Víctor Falcón
Pau García
Laura Isidro

Mutually Assured Destruction: Barcelona

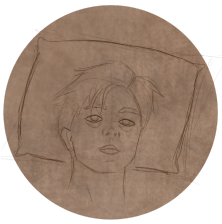
Adventure:

Our story can be played through an HTML and through the Twine application or website. To play the story directly, you can execute the HTML, but if you want to check out the complete narrative tree and all of its options, you have to check out the twee file and import it through Twine.

Our story's tree is very vertical in nature, and because of this, not all of it could fit in this document. To remedy this, we've made a very minimalist version of the story to include here. This minimalist version of the flowchart is mainly for you to get the idea behind the story, but it's recommended that you first play the game through the HTML file, or that you first check out the actual game tree by importing the twee file into Twine.

Furthermore we made sketches to figure out how the characters would be.


Priest Rafael

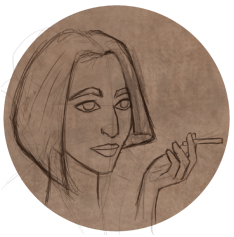

Víctor Mora


Guillermo Morris


Grandfather Alan

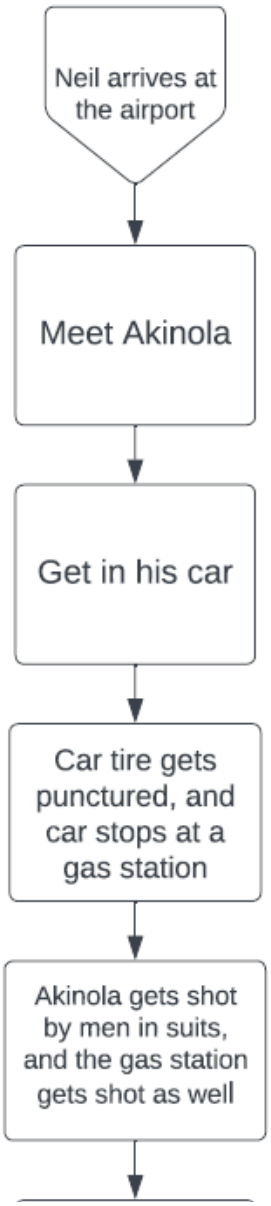

Paco Miller

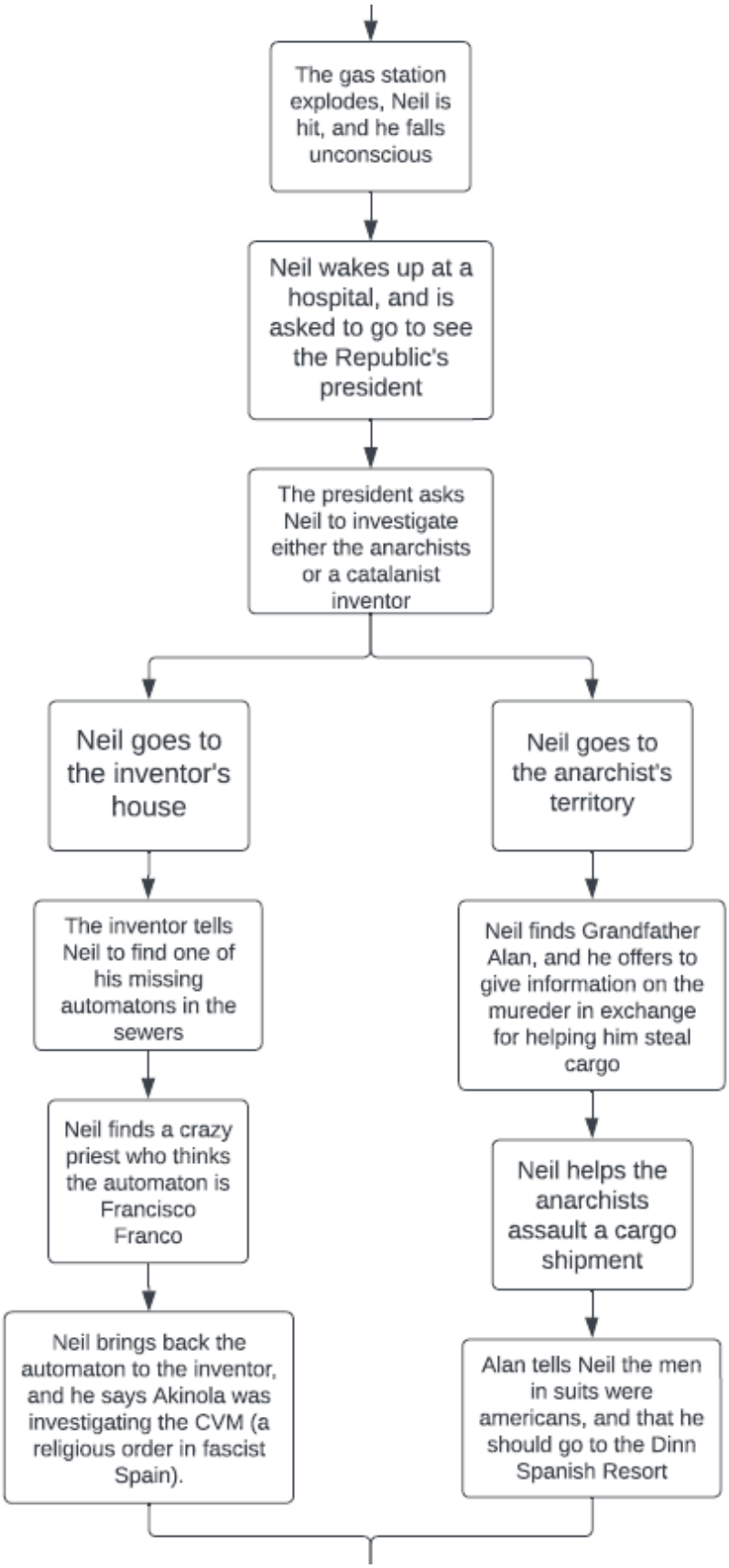

Neil Crowley

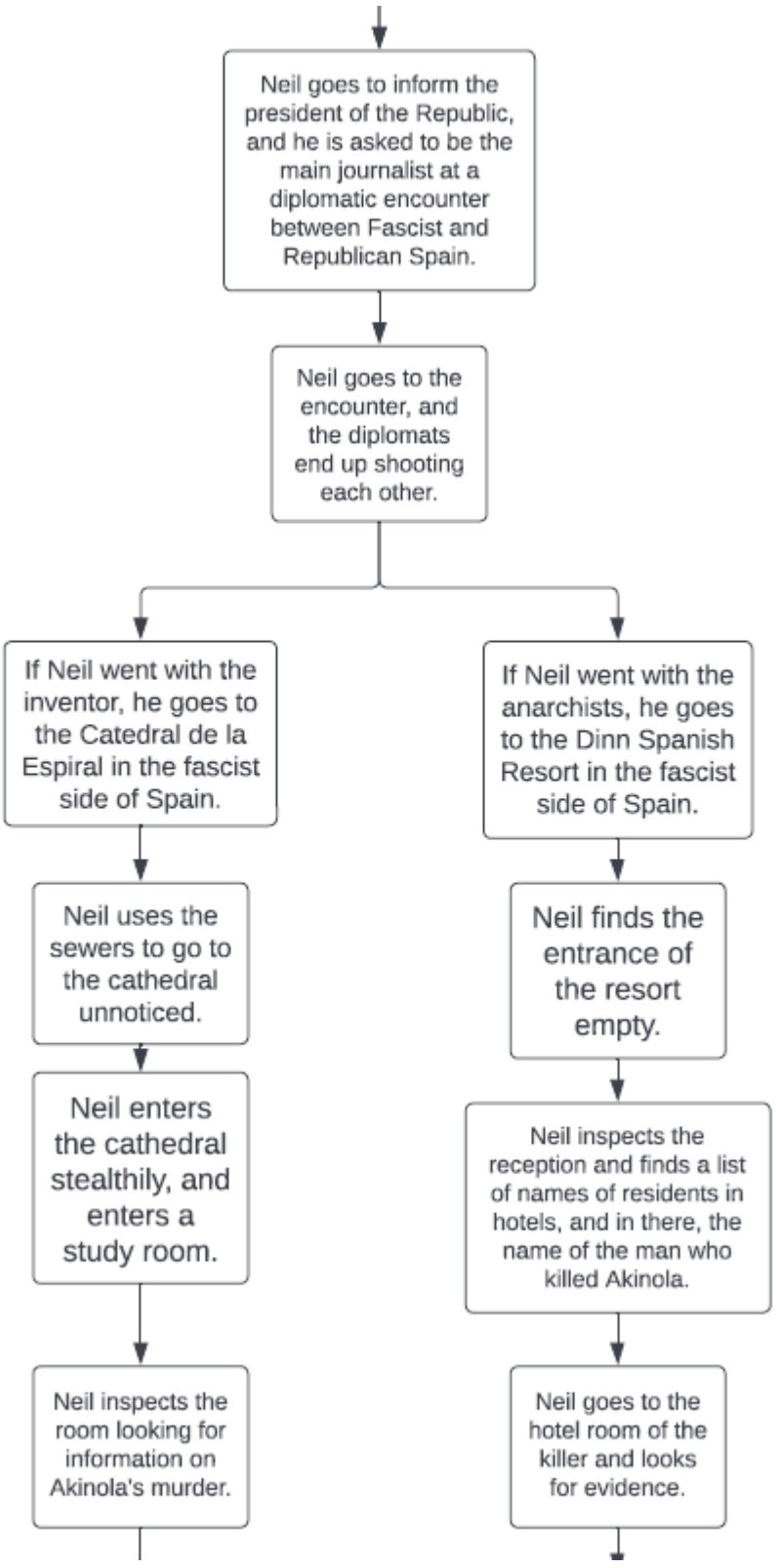

Nancy Dinn

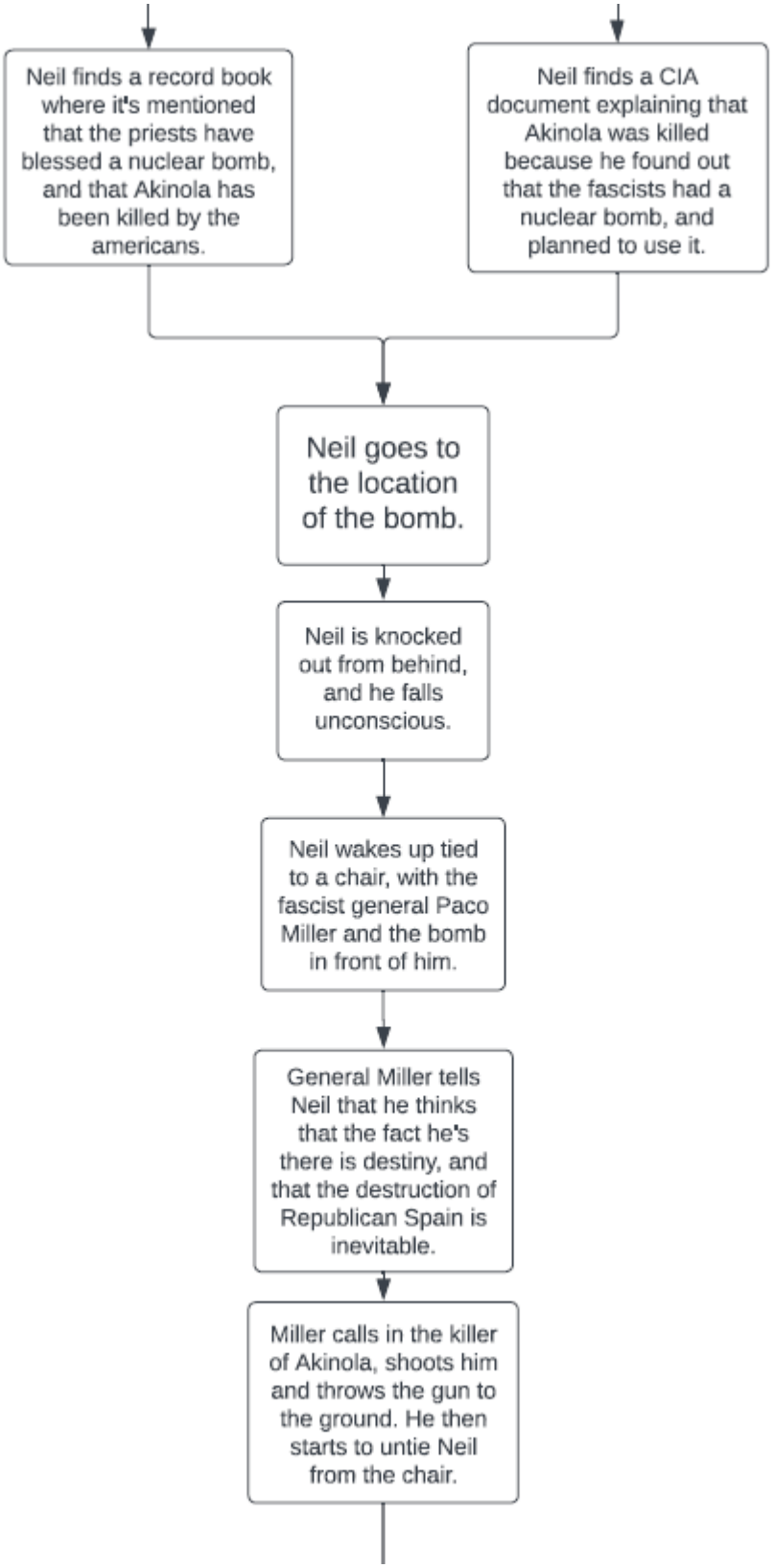
The game's files will be included alongside this pdf in a folder, but just in case, we'll also include all files in the following link (which includes the Twee file, the HTML file, and the simplified flow chart in a stretched pdf so it's even easier to read).
Game Files:https://drive.google.com/drive/folders/1w9d3mTmJN4ca2KMjYuJ57w7sXRty258X?usp=share_link

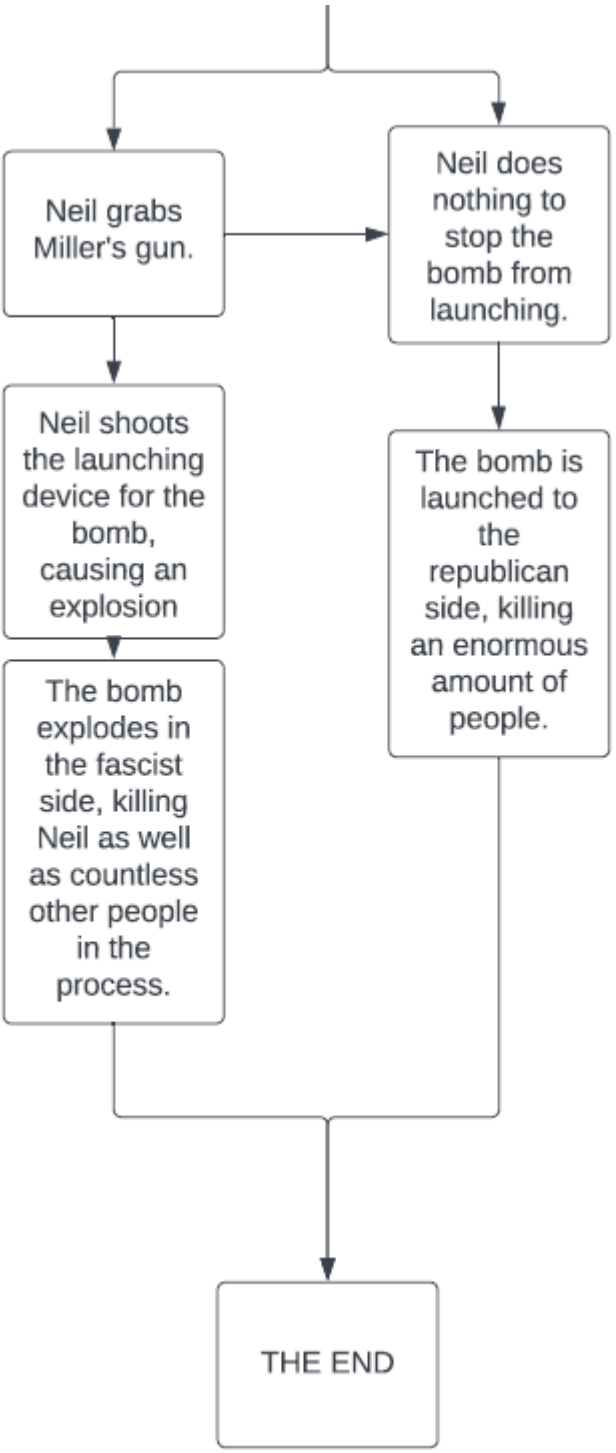
Simplified Flow Chart:




The gas station explodes, Neil is hit, and he falls unconscious
Neil wakes up at a hospital, and is asked to go to see the Republic's president
The president asks Neil to investigate either the anarchists or a catalanist inventor
Neil goes to the inventor's house
Neil goes to the anarchist's territory
The inventor tells Neil to find one of his missing automatons in the sewers
Neil finds Grandfather Alan, and he offers to give information on the mureder in exchange for helping him steal cargo
Neil finds a crazy priest who thinks the automaton is Francisco Franco
Neil helps the anarchists assault a cargo shipment
Neil brings back the automaton to the inventor, and he says Akinola was investigating the CVM (a religious order in fascist Spain).
Alan tells Neil the men in suits were americans, and that he should go to the Dinn Spanish Resort


Neil goes to inform the president of the Republic, and he is asked to be the main journalist at a diplomatic encounter between Fascist and Republican Spain.
Neil goes to the encounter, and the diplomats end up shooting each other.
If Neil went with the inventor, he goes to the Catedral de la Espiral in the fascist side of Spain.
If Neil went with the anarchists, he goes to the Dinn Spanish Resort in the fascist side of Spain.
Neil uses the sewers to go to the cathedral unnoticed.
Neil finds the entrance of the resort empty.
Neil enters the cathedral stealthily, and enters a study room.
Neil inspects the reception and finds a list of names of residents in hotels, and in there, the name of the man who killed Akinola.
Neil inspects the room looking for information on Akinola's murder.
Neil goes to the hotel room of the killer and looks for evidence.


Neil finds a record book where it's mentioned that the priests have blessed a nuclear bomb, and that Akinola has been killed by the americans.
Neil finds a CIA document explaining that Akinola was killed because he found out that the fascists had a nuclear bomb, and planned to use it.
Neil goes to the location of the bomb.
Neil is knocked out from behind, and he falls unconscious.
Neil wakes up tied to a chair, with the fascist general Paco Miller and the bomb in front of him.
General Miller tells Neil that he thinks that the fact he's there is destiny, and that the destruction of Republican Spain is inevitable.
Miller calls in the killer of Akinola, shoots him and throws the gun to the ground. He then starts to untie Neil from the chair.


Neil grabs Miller's gun.
Neil does nothing to stop the bomb from launching.
Neil shoots the launching device for the bomb, causing an explosion
The bomb is launched to the republican side, killing an enormous amount of people.
The bomb explodes in the fascist side, killing Neil as well as countless other people in the process.
THE END

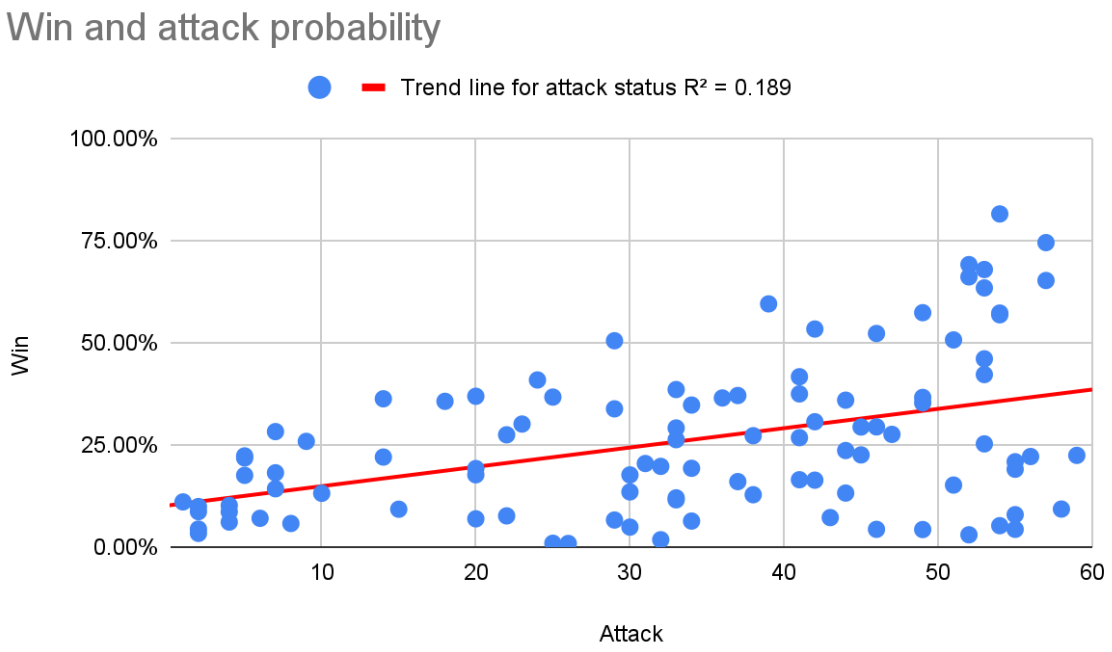
Battle Balance:

Sensitivity analysis of character statistics

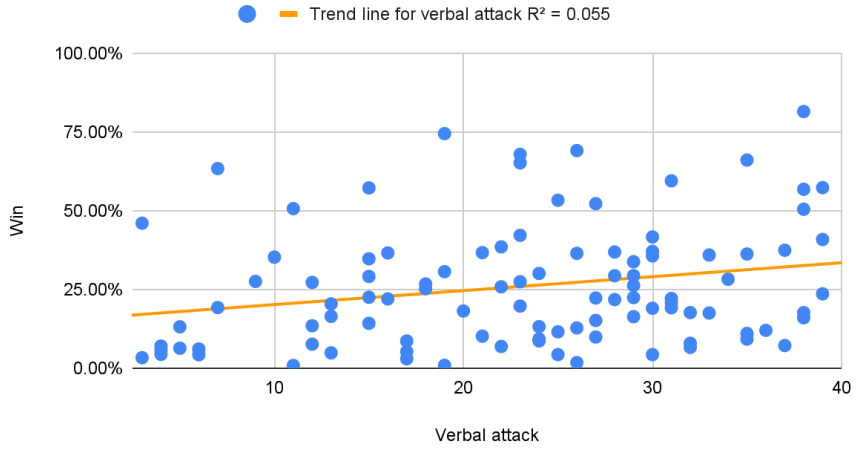
We have performed 100 simulations with random values of PH atack, PH defense, Accuracy and verbal attack with predefined maximum. With the results we have created and watched their influence over the winrate.

MAX ATK	MAX DEF	MAX ACC	MAX VA
60	30	100	40

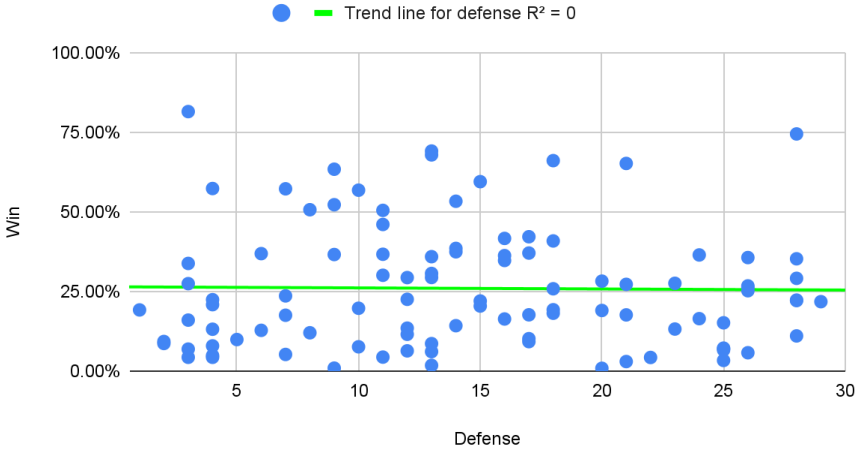
To calculate the win we used this Win = (2 * PHATK + 1.5 * VA) * ACC + PH DEF. After analyzing the results we noticed that all the stats as their value increases the character has more probability to win (excluding defense). While the accuracy stat influences the most over winrate the defense stat doesn't make much difference due to the trend line is almost flat



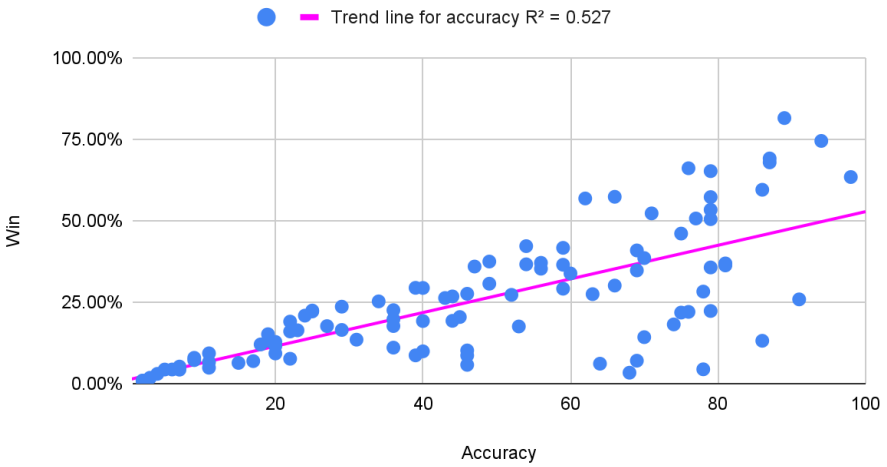
Win and verbal attack probability



Win and defense probability



Win and accuary



Main character progression

For this analysis we have used the same win formula and we have set new base stats for enemies and the main character

	PH ATTK	PH DEF	ACC	VA	Win = (2 * PHATK + 1.5 * VA) * ACC + PH DEF
Boss	20	30	75	40	7530
Minion	10	5	50	30	3255

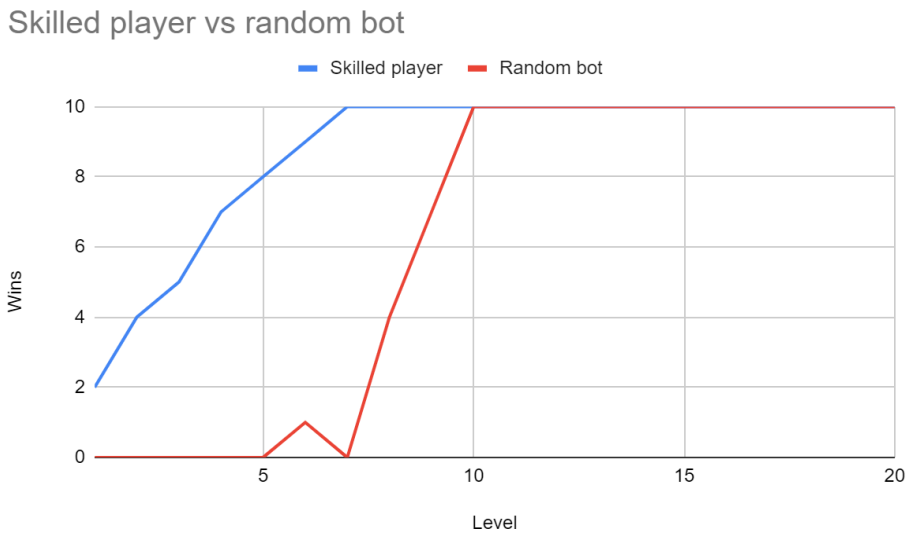
For character stats we use base + (level*mul)

PH ATTK Base	PH DEF Base	ACC Base	VA Base
12	5	20	10
PH ATTK MULT	PH DEF MULT	ACC MULT	VA MULT
0.4	0.25	0.8	0.235

With these stats we have run 100 simulations from level 1 to 100 in order to get the win rate against a minion and a boss. The graphic below shows a slight exponential increase until it reaches 100%. The minion win rate grows faster than the boss rate and a nice level to face easily the minion is lvl 20-25 and with lvl 40-45 would be an interesting fight against the boss

Skill ratio

For this analysis we compared the wins of a skilled player (us) vs bot for each level. We can conclude that a skilled player has a constant increase in wins due to his decision making instead of the bot that from level 6 on can start winning due to the increase of stats.



Dominant strategy

In this case we have released 100 simulations of each attack type: the verbal attack and the normal one. We registered the win rate of every 10% step frequency. The results show that spamming is as bad as not using it so you have to alternate the attacks in order to achieve the victory. This indicates that the battle is balanced.