JAVA 1

SpacePigFighter

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Chapter 1

Presentation

1.1 What is it ?

"Space Pig Fighter" is a game that is played in the terminal by 2 players. Each player is a space pig and have to beat the other one.

A game happens in 2 phases. The first one is a spacecraft battle. The second one is a melee battle. Each spacecraft has several caracteristics. Each pig has several caracteristics and some weapon.

1.2 Rules

1.2.1 Animal class

|Animal class | life | force | resistance | special attack | |—|—|—|—|—| |Bear | mid | mid | big | damageAnnulation | |Chicken | low | big | mid | triple attack | |Duck | big | mid | low | fly | |Pig | mid | low | big | moreDamage | |Tiger | mid | big | low | paralyze foe which can't attack next turn |

|Animal class | life | force | resistance | special attack | |—|—|—|—|—| |Bear | 1000 | 110 | 40 | damageAnnulation: nn | |Chicken | 800 | 130 | 20 | triple attack: nn | |Duck | 1200 | 110 | 0 | fly: nn | |Pig | 1000 | 90 | 40 | moreDamage: nn | |Tiger | 1000 | 130 | 0 | paralyze foe which can't attack next turn: nn |

1.2.2 Animal specialAttack

- damageAnnulation - moreDamage - paralyze foe which can't attack next turn - tripleAttack, 1 turn to charge - fly, dodge current attack and attack next turn

1.2.3 Meteorites malus

- small : -20 hp - medium : -50 hp - big : -100 hp

1.2.4 Stuff choice

You have 2 skill points to share between offensif and defensif stuff. You may choose to boost your attack at the expense of the your defense or to boost your defense at the expense of the your attack. Unless you prefer to choose a well balanced build.

|Build | Attack points | Defense points | |—|—|—| |Offensive | 2 | 0 | |Well balanced | 1 | 1 | |Defensive | 0 | 2 |

|Build | Offensive stuff | Stats bonus | Defensive stuff | Stats bonus | |—|—|—|—|—| |Offensive | Axe | 40 | None | 00 | |Well balanced | Sword | 20 | Helmet | 20 | |Defensive | None | 00 | Shield | 40 |

1.3 How it is thought/programmed

Each player plays when it is its turn.

Chapter 2

Story

- welcome players

2.1   Start the game

- player 1 is invited to choose his animal, enter animal's pseudo and color (pink by default), his spacecraft's color (gray by default). - player 2 is invited to choose his animal, enter animal's pseudo and color (pink by default), his spacecraft's color (gray by default).

2.2   Part 1 of the game

- launch part1 of the game: space battle. You have to find the right location of the other player's spacecraft by entering a position. Each player try to guess turn by turn. You have to be careful, avoid meteorites ! Otherwise your pig's life will decrease. - when a player find the other one's spacecraft, he climbs aboard and it's time for part 2 of the game.

2.3   Part 2 of the game

- Players are welcomed to choose a stuff build in order to fight the other player.

1 Turn:

- Player 1 choose an action for his pig to do (choose between normal attack, special attack and scream) - Player 2 choose an action for his pig to do (choose between normal attack, special attack and scream) - Resolution

Game is over when a pig has no life point left. Since the resolution happens after both player's action, the result can be a draw.

2.4   End

At the end of the game, a file is created with the game summary written in it.

Chapter 3

Development part

Each player plays when it is its turn.

Here is the UML diagram of the program:

3.1 UML

<insert here: UML>

3.2 class description

<insert here: class description>

3.3 Technical part

3.3.1 Set the game

- set Player class for each player - set Space class with 2 CubeEnvironment (1 for each player). Each CubeEnvironment is set with 3 meteorites and 1 spacecraft. - set FightArea class with 2 pigs. Each pig is initialized with stuff selected by the player.

3.3.2 The Space :

It is composed by 2 CubeEnvironment created thanks to the 2 Player.

Chapter 4

Conclusion

Le projet est cool.