

ZEUS  
Zombie Epidemic Universe Simulator

Czar Ian Echavez

(24008064)

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Supervisor: Professor Atta Badii

# Abstract

ZEUS is a simulator that can be used to create a visual model of a theoretical zombie infestation. The simulator has a dual use as it can be used to model the aforementioned zombie infestation, or the simulation can be used to model a realistic spread of a pathogen. Users can set up a simulation which contain the parameters of the zombie infestation (or pathogen) as well as the scenarios which may be involved. The simulation may also save these simulations as well as load and use the simulations, to allow for the simulations to be passed across different users.

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# Introduction

# Requirements and Analysis

## Use Case

|  |  |
| --- | --- |
| **Element:** ZEUS Simulator GUI | **Use Case ID:** 1 |
| **Stakeholders/Interested Parties:**   * Epidemiologists * Pathogen Researchers * Hobbyists | |
| **Primary Actor:** Software User | |
| **Description:**  The user of the software will need a way to interact with the software. A Graphical User Interface will provide a user with proper prompts as well as output the correct responses depending on the input(s). | |
| **Trigger(s):**   * User gives mouse inputs via clicking or moving move around the screen * User gives key inputs via the keyboard or on screen keyboard | |
| **Conditions:**   * User needs to have a keyboard * User needs to have a mouse * Keyboard and mouse need a way to communicate with the computer running the software, either via physical wire or wireless connection | |
| **Event flow:**   * User gives input into keyboard or mouse * Keyboard or mouse transforms input into string/numerical values the computer can process * The input is passed into the software * The software check if the mouse or keyboard input is relevant and performs actions based on the input | |
| **Alternate flow:**   * User inputs values to keyboard and mouse but neither are connected to the computer, therefore the input is not detected * User inputs values but the software is not running therefore inputs are not detected * User inputs values but the inputs are irrelevant to the software | |

# Design Specification

# System Development

# Sub-system Conformance Testing System Integration

# Usability evaluation

# Project outcomes (lessons learned)

# Conclusions and Evaluation

# Future of the project

# Appendices and References