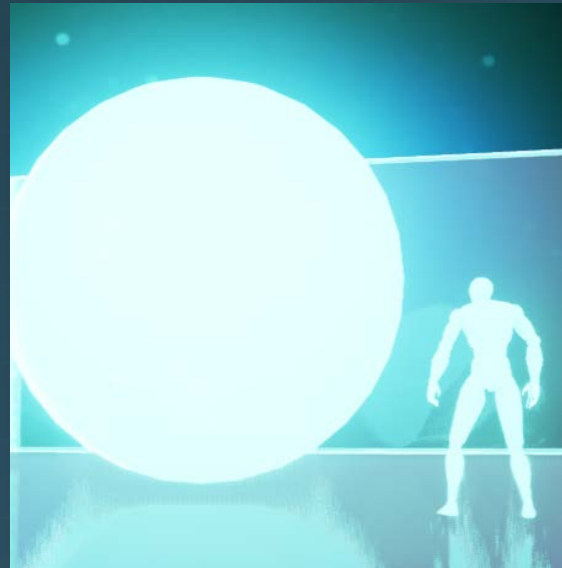# Computer Game & Simulation Programming

TIDEWATER REGION – ADVANCED TECHNOLOGY CENTER

RIKAKO MANNON
DERICK WELLS
IAN ST. JOHN

Topic

You are an anti-virus software inside of a computer terminal that has been infected with malware. Your objective is to learn about the different types of malware to defeat them.

Process

The planning process consisted of many discussions and charts to ensure the topic, educational aspect, and gameplay all fit in together.
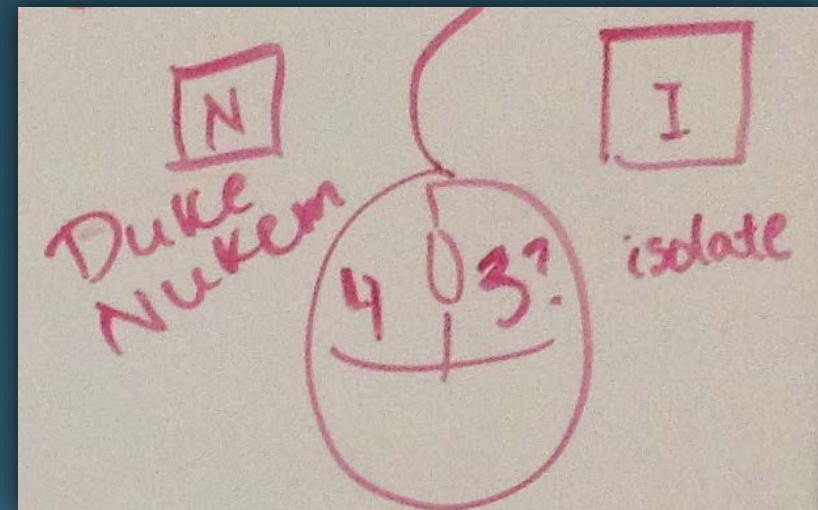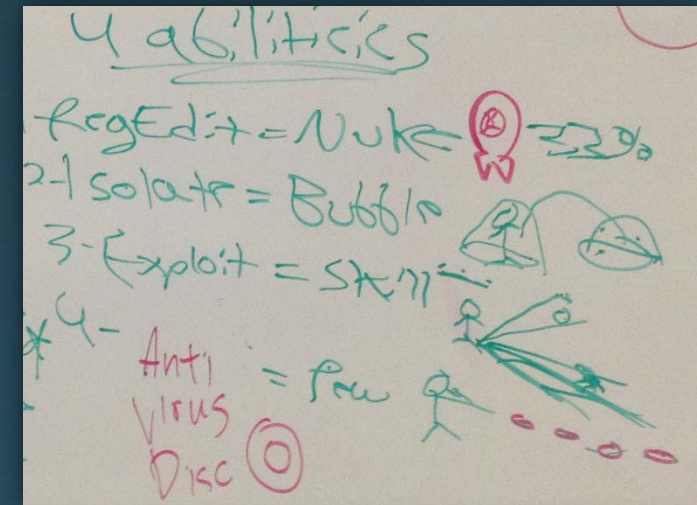
Software Selection

The software used to create the game included:

o Unreal Engine 4

o Blender 3D

o Photoshop

o Illustrator

o Linux Multimedia Studio (LMMS)

User Interface

The user interface is designed to use simple shapes and colors with sci-fi/technological accents.

We did this to create something that wasn't too busy yet still aesthetically pleasing.

Game Flow

NEAR THE BEGINNING

The beginning of the game consists of an arena with minimal numbers of malware. What is learned in the tutorial section is the knowledge of the powers that you posess.
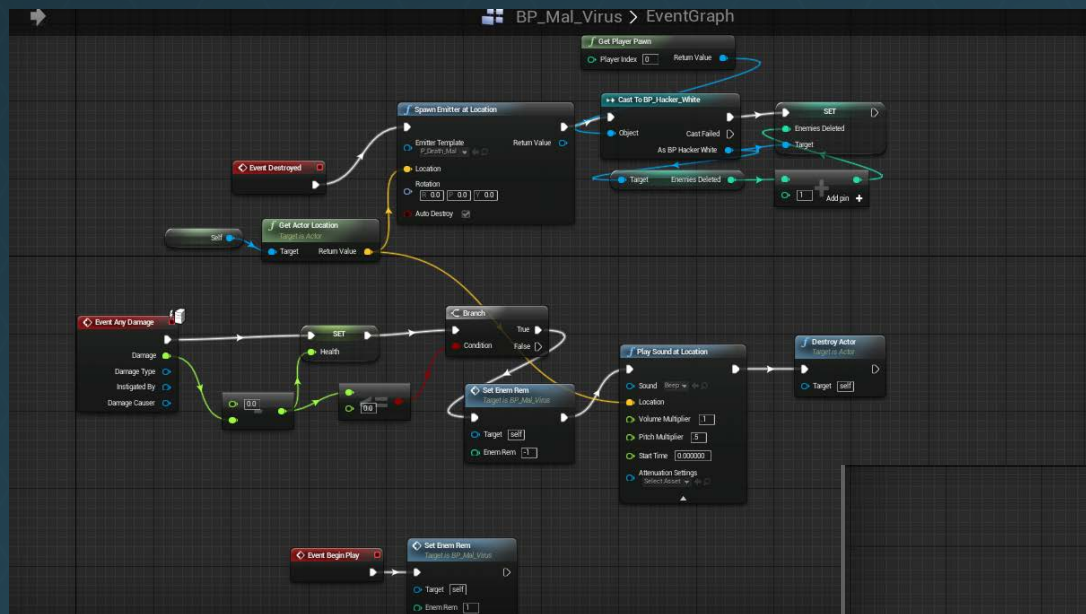
NEAR THE END

It will get progressively harder as you complete each level. The enemies will increase in number and will become more complex/aggressive, but by mastering the powers you can clear the terminal of malware and win the game.
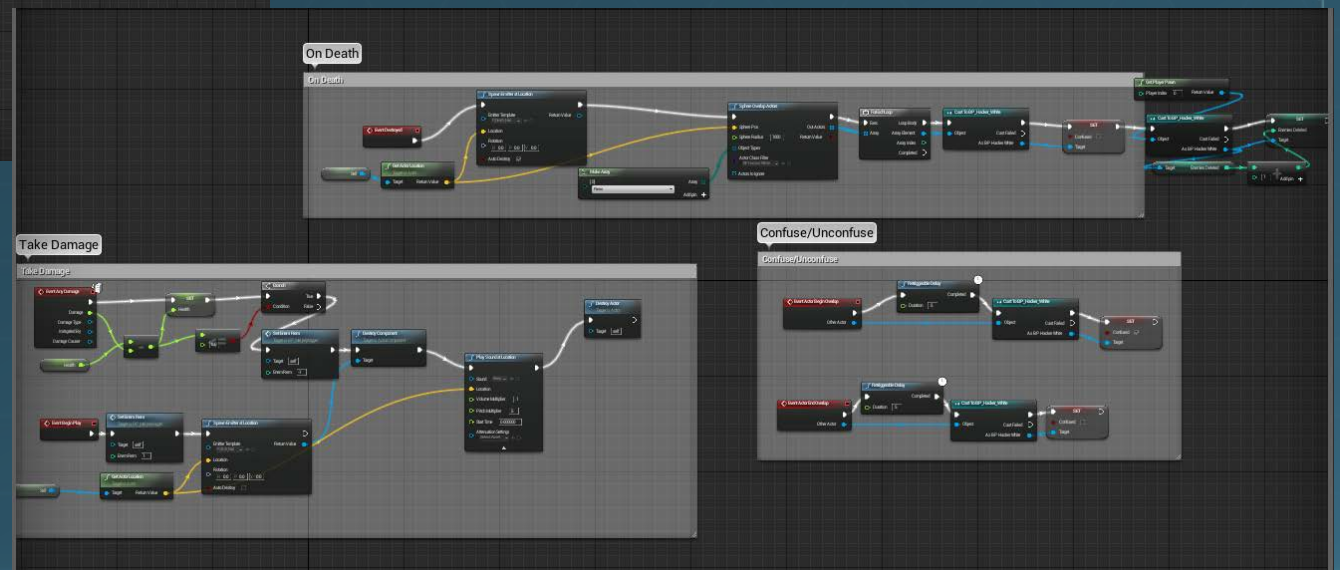
PROGRAM MODULES,
STRUCTURE,
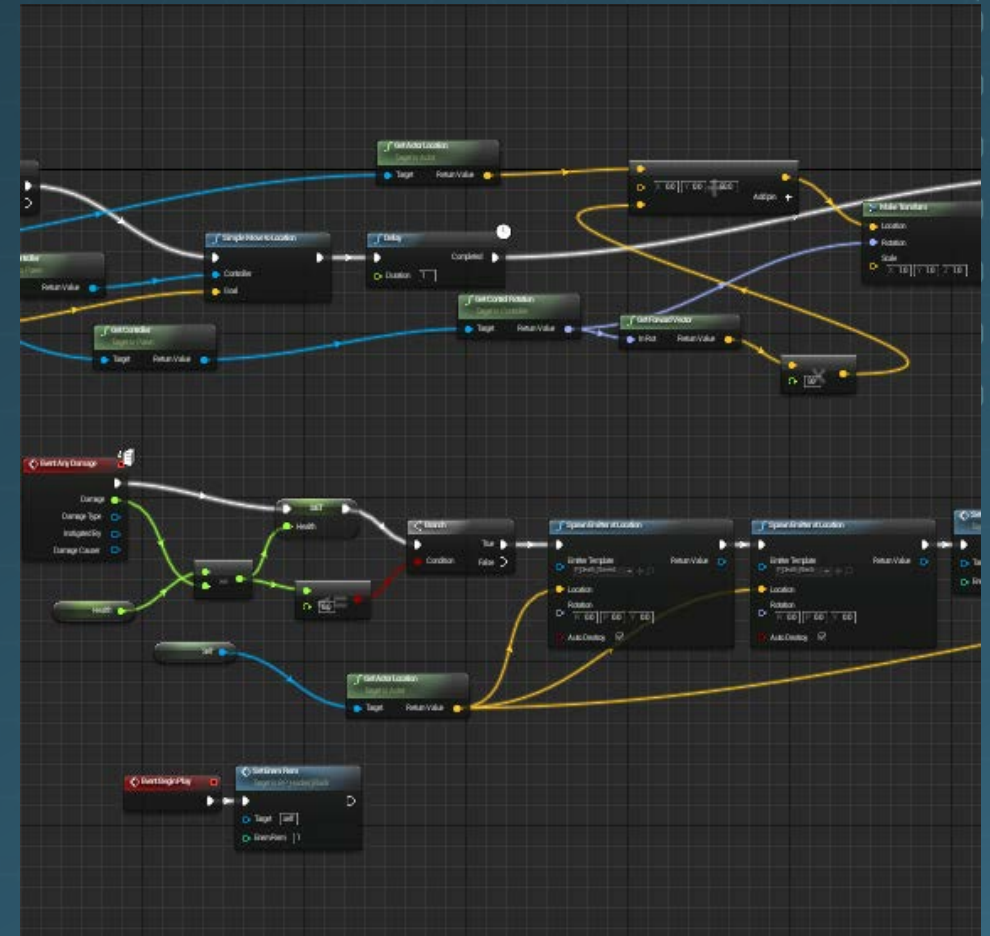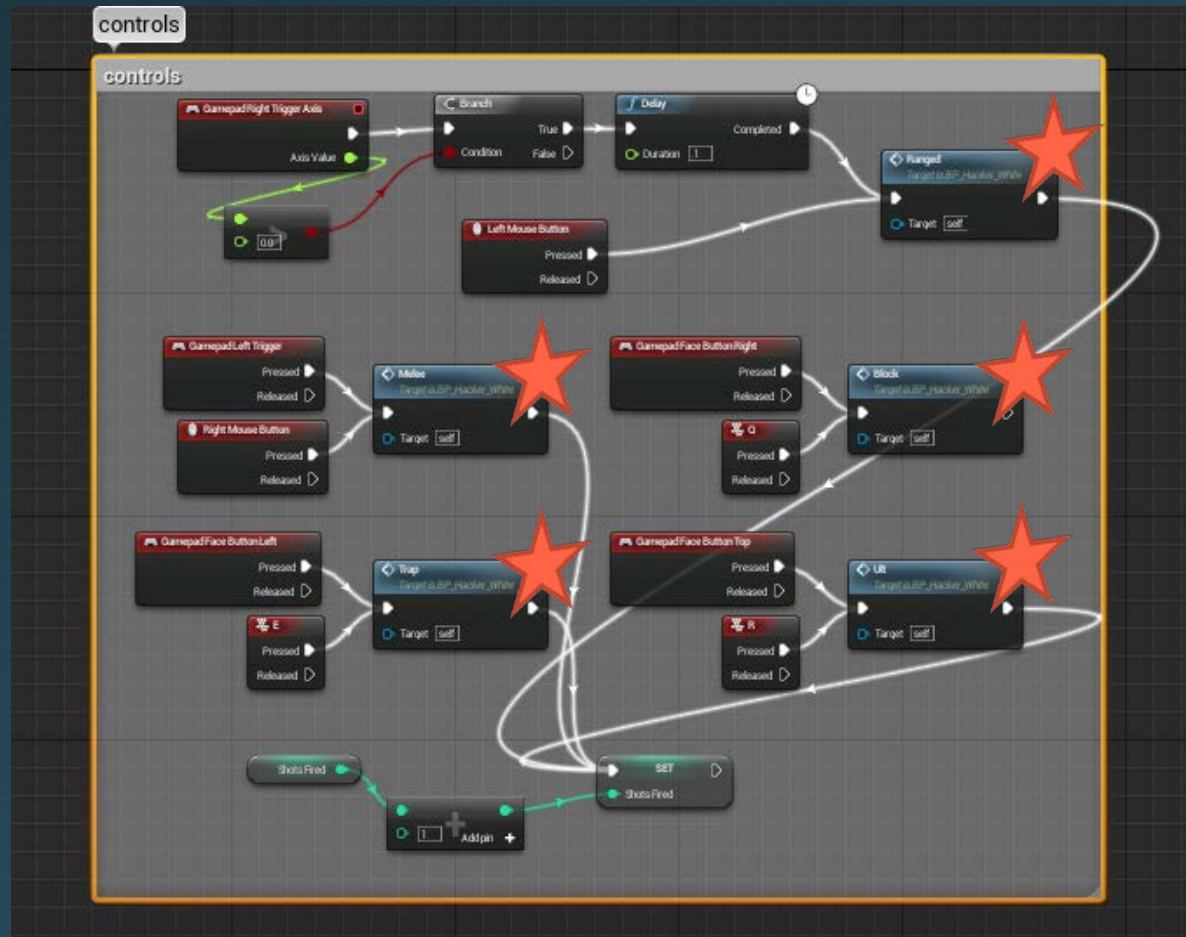COMMENTING
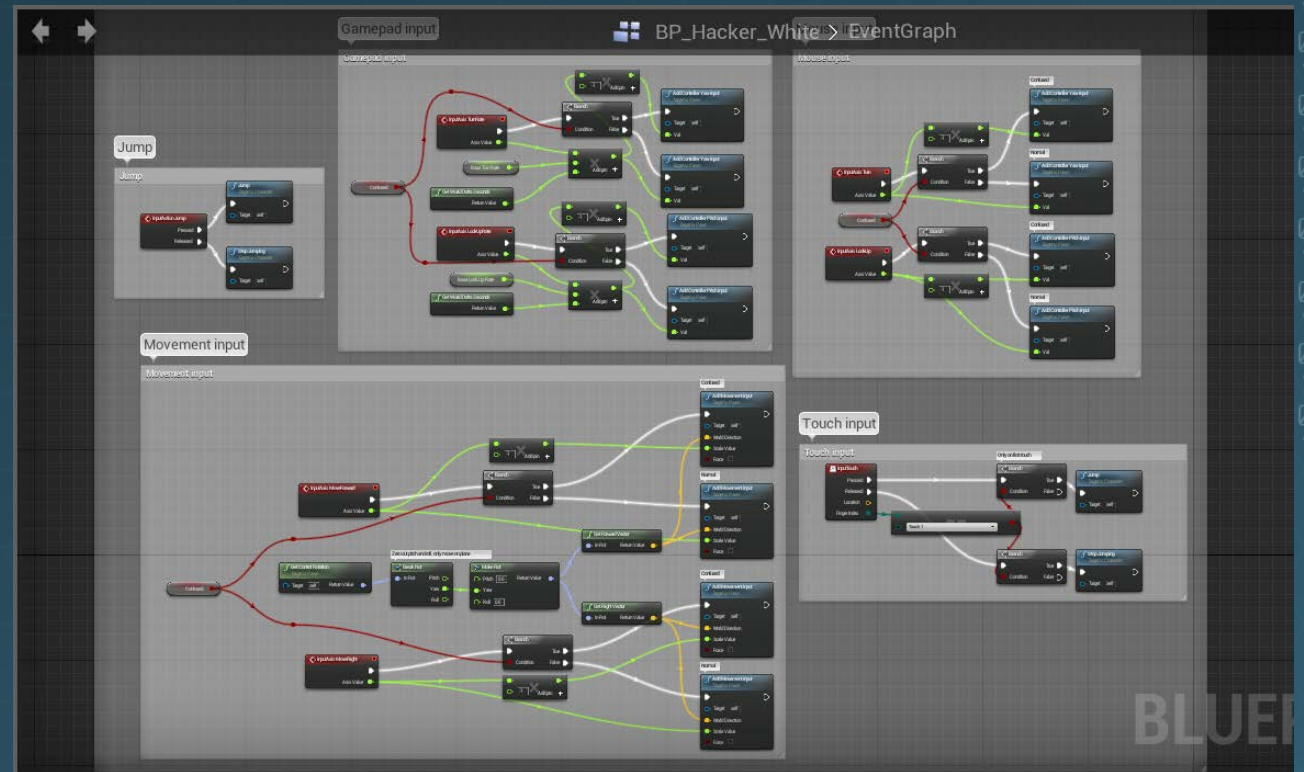
Commenting/Events
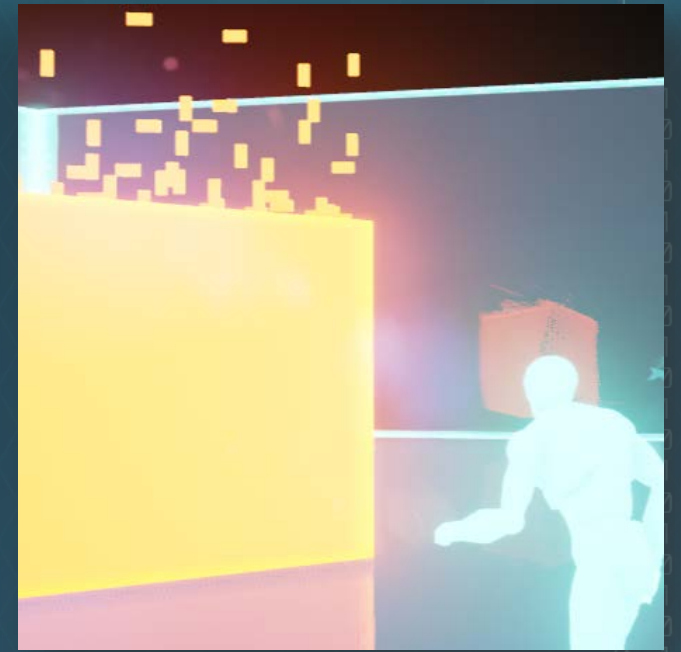

Before Comments

After Comments

Methods

At a Glance

Program Usefulness and Education Value

- Complete Descriptions of Threats, Solutions, and Related Terms

- Gameplay that Simulates Malware Behavior

- Gameplay that Simulates Security Processes

- **Is Fun and Interactive**

Live Showcase

Any Questions?