Université Catholique de Louvain

INGI1131
Concepts of Computer Languages

Zombieland

Course Project

Group 43

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Introduction

Context : Zombie apocalypse, mutants
Why : need for food medicine, ressources
Task : simulator to reduce human loss (+ pass time)

1   Architecture and design

1.1   Components

diagramme des interactions

1.2   Controller

states + responsibilities

1.3   Cell

room == grid of cells
states + responsibilities

1.4   Players

states + responsibilities
interaction between them Brave and zombies in contiguous cells :
- if bullets left then
- - if brave facing, brace wins and zombie dies
- - else if brave not facing then
- - - if zombie facing, brave dies and game over
- - - else nothing happens
(petits dessins)

1.4.1   Brave

depends on the player

1.4.2   Zombies

AI : try moving 3 turns in the same direction, destroy objects 20 % of the time, change direction randomly if obstacle. If brave, attempt to kill her.

1.5   Other

QTk?

2   Concurrency issues

synchronization of the turns between the brave and the zombies
synchronization between the zombies : not on the same cell

Conclusion

should fulfill the requirements and provide some help to survive