

# PS5 - SOUTENANCE

## **PROJET TAKENOKO**

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**01**

# **DÉMONSTRATIONS**

# DÉMONSTRATIONS

## 2000 PARTIES

1000 parties : meilleur bot contre le second meilleur  
1000 parties : meilleur bot contre trois clones de lui même

### STATISTIQUES

X parties avec export en CSV



### LOGS

1 partie avec toutes les logs

# 2000 PARTIES

END - All 1000 games have been run :

SCOREBOARD - ===== Scoreboard =====

< ColletBot : Wins-364 Total Score-23592 > |

< GeneralTactic : Wins-636 Total Score-31102 > |

GAMESTATS - Summarized game statistics for 1000 games between [ColletBot | Type: ColletBot, GeneralTactic | Type: GeneralTacticBot]

===== BotAverage =====

< ColletBot : Score avg per game- 23 > |

< GeneralTactic : Score avg per game- 31 > |

END - All 1000 games have been run :

SCOREBOARD - ===== Scoreboard =====

< GeneralTacticBot2 : Wins-473 Total Score-27868 > |

< GeneralTacticBot1 : Wins-528 Total Score-28424 > |

GAMESTATS - Summarized game statistics for 1000 games between [GeneralTacticBot1 | Type: GeneralTacticBot, GeneralTacticBot2 | Type: GeneralTacticBot]

===== BotAverage =====

< GeneralTacticBot1 : Score avg per game- 28 > |

< GeneralTacticBot2 : Score avg per game- 27 > |

**02**

# **QUALITÉ & DETTE TECHNIQUE**

# STATISTIQUES GÉNÉRALES



**~10000 LIGNES**

Dont 7100 de code  
et environ  
11% de commentaires



**121 CLASSES**

Organisées  
dans 26 packages



**~1200 commits**

Ce qui fait  
~160 commits  
par semaine

# UNIT / INTEGRATION TESTING



## 544 tests

Théoriquement pas encore assez en considérant que la complexité cyclomatique du projet est : ~1400.



## Coverage : 81%

Valeur à prendre avec des pincettes.



## Mutation testing

Mutation Coverage : 70%  
Test Strength : 80%



# SONARQUBE



## Dette technique

Actuelle : 1h13m

Tests unitaires @Disabled

3 méthodes avec une complexité  
trop élevée : 23, 19, 18  
(au lieu de 15)



## PIT Test

Résultat des tests de  
mutation.



## Bugs

Aucun bug dans le  
code principal.

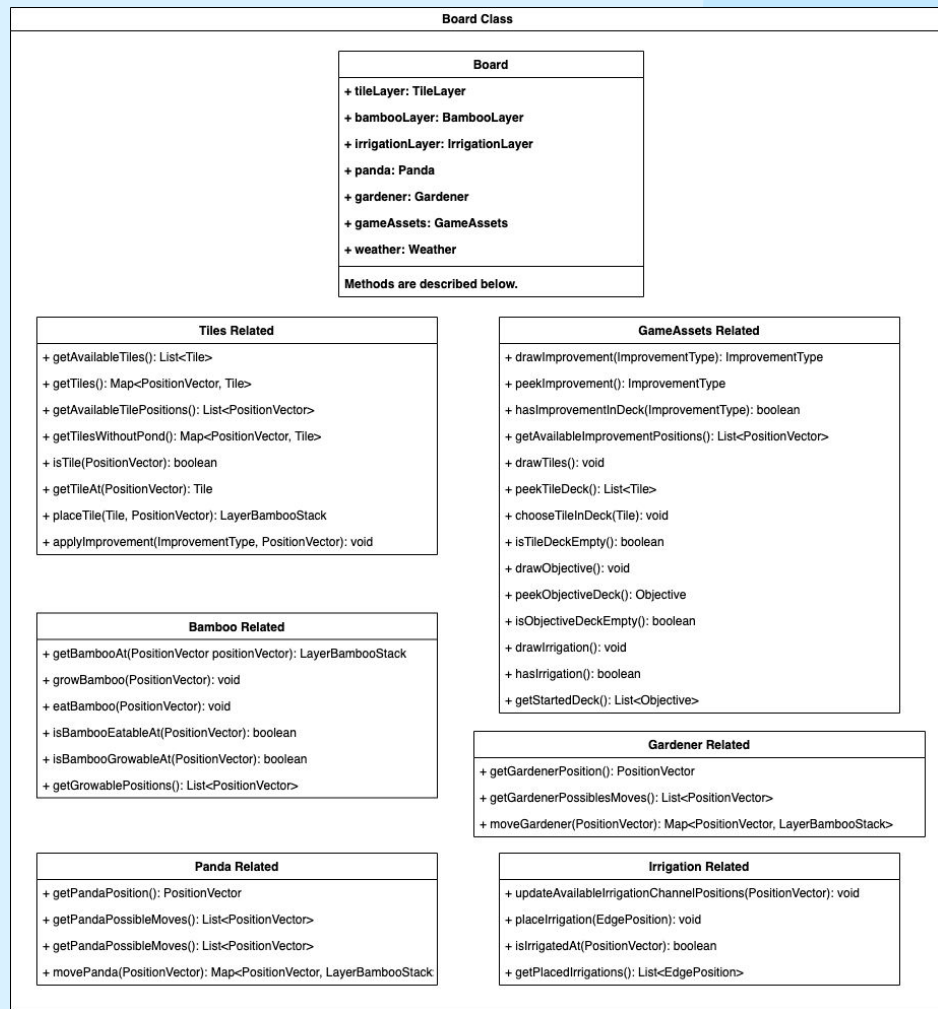
En revanche, chaque  
mutant qui n'est pas  
vérifié est considéré  
comme un bug

**03**

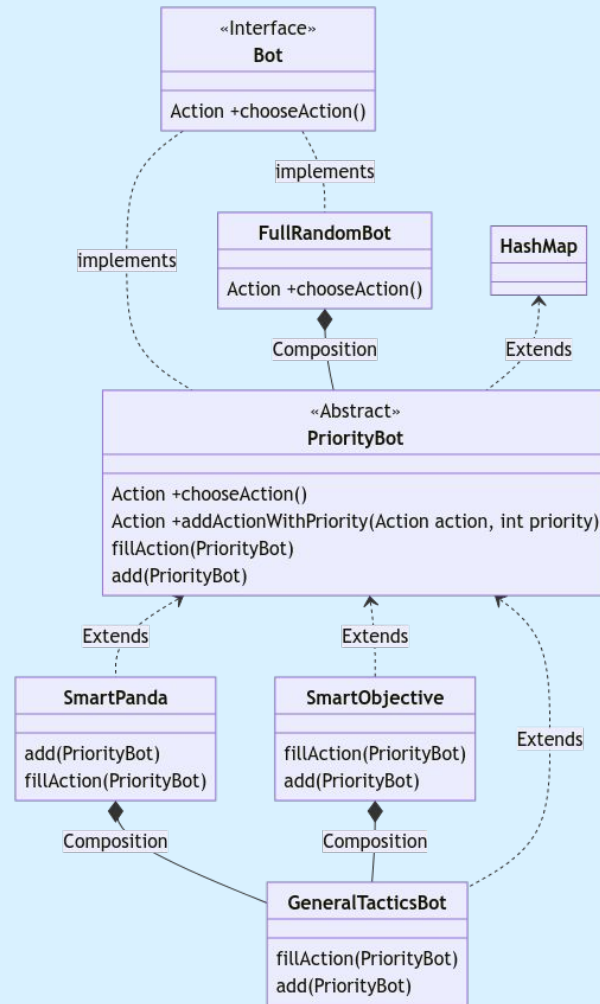
# **ARCHITECTURE INTERNE**

# ARCHITECTURE DU BOARD

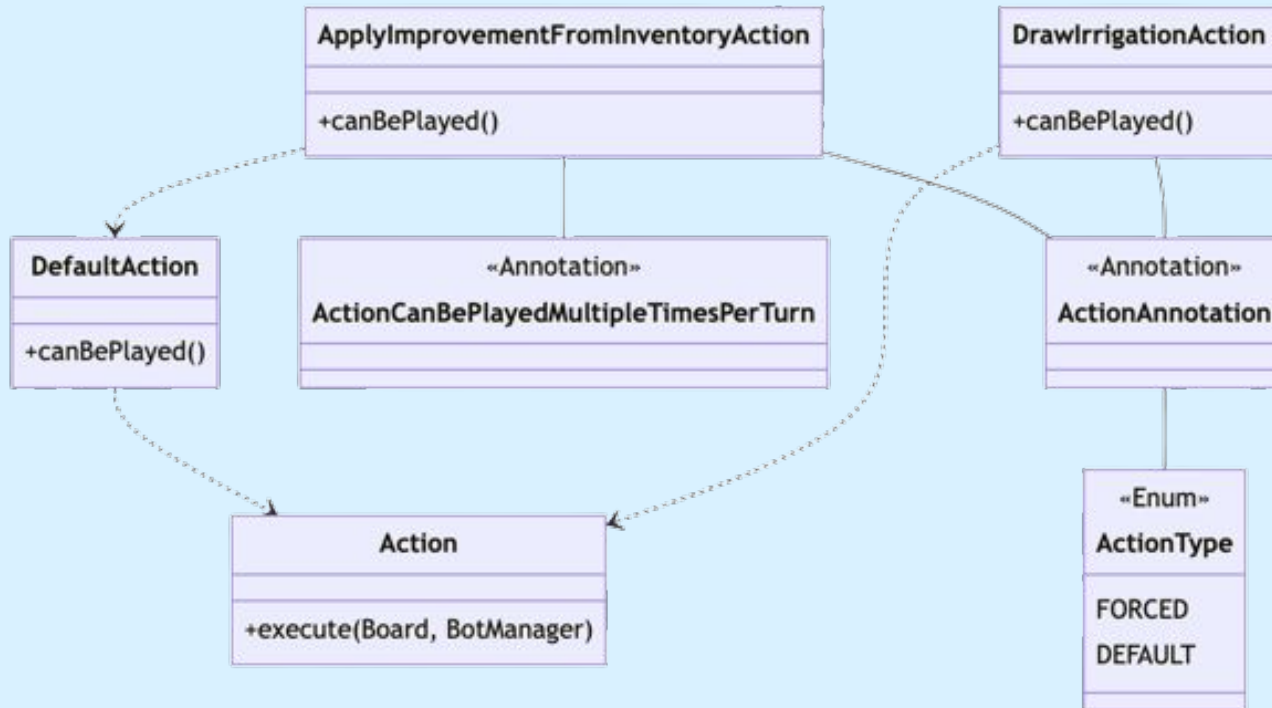
Board est une façade et  
cela permet d'éviter  
l'anti-pattern : Train  
Wreck



# ARCHITECTURE DES BOTS



# ARCHITECTURE DES ACTIONS



**04**

# **ORGANISATION D'ÉQUIPE**

# PRINCIPES AGILE

**v0.X.0**

**RELEASE**

Régulière et stable

Sloth - v0.5.0

Pre-release

Chameleon - v0.4.0

Pre-release

Reindeer - v0.3.0

Pre-release

Red Panda - v0.2.0

Pre-release

Axolotl - v0.1.0

Pre-release

**#123**

**USER-STORY**

Définir un besoin

- ☐ ☒ As a dev, we can run many games with different bot algorithms, in order to find the best ones **user-story**  
#173 by neoteristis was closed on Jan 3 ☒ 11 tasks done ☒ WEEK 3 - Reind...
- ☐ ☒ As a bot, it has an inventory, in order to win by having two bamboos in his inventory **user-story**  
#96 by neoteristis was closed on Dec 19, 2022 ☒ 3 tasks done ☒ WEEK 2 - Red P...
- ☐ ☒ As a bot, it can move the panda in a line, in order to win when the panda eats a bamboo **user-story**  
#95 by neoteristis was closed on Dec 18, 2022 ☒ 14 tasks done ☒ WEEK 2 - Red P...
- ☐ ☒ As a bot, it can move the panda by one tile, in order to win when he moves **user-story**  
#94 by neoteristis was closed on Dec 16, 2022 ☒ 10 tasks done ☒ WEEK 2 - Red P...

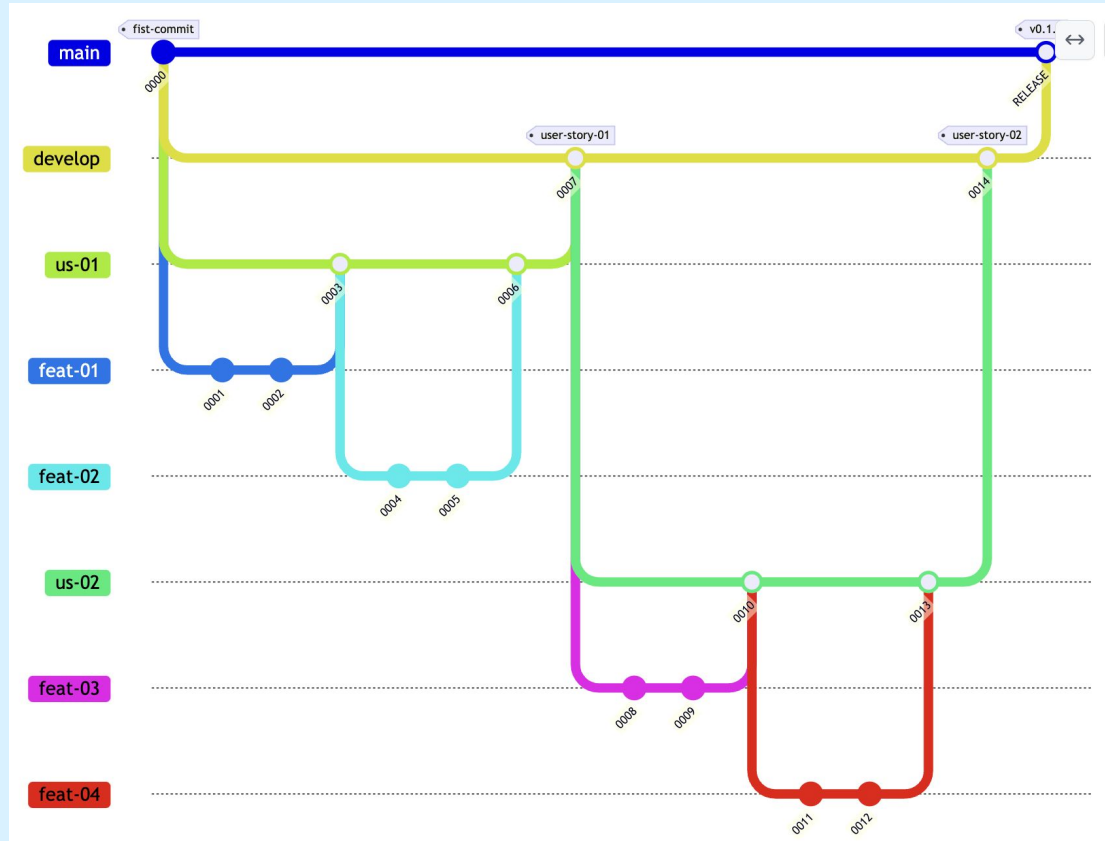
**#456**

**FEATURE**

Définir un ajout, modification,  
ou retrait spécifique

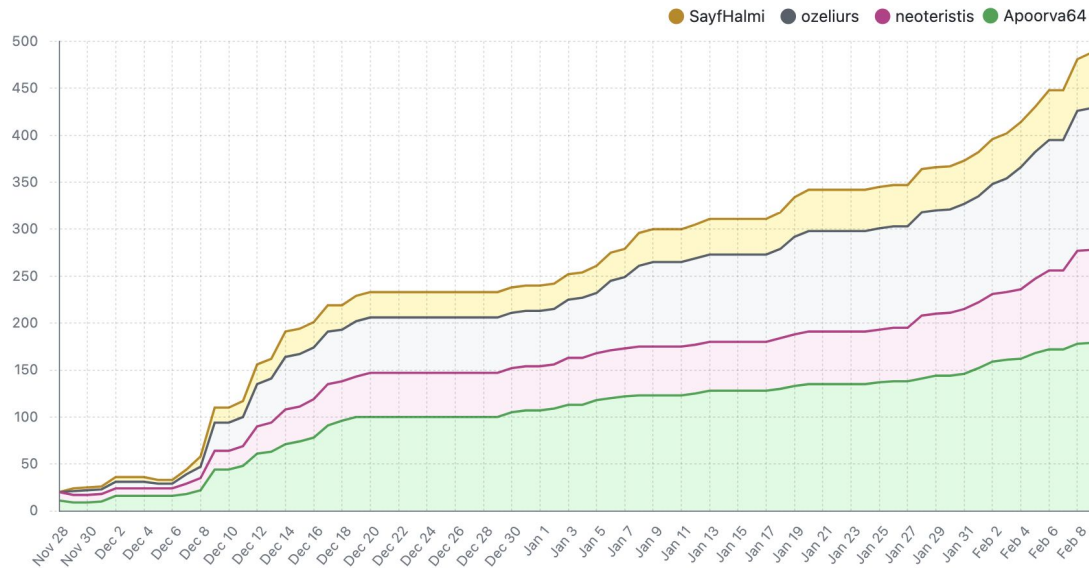
- ☐ ☒ make the bamboo grow 2 times faster on a tile with FERTILIZER improvement **feature**  
#290 by Apoorva64 was closed 3 weeks ago ☒ WEEK 4 - Cham...
- ☐ ☒ add GetAndStoreImprovementAction **feature**  
#285 by ozellurs was closed 3 weeks ago ☒ WEEK 4 - Cham...
- ☐ ☒ add improvement to the bot's inventory **feature**  
#282 by SayfHalmi was closed 3 weeks ago ☒ WEEK 4 - Cham...
- ☐ ☒ create a deck for the Improvement **feature**  
#281 by ozellurs was closed 3 weeks ago ☒ WEEK 4 - Cham...
- ☐ ☒ add method to get improvement placable tile **feature**  
#280 by Apoorva64 was closed 3 weeks ago ☒ WEEK 4 - Cham...

# BRANCHING STRATEGY





# RÉPARTITION DU TRAVAIL



Thu 9. Feb 2023

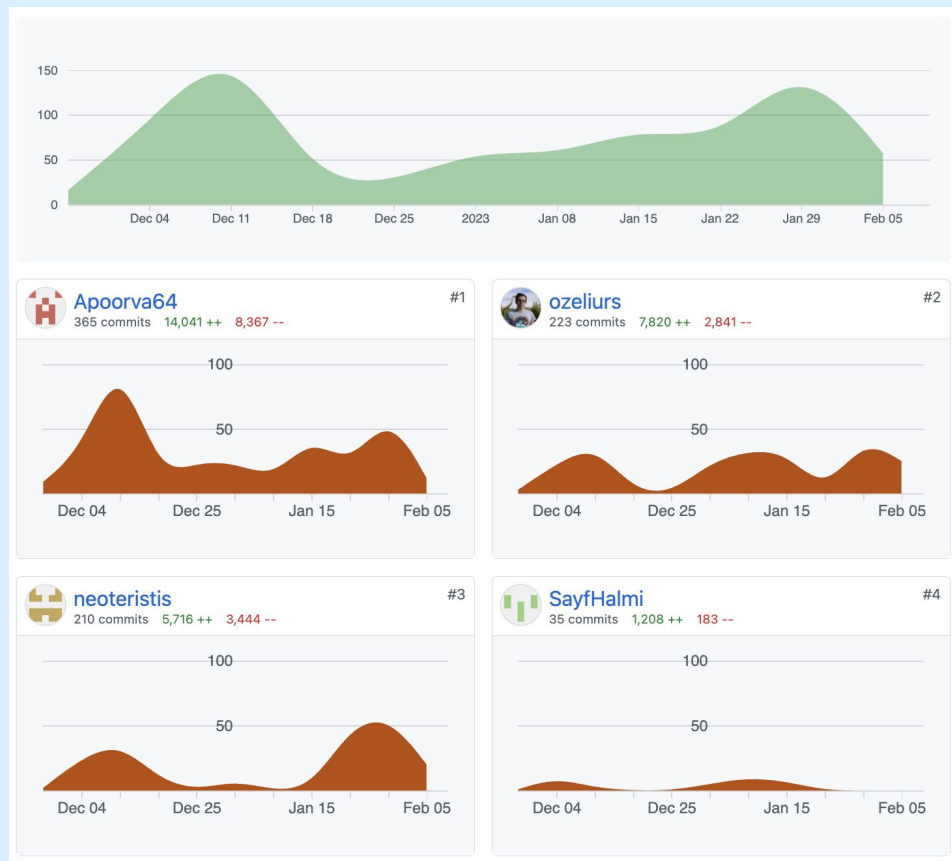
**SayfHalmi 59**  
**ozeliurs 151**  
**neoteristis 99**  
**Apoorva64 179**

# CONTRIBUTOR STATS

**Nombres de :**

**- PRs : ~200**

**- issues : ~250**



# CONTINUOUS INTEGRATION

## GitHub Hooks

Verify that the commit conventions are respected

## Format check

Verify that the code is correctly formatted

## SonarQube

Code quality and PIT test reports

## Maven Compiler

Verify that the project can be built

## Package

Publish a package for each release

**MERCI POUR  
VOTRE ATTENTION !**