

# Multi-agent based simulation of G. R. R. Martin's Sand Kings

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**Abstract**—This document describes the multi-agent based simulation of George R. R. Martin's *Sand Kings* created for the Agents Systems and Applications course at the Warsaw University of Technology.

## I. INTRODUCTION

**T**HE FANCY Introduction. Motivation, Objective, The book. Maybe structure

## II. TOOLS

Repast, what why etc.

## III. METHODOLOGY

Small introduction to methodology

### A. Agents

What is an agent. Mobiles, Maw, God, Monsters etc.

### B. Environment

1) *Map*: The map is a 50x50 grid consisting of different shades of yellow and grey to represent the environment described in *Sand Kings*, where the terrarium was filled with sand and rocks.

2) *Food*: In the simulation there are 5 types of food with different weight and calories which are proportional. They affect respectively how many mobiles are needed to carry each and how much maw's strength is increased by eating it. The first four types of food are dropped by the God agent. They are represented by **pizza**, doughnut, grape and cabbage icons, where the first one has the highest calorie value. The last type of food is dropped only by a living agent (either a mobile, maw or monster) when it dies.

### C. Desire System

Alliances, formations etc.

### D. Communication

Things about knowledge, communication etc.

## IV. SIMULATION

Small intro to simulation. What are we planning to do in this section.

### A. Data set

What do we have in simulation. Environment, maws, mobiles, how many etc.

### B. Results

Results of our simulation.

## V. CONCLUSIONS

Conclusions of this paper.

## APPENDIX

Is it even needed ?

## ACKNOWLEDGMENT

Some thanks to Paprzycki ? hahahahaha for what

## REFERENCES

[1] Source example, for more add sources here