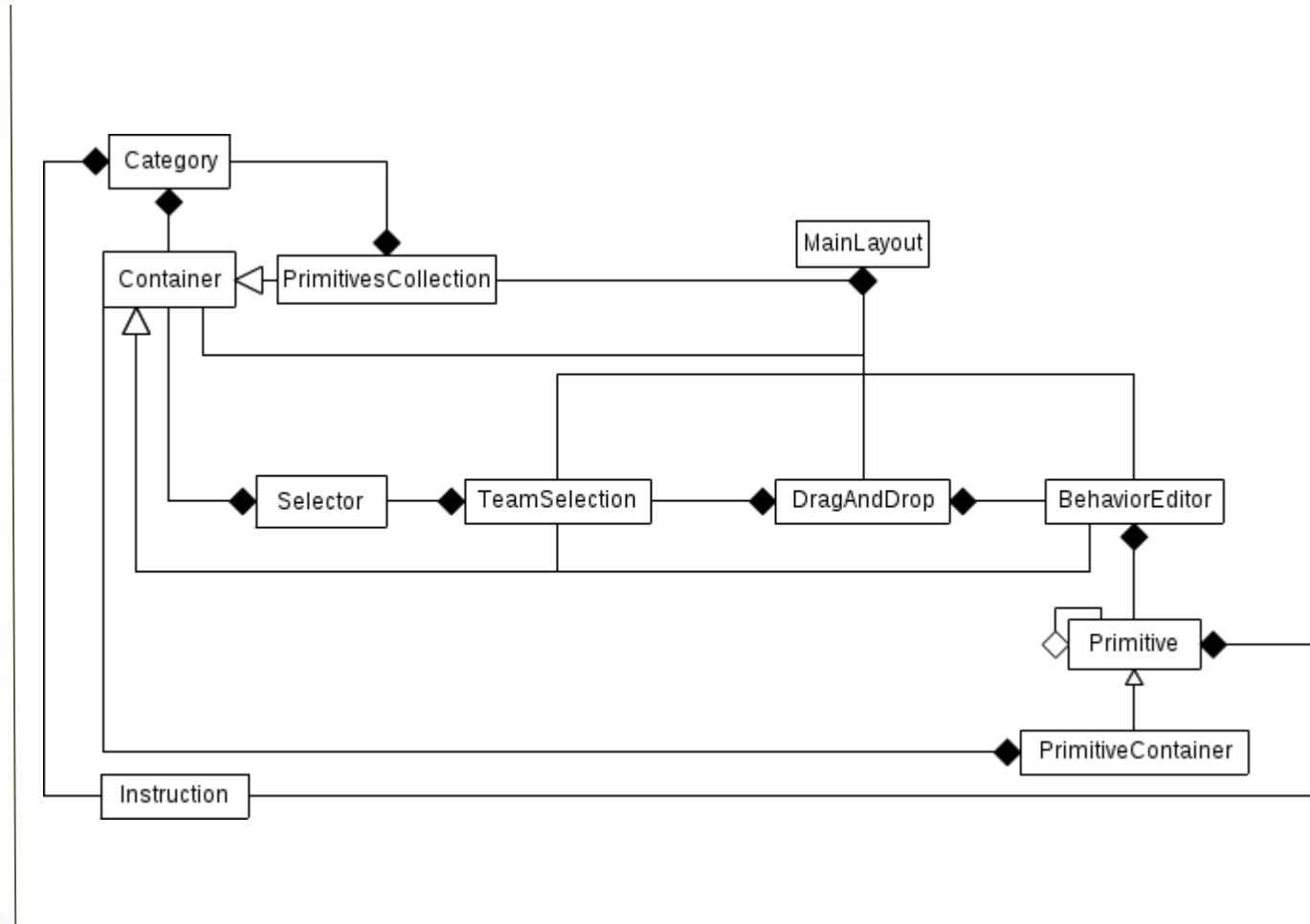
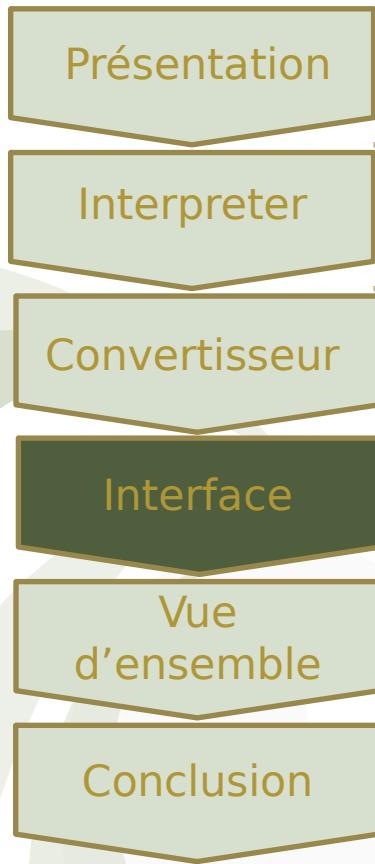
Interface graphique



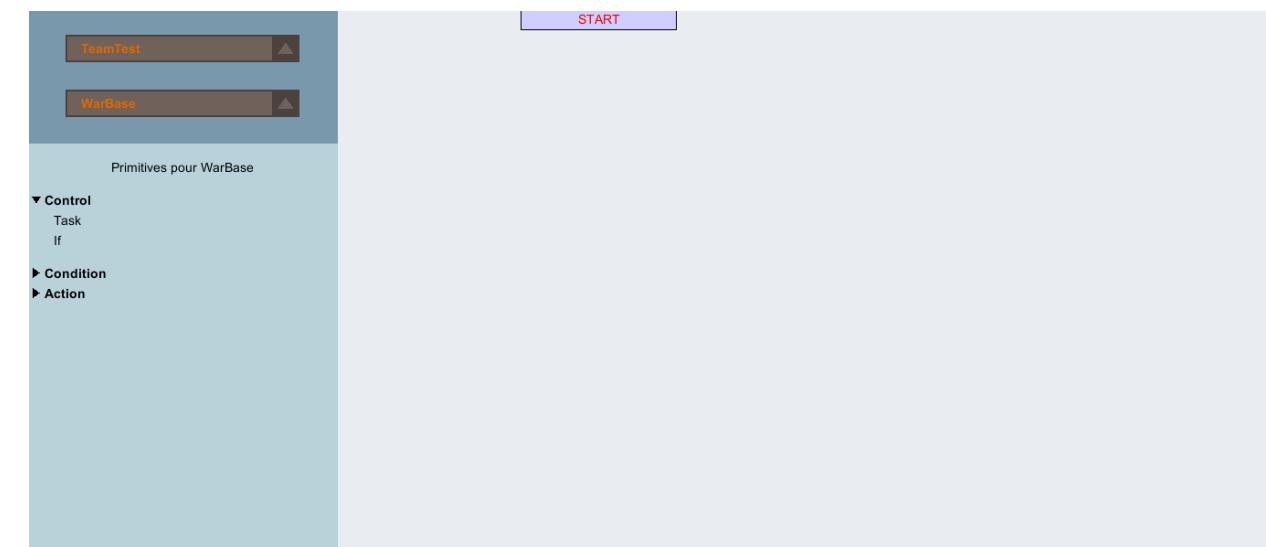
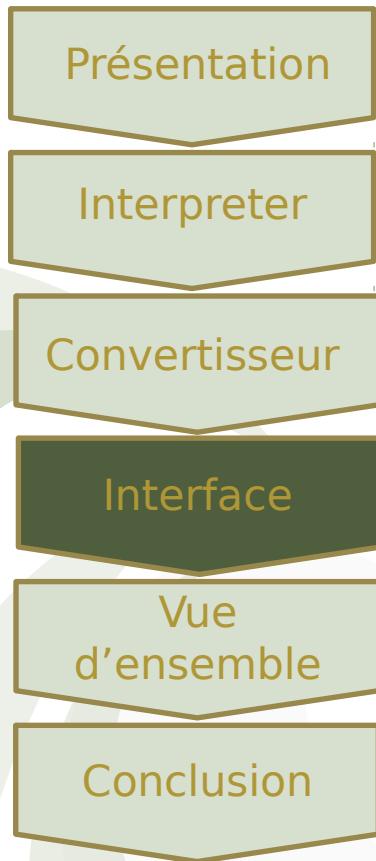
Interface graphique



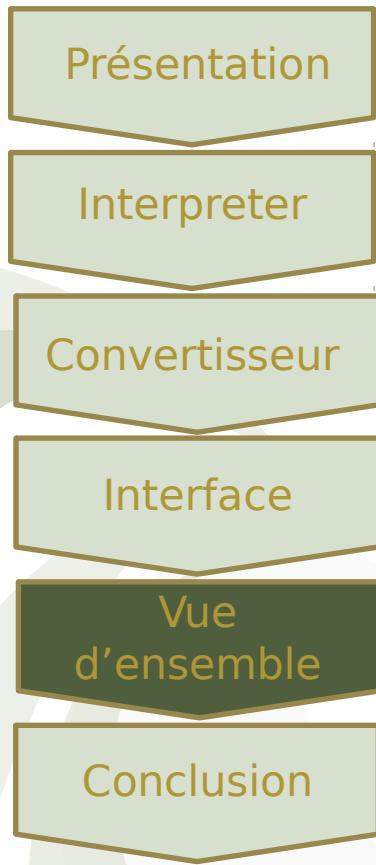
Interface graphique



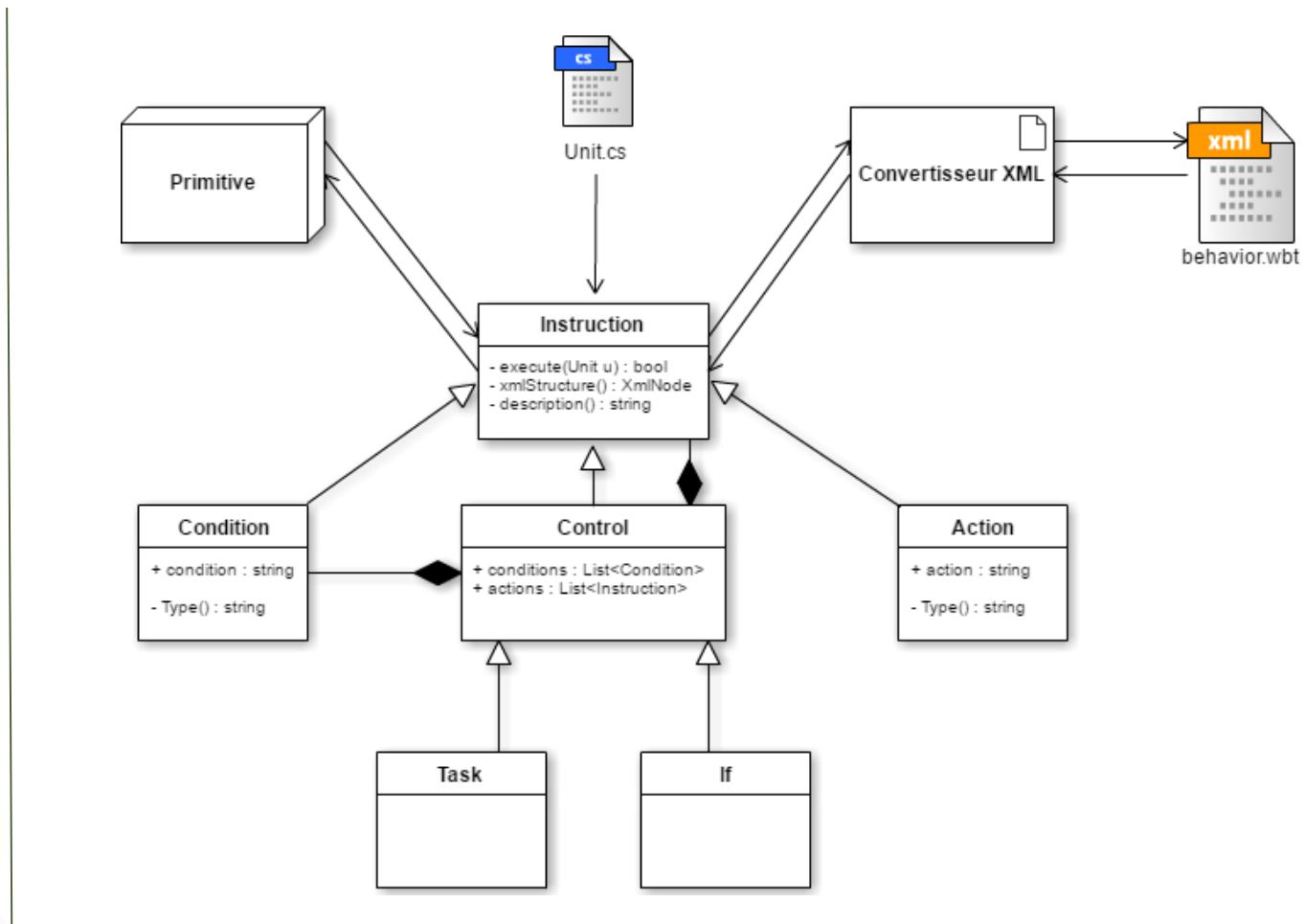
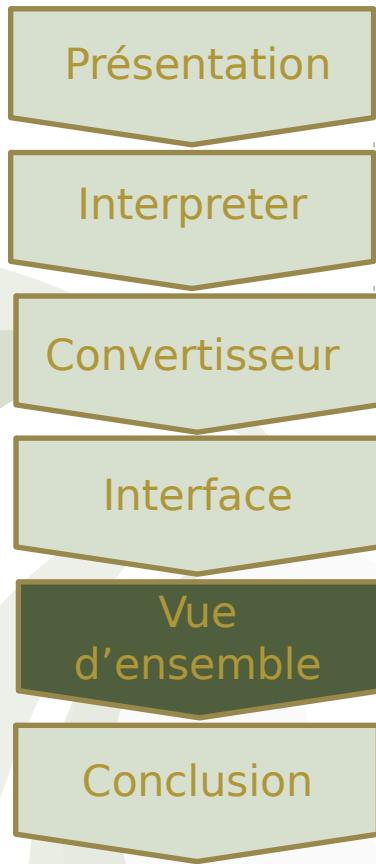
Interface graphique



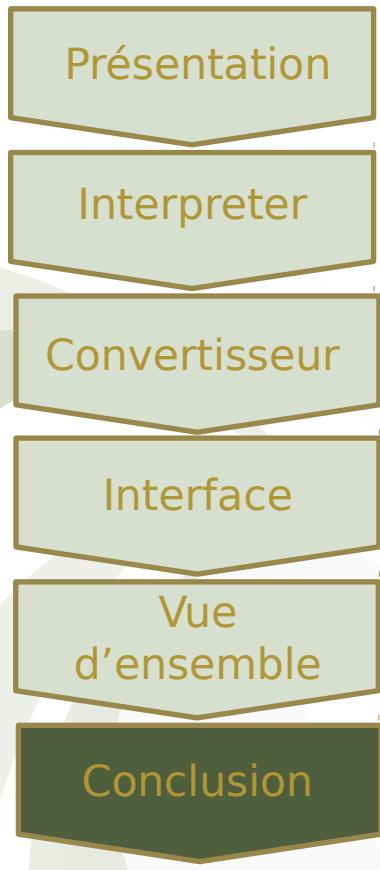
Vue d'ensemble



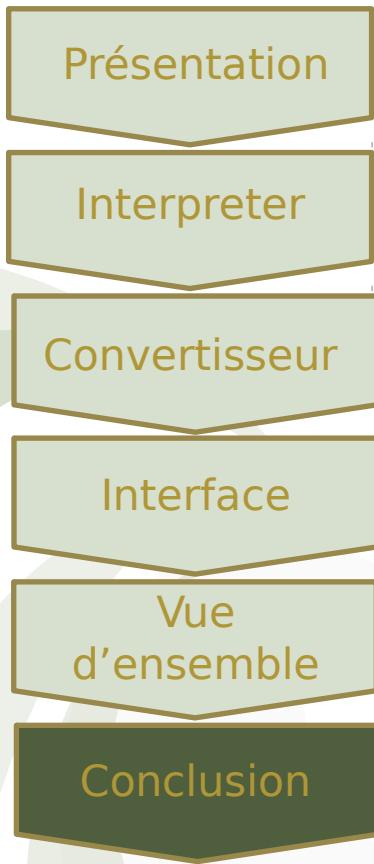
Vue d'ensemble



Conclusion

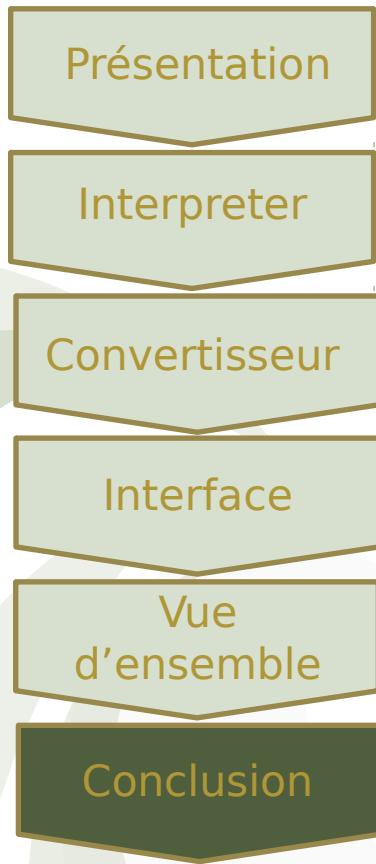


Conclusion



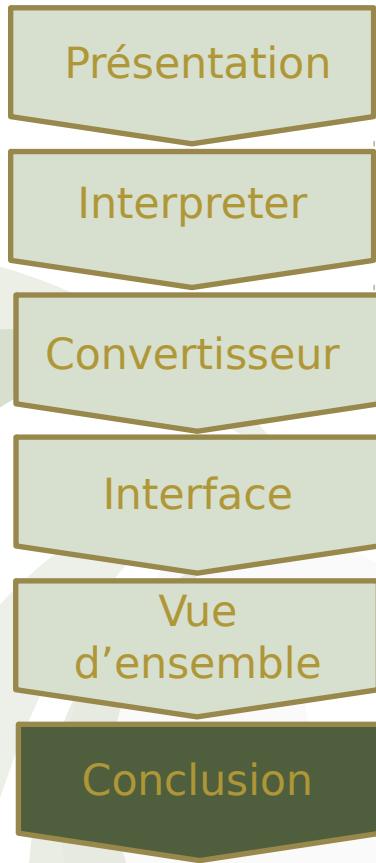
- Développement et maintenance plus souples

Conclusion



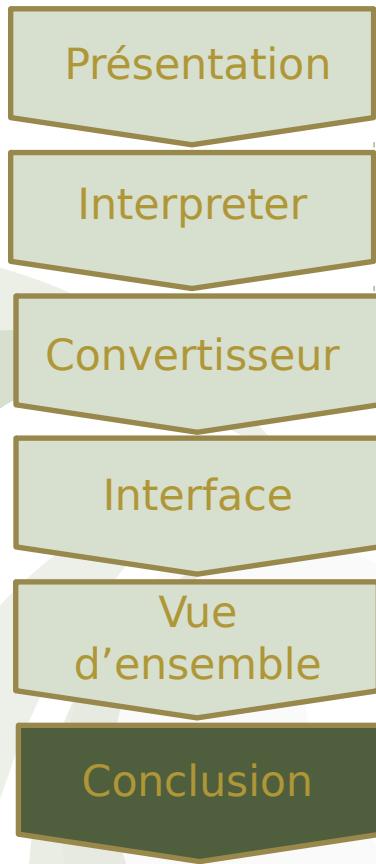
- Développement et maintenance plus souples
- Structure externe allégée

Conclusion



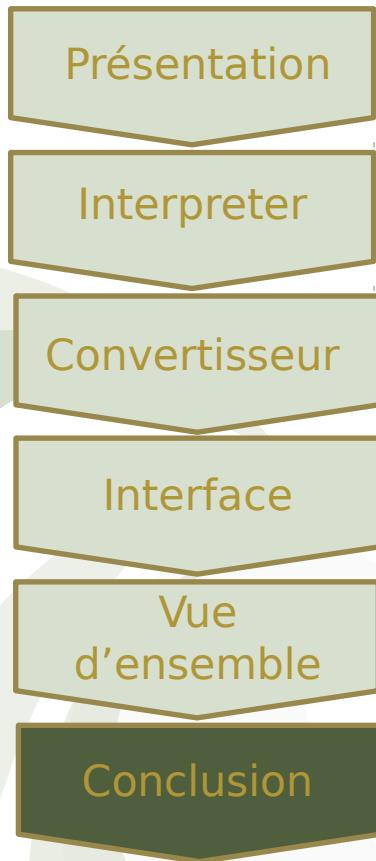
- Développement et maintenance plus souples
- Structure externe allégée
- Choix d'OpenGL plutôt qu'Unity3D

Conclusion



- Développement et maintenance plus souples
- Structure externe allégée
- Choix d'OpenGL plutôt qu'Unity3D
- Intégration au projet Warbot réussie

Conclusion



- Développement et maintenance plus souples
- Structure externe allégée
- Choix d'OpenGL plutôt qu'Unity3D
- Intégration au projet Warbot réussie
- Application accessible en jeu



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Merci de votre attention

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Warbot sous Unity

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