

A CERTAIN UNREALISTIC  
**CTF MAP**

inspired by *A Certain Scientific Railgun*

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## Story

It is the annual Tokiwadai Midsummer festival, where the dormitories open to the public. Invited guests from all over are allowed access into the dorms, where Tokiwadai students have prepared events in order to showcase their special skills and talents. Although these exhibits are quite extraordinary, they are not the main attraction. With the midsummer festival, comes the annual Tokiwadai Esper CTF games, where the top students compete in a dorm wide match of Capture the Flag, set in UNREAL Tournament, to showcase their esper powers.

The students have divided the dorms into 2 sides, where one group's headquarters is in the dining hall (red team), and the other group is set up in the study hall (blue team).

With the rather simple design of the Tokiwadai dorms, there is sure to be conflict in the Courtyard, the North Entrance, and the South Hall.

The Tokiwadai Midsummer festival ensures that there will never be a dull moment, not in Academy City.



*Figure 1 - Arming teenagers with fully automatic rifles is always a great idea.*

## Reference

### Dining Hall (Red Base)



Figure 2 - Dining Hall Overview



Figure 3 - Dining Hall Western Wall (Kitchen)

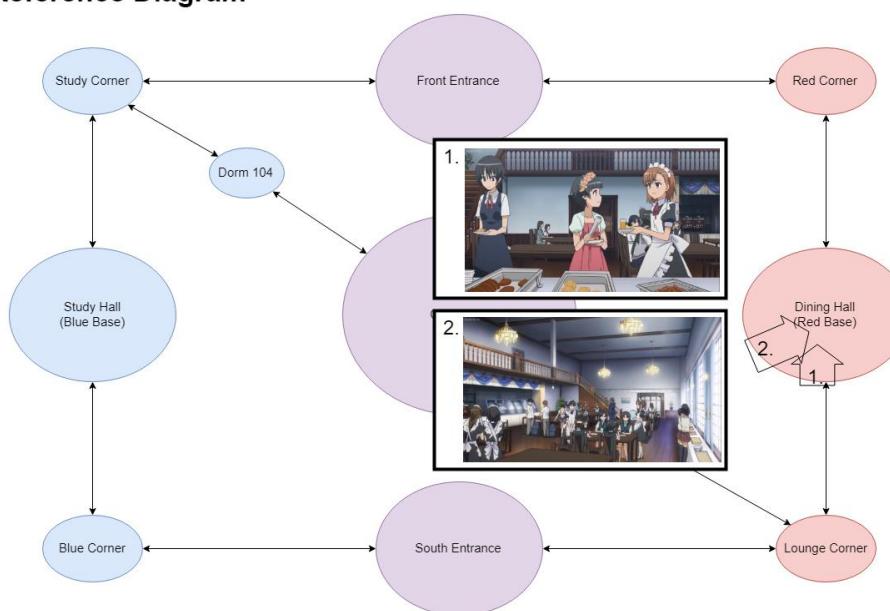


Figure 4 - Dining Hall West Exit (Door to Eastern Hallway)

### Tokiwadai Reference Diagram

[Dining\\_Hall](#)

Legend
Blue Base
Red Base
Neutral



## Study Hall (Blue Base)

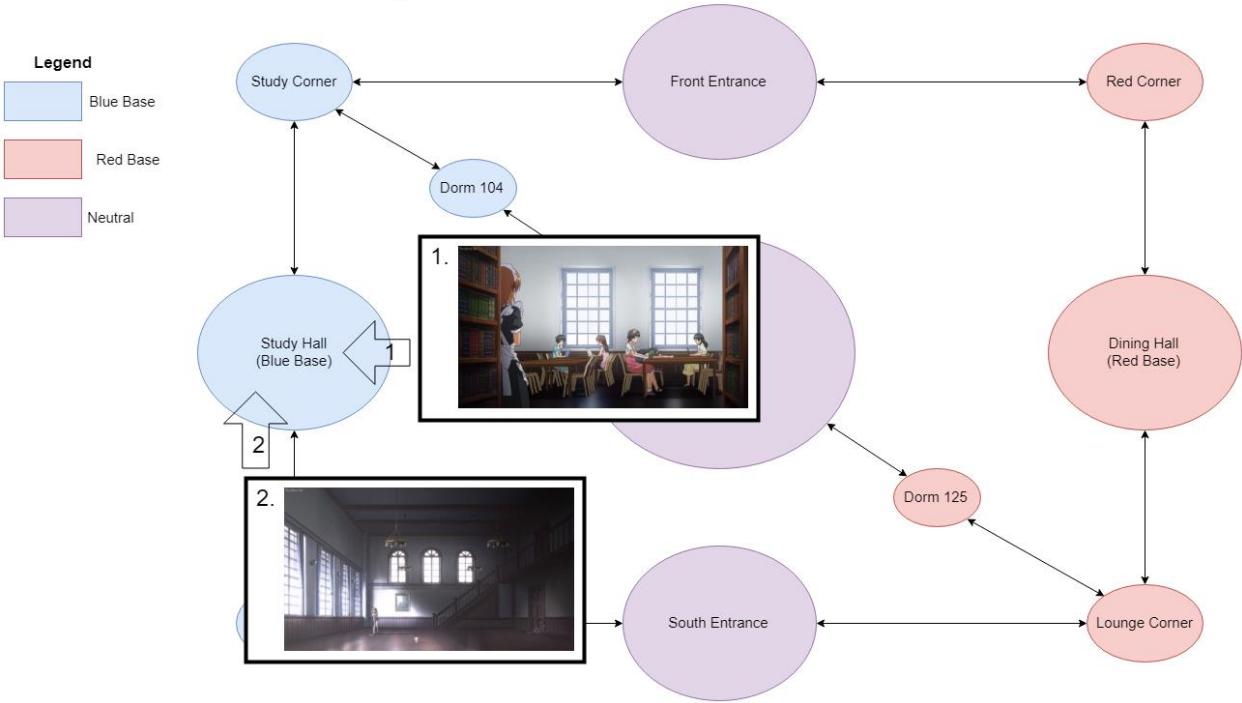


Figure 5 - Study Hall with tables

Figure 6 - Study Hall without tables

## Tokiwadai Reference Diagram

### Study Hall



## Courtyard (Neutral)



Figure 7 - Courtyard overview (north wall not shown)



Figure 8 - Courtyard South Wall. South Stage

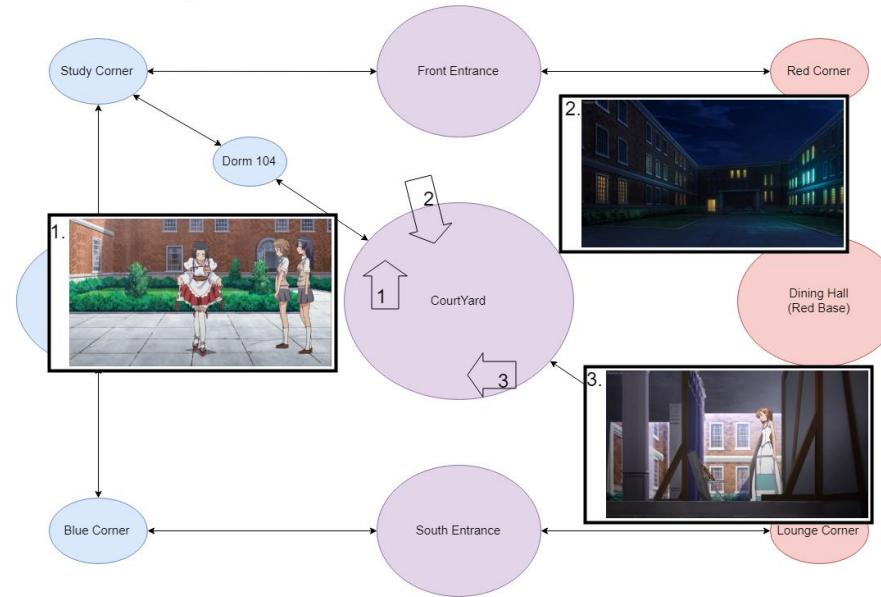


Figure 9 - Courtyard North wall and path (North window)

### Tokiwadai Reference Diagram

Courtyard

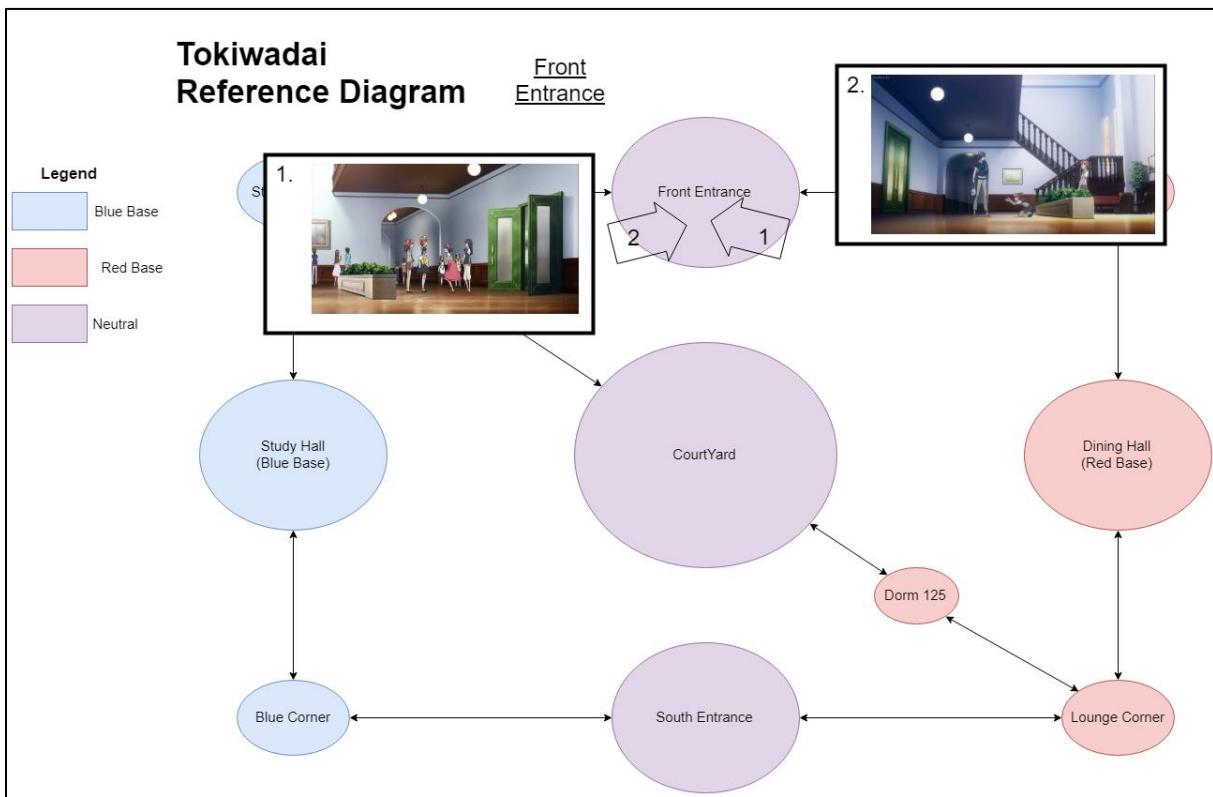
Legend
Blue Base
Red Base
Neutral



## Front Entrance (Neutral)



## Tokiwadai Reference Diagram



### South Entrance (Neutral)



Figure 12 - South Entrance Exterior

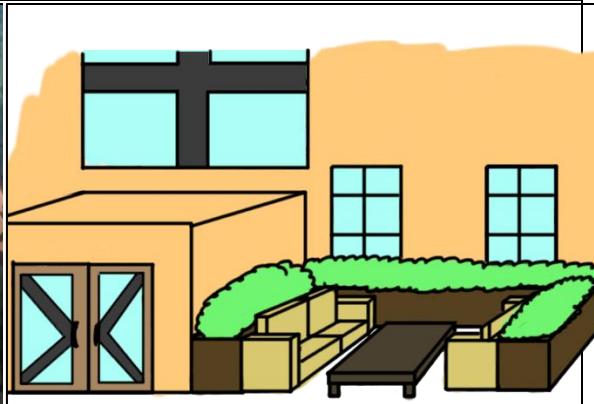


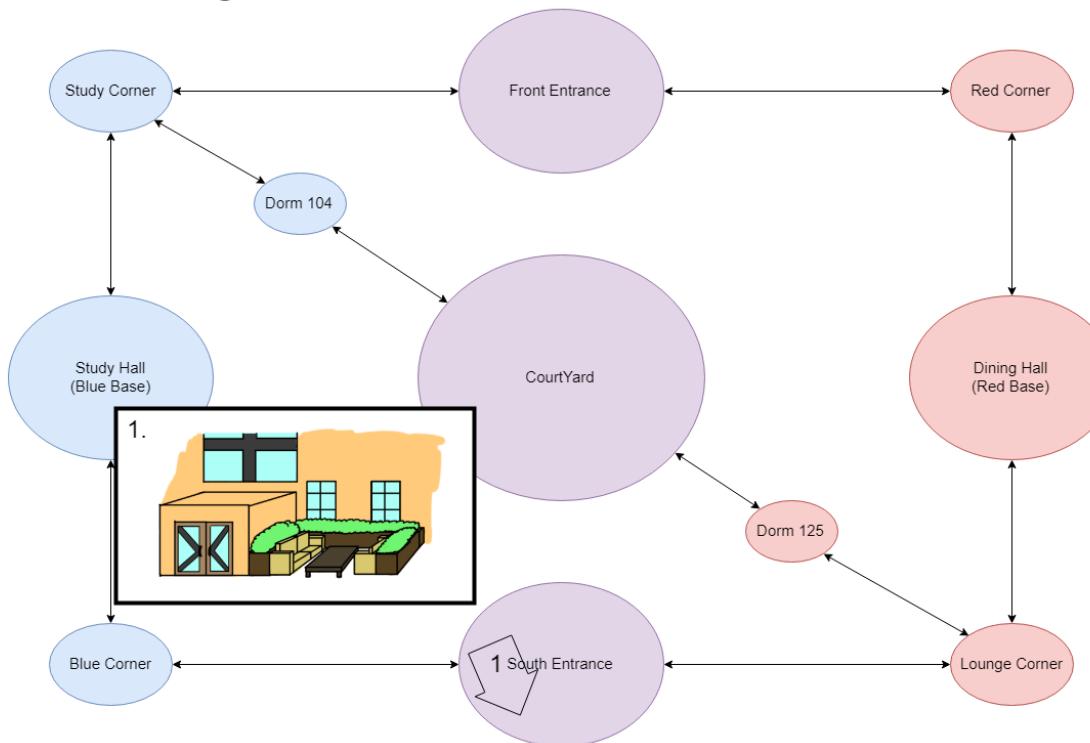
Figure 13- A drawing of the interior of the South Entrance

### Tokiwadai Reference Diagram

South  
Entrance

**Legend**

	Blue Base
	Red Base
	Neutral



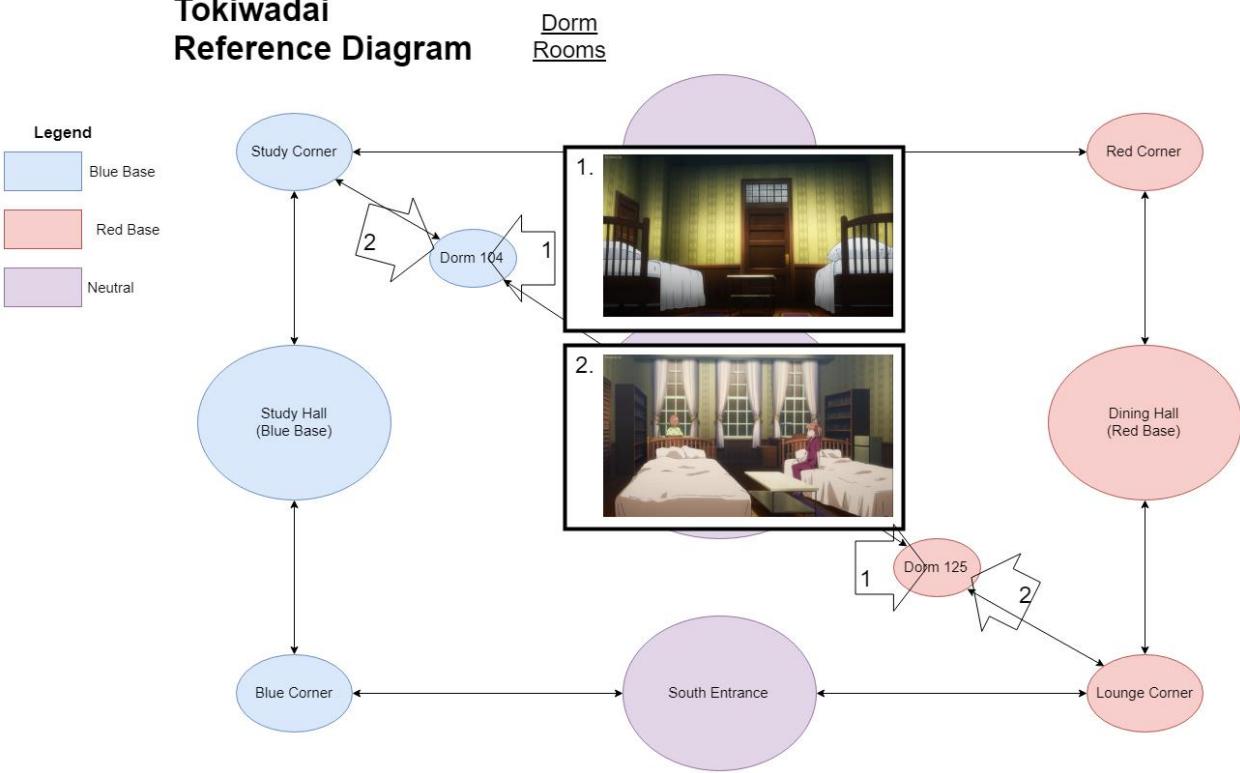
## Dorm Rooms



Figure 14 - The entrance to the dorm rooms (washroom on left in reference)

Figure 15 - The interior of the dorm rooms

### Tokiwadai Reference Diagram



## Region Kits Reference

### Courtyard

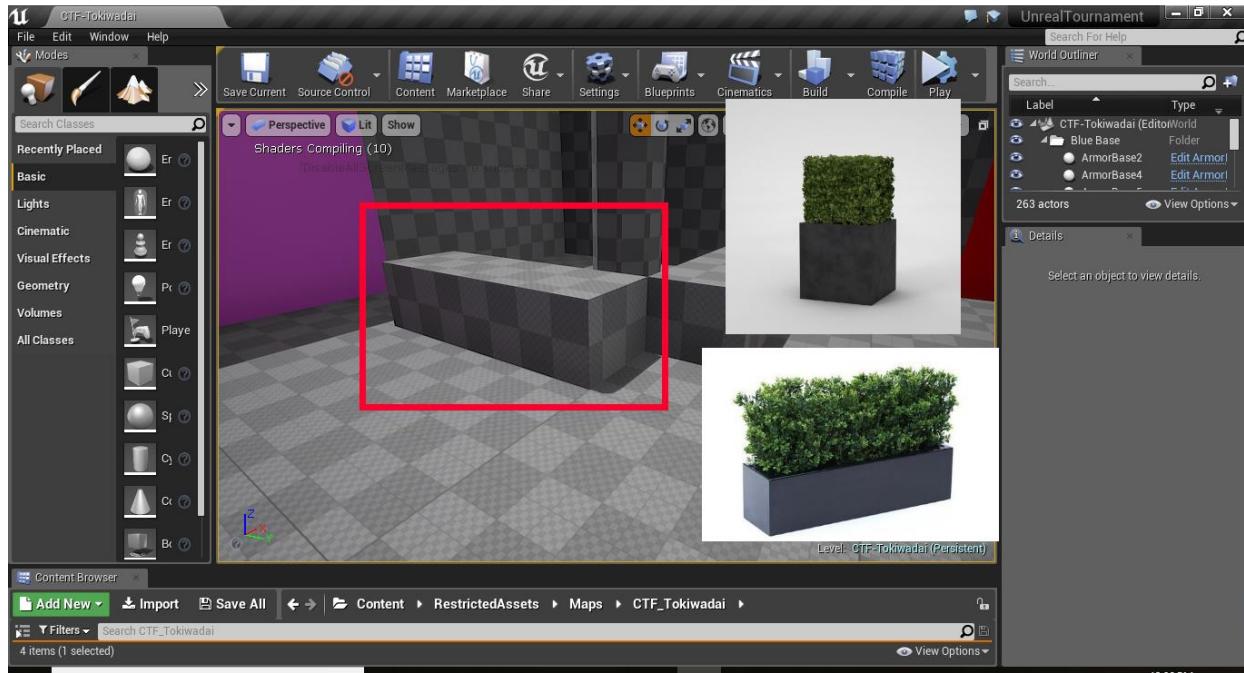


Figure 16 - Square bush reference

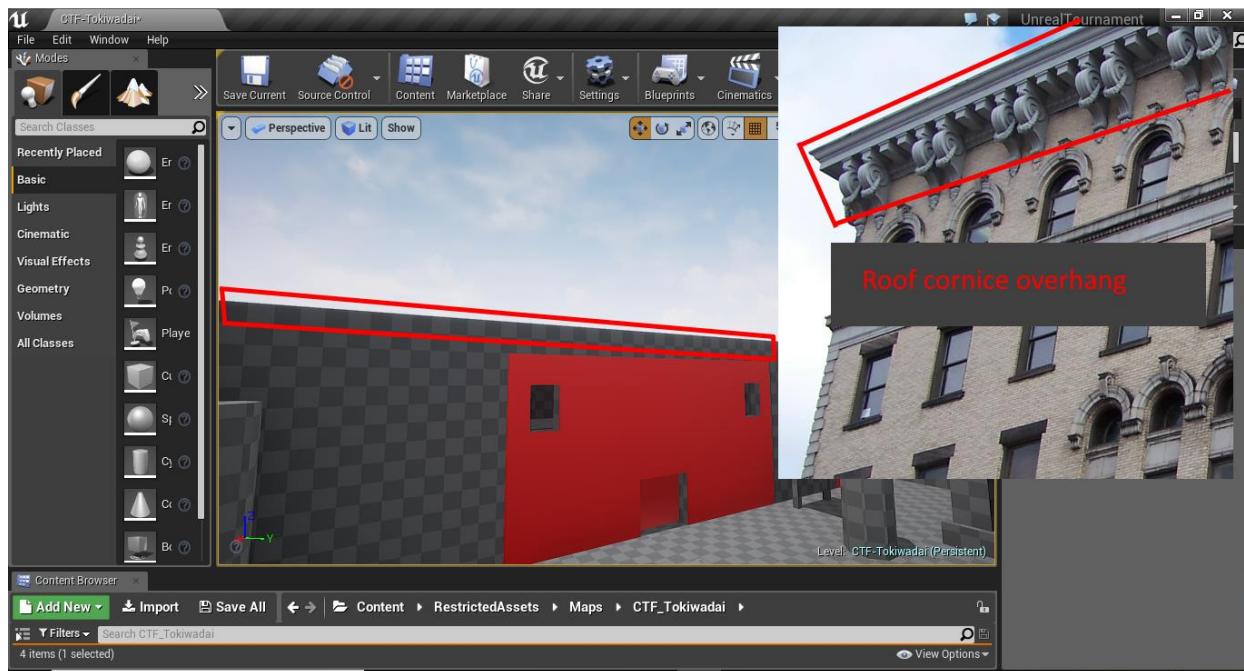


Figure 17 - Roof Cornice area, and design

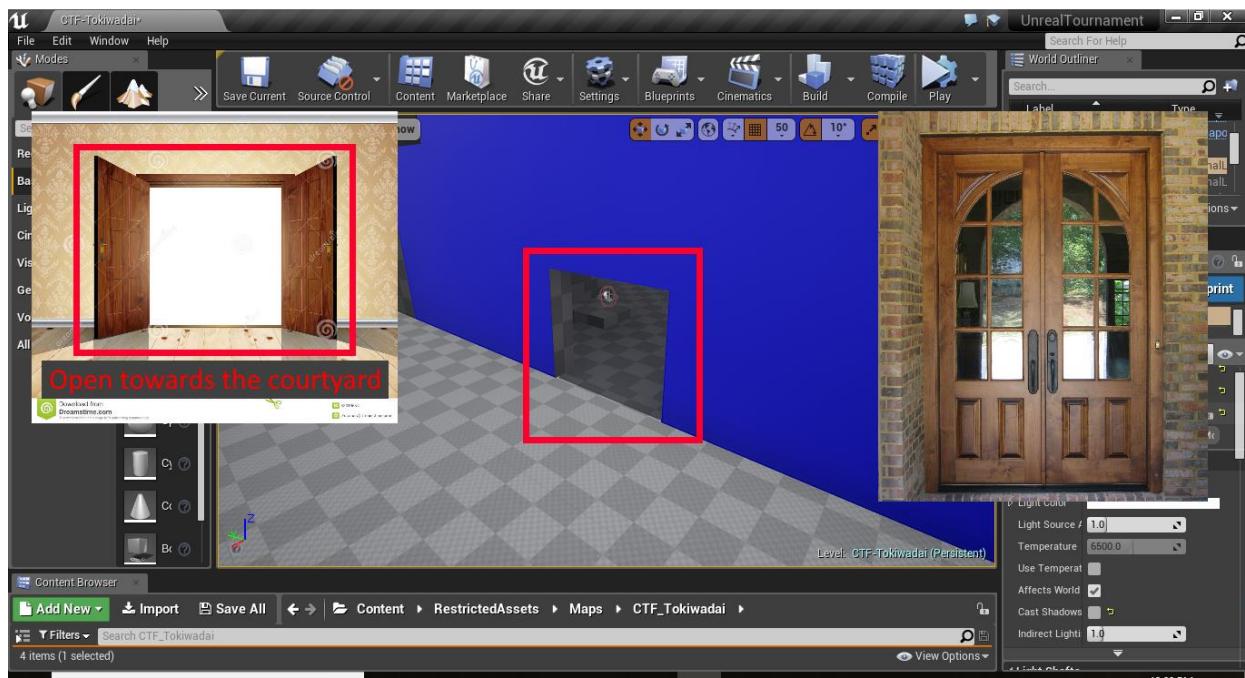


Figure 18 - Open Door design type, and opening direction

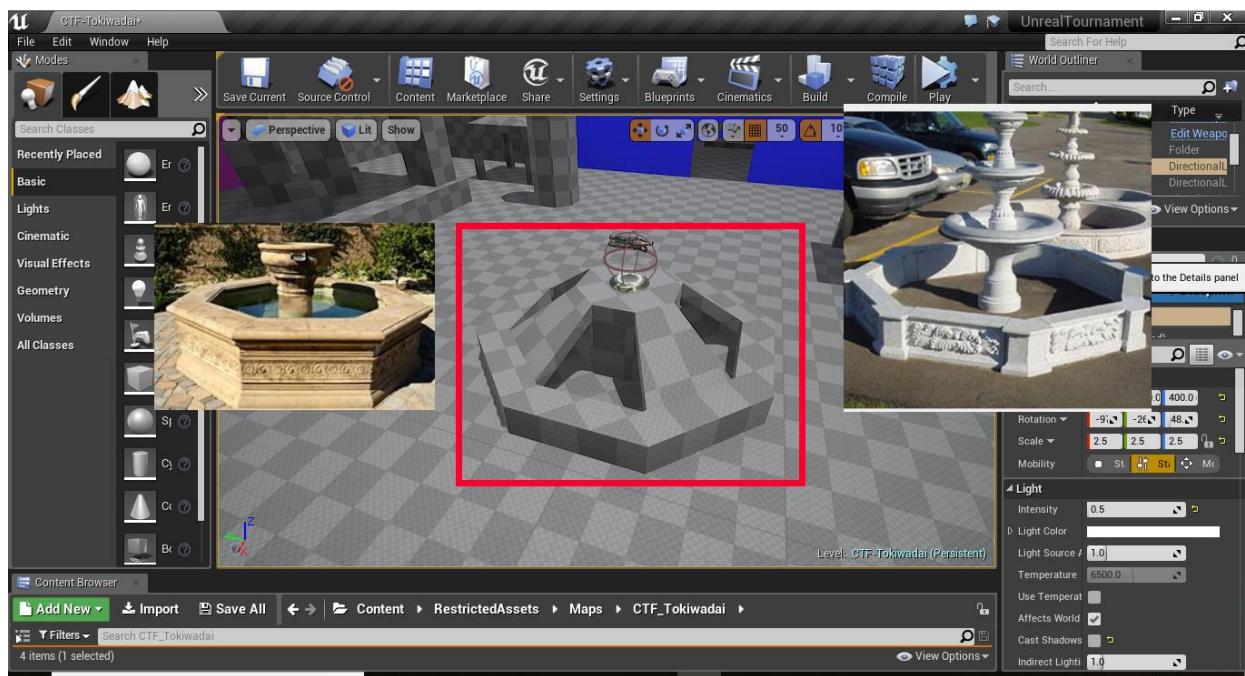


Figure 19 - Fountain Design and shape

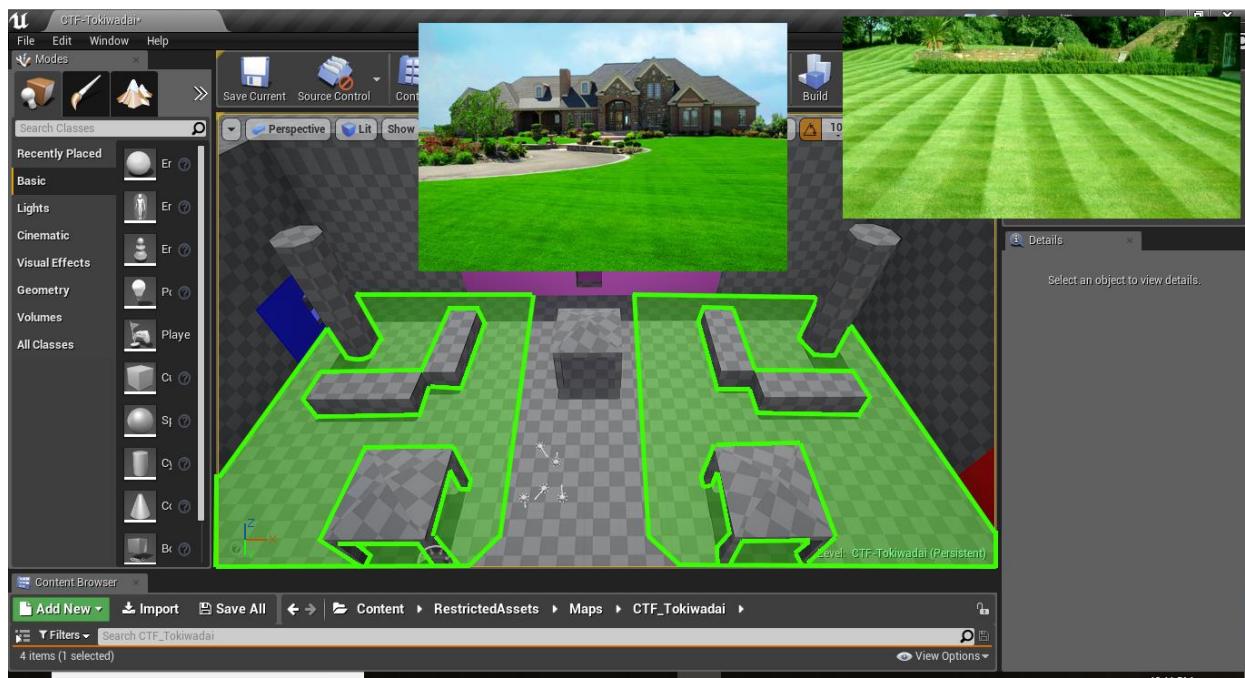


Figure 20 - Grass area and look / feel

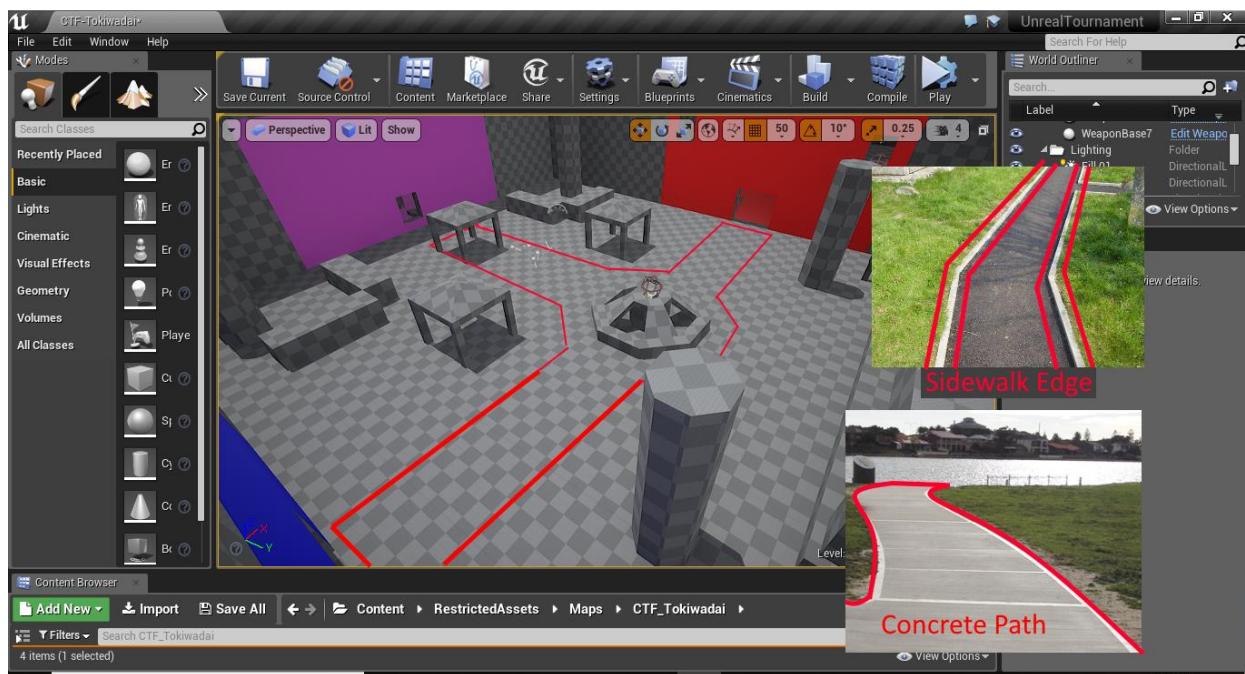


Figure 21 - Concrete Path shape, look, and edge reference

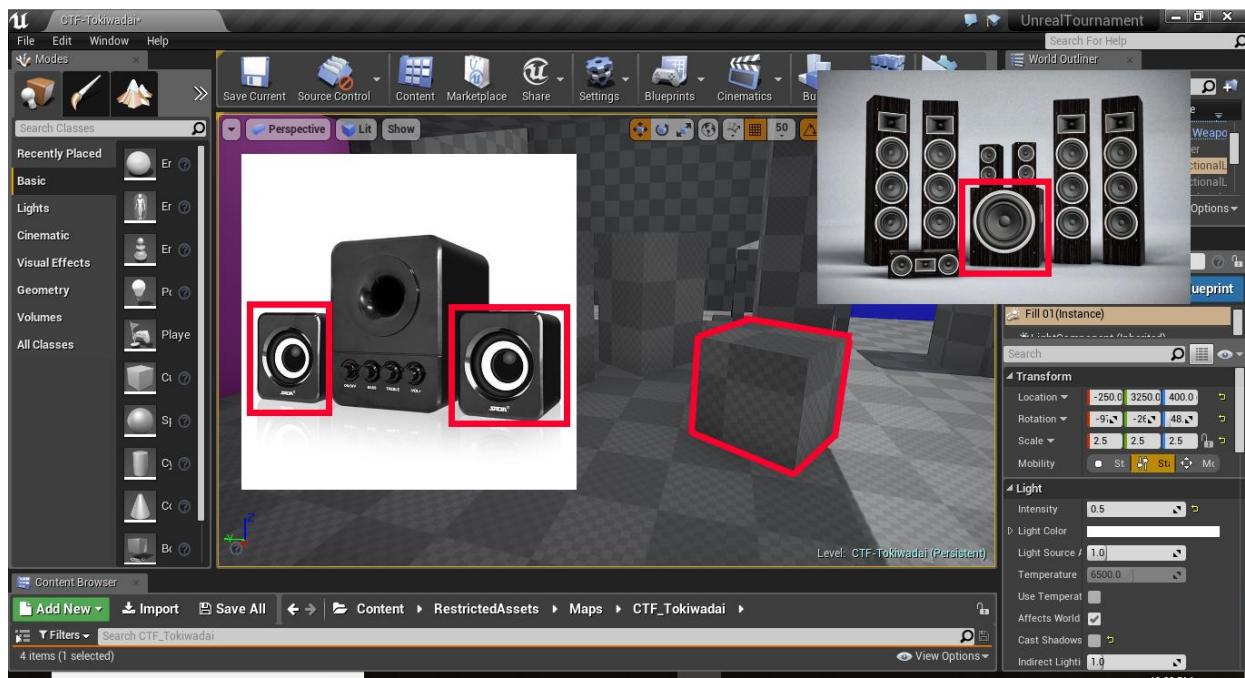


Figure 22 - Small Speaker reference

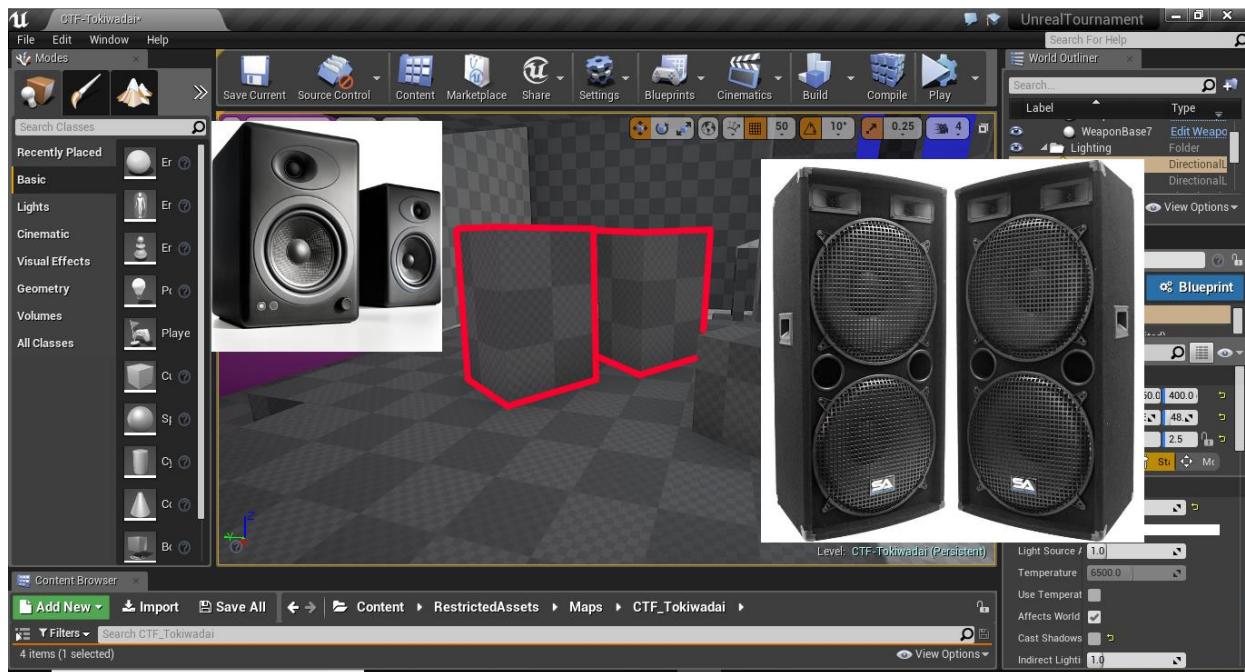


Figure 23 - Large Speaker reference

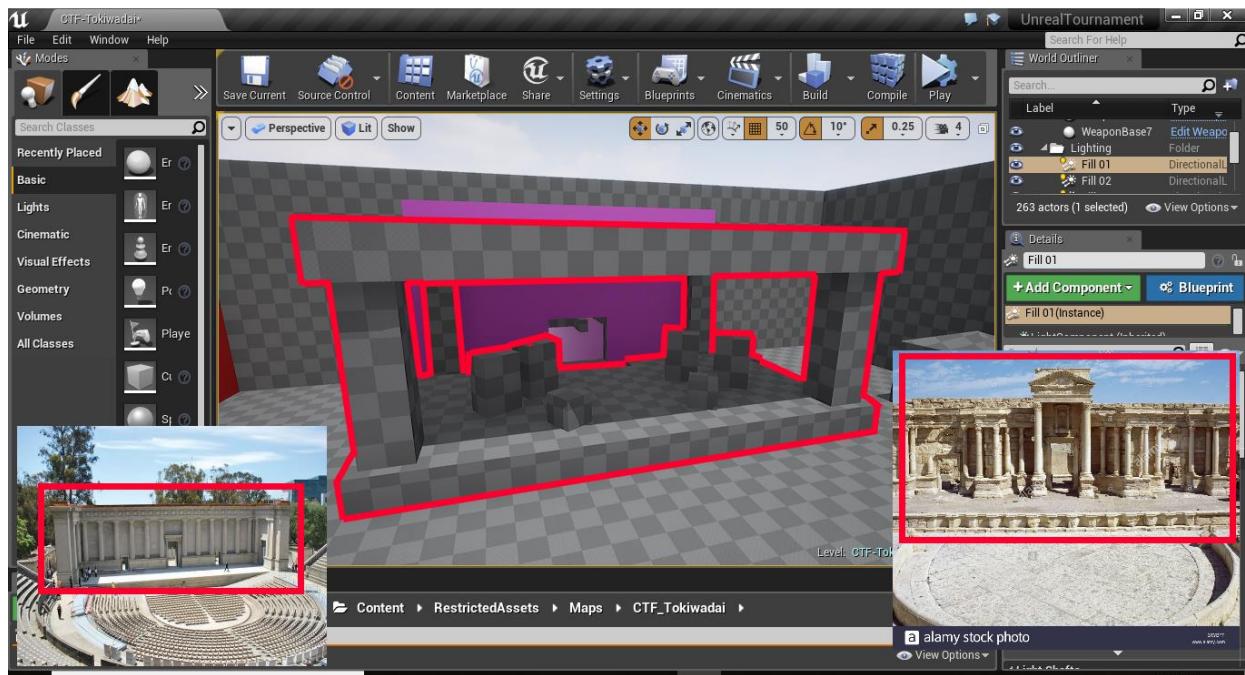


Figure 24 - Stage Reference. Greek-like structure with columns

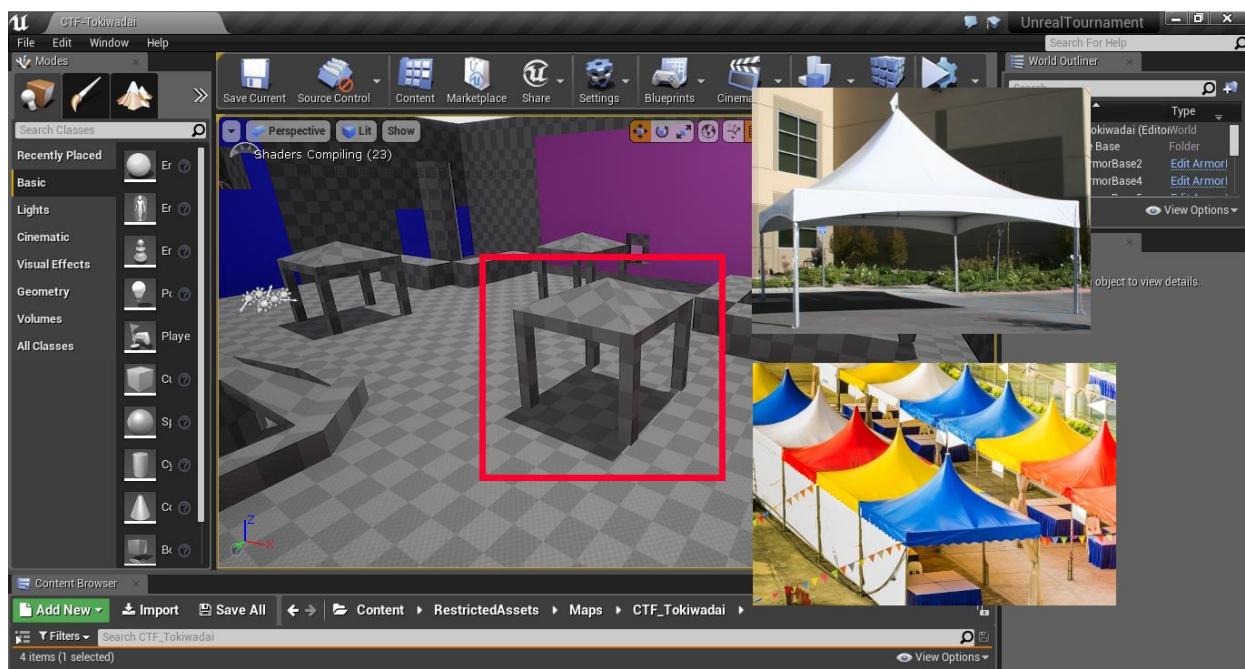


Figure 25 - Tent Reference

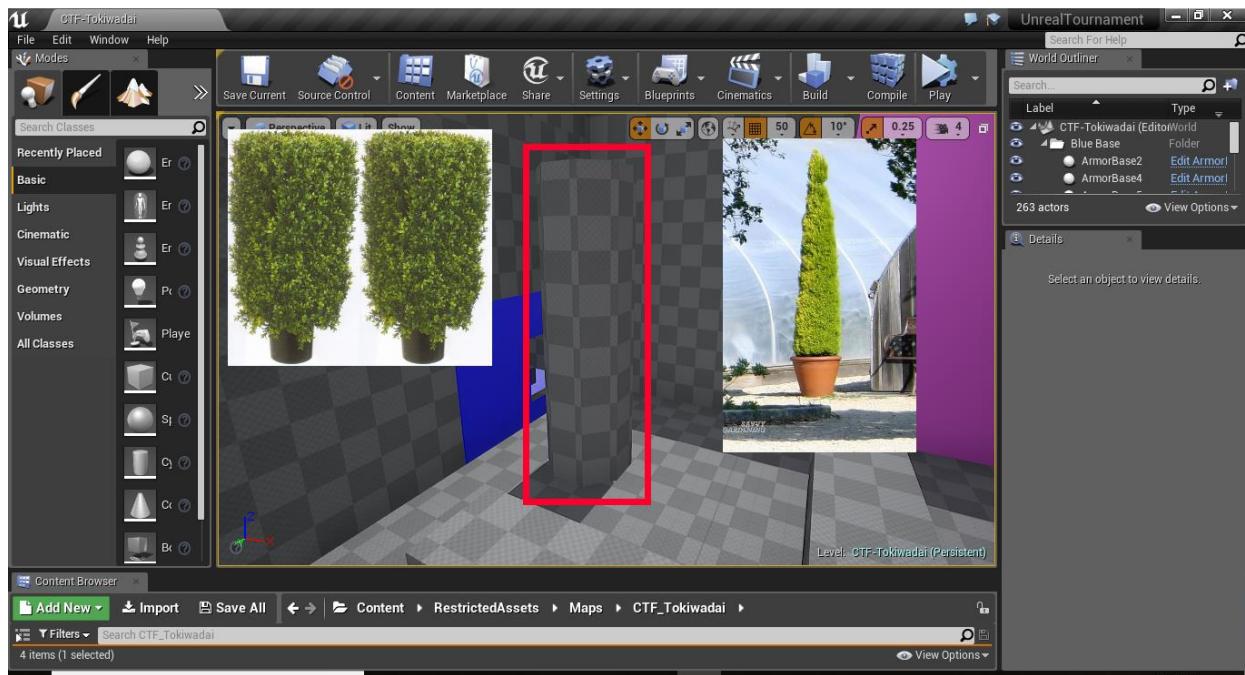


Figure 26 - Tree reference, and shape

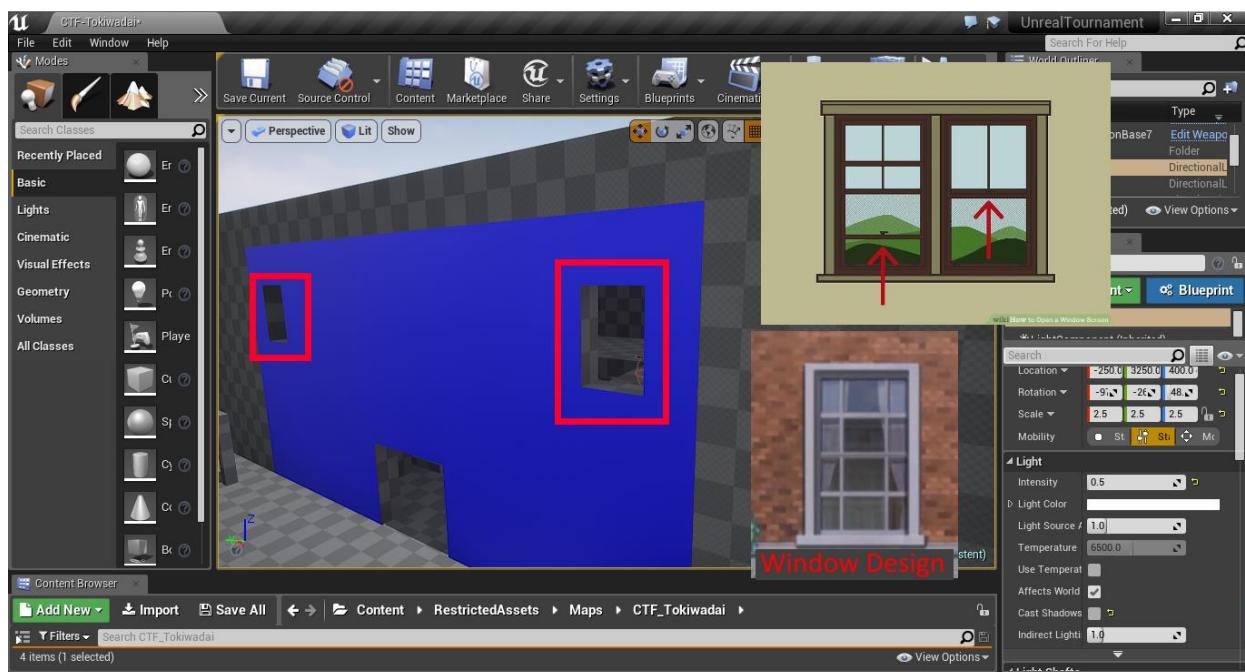


Figure 27 - Window function, and form / design

# Program / Requirements

## Reference Requirements

### Dining Room (Red Base)

Kitchen  
Entrance to courtyard  
2<sup>nd</sup> floor balcony  
Staircase

### Study Room (Blue Base)

Large bookcases  
Entrance to courtyard  
2<sup>nd</sup> floor balcony  
Staircase

### Courtyard (Neutral)

Stage  
Patches of shrubbery  
Tents / Festival Booths

### Front Entrance (Neutral)

Staircase  
2<sup>nd</sup> floor balcony  
Large open window

### South Entrance (Neutral)

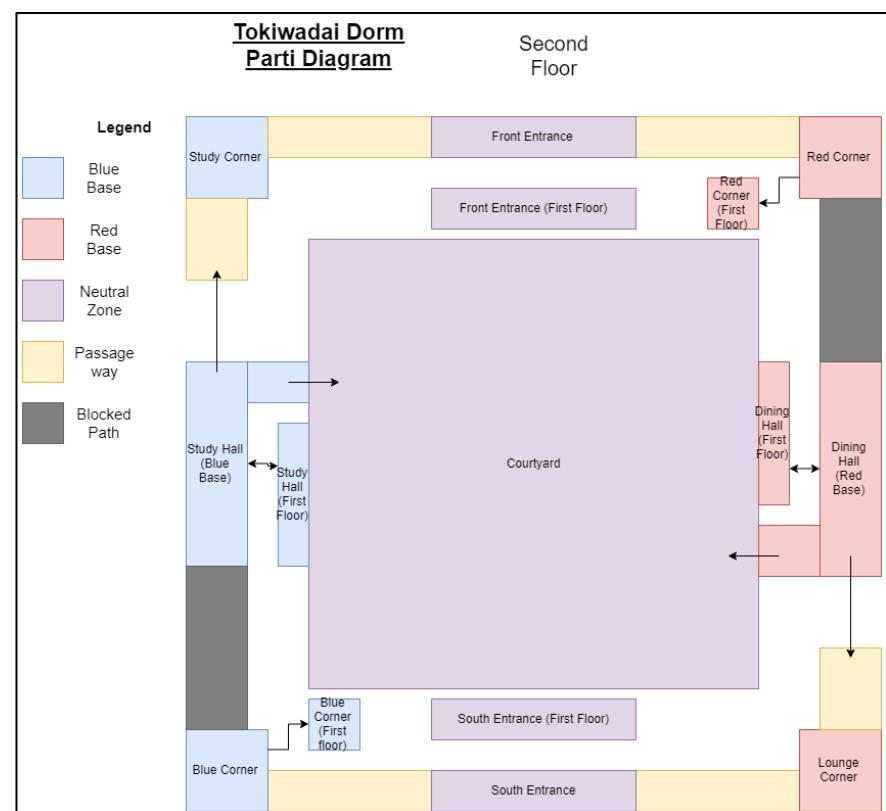
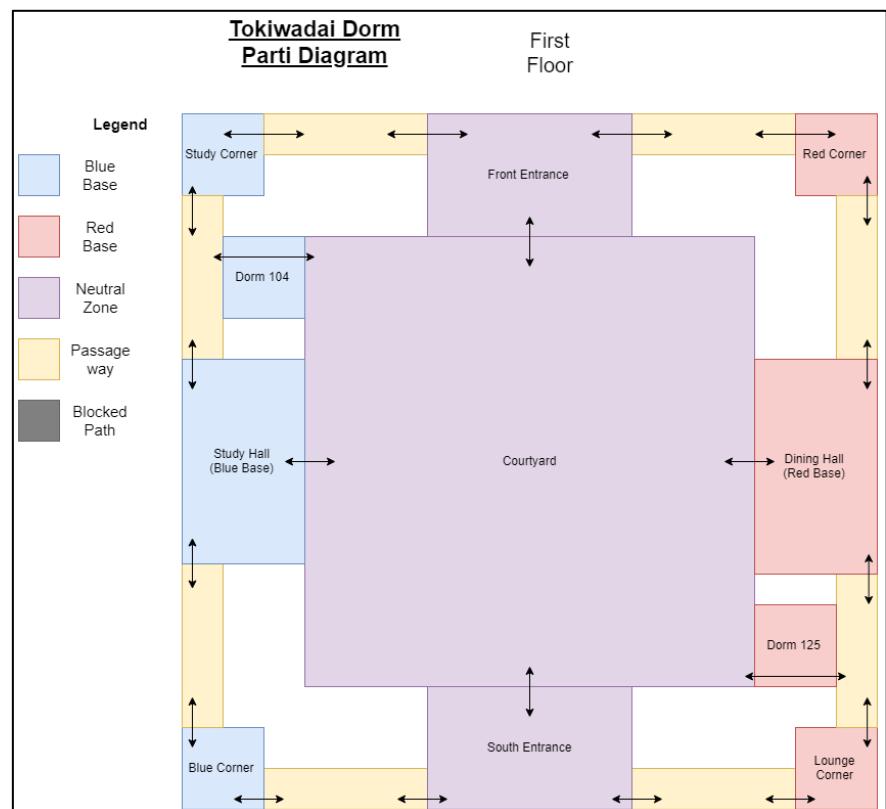
Stage Door (door to courtyard)  
Balcony  
Staircase  
Southern Exit

### Dorm 104

Passage between study corner & courtyard  
Window  
Door

### Dorm 125

Passage between lounge corner & courtyard  
Window  
Door



## Gameplay Requirements

<b>Dining Room (Red Team)</b> <ul style="list-style-type: none"><li>• Spawn Points (x2)</li><li>• Red Flag</li><li>• Weapons<ul style="list-style-type: none"><li>◦ Enforcer (x1)</li></ul></li><li>• Armor<ul style="list-style-type: none"><li>◦ Arm</li></ul></li><li>• Health<ul style="list-style-type: none"><li>◦ Small (x1)</li></ul></li></ul>	<b>Study Room (Blue Team)</b> <ul style="list-style-type: none"><li>• Spawn Points (x2)</li><li>• Blue Flag</li><li>• Weapons<ul style="list-style-type: none"><li>◦ Enforcer (x1)</li></ul></li><li>• Armor<ul style="list-style-type: none"><li>◦ Arm</li></ul></li><li>• Health<ul style="list-style-type: none"><li>◦ Small (x1)</li></ul></li></ul>
<b>Dining Room Second Floor (Red Base)</b> <ul style="list-style-type: none"><li>• Weapons<ul style="list-style-type: none"><li>◦ Shock Rifle (x1)</li></ul></li></ul>	<b>Study Room Second Floor (Blue Base)</b> <ul style="list-style-type: none"><li>• Weapons<ul style="list-style-type: none"><li>◦ Shock Rifle (x1)</li></ul></li></ul>
<b>Dorm 125 (Red Team)</b> <ul style="list-style-type: none"><li>• Health<ul style="list-style-type: none"><li>◦ Small (x1)</li></ul></li></ul>	<b>Dorm 104 (Blue Team)</b> <ul style="list-style-type: none"><li>• Health<ul style="list-style-type: none"><li>◦ Small (x1)</li></ul></li></ul>
<b>Red Corner (Red Base)</b> <ul style="list-style-type: none"><li>• Spawn point (x1)</li><li>• Armor<ul style="list-style-type: none"><li>◦ Leg</li></ul></li><li>• Weapons<ul style="list-style-type: none"><li>◦ Enforcer (x1)</li></ul></li></ul>	<b>Blue Corner (Red Base)</b> <ul style="list-style-type: none"><li>• Spawn point (x1)</li><li>• Armor<ul style="list-style-type: none"><li>◦ Leg</li></ul></li><li>• Weapons<ul style="list-style-type: none"><li>◦ Enforcer (x1)</li></ul></li></ul>
<b>Lounge Corner (Red Base)</b> <ul style="list-style-type: none"><li>• Spawn point (x1)</li><li>• Weapons<ul style="list-style-type: none"><li>◦ Enforcer (x1)</li></ul></li></ul>	<b>Study Corner (Blue Base)</b> <ul style="list-style-type: none"><li>• Spawn point (x1)</li><li>• Weapons<ul style="list-style-type: none"><li>◦ Enforcer (x1)</li></ul></li></ul>
<b>Lounge Corner Second Floor(Red Base)</b> <ul style="list-style-type: none"><li>• Armor<ul style="list-style-type: none"><li>◦ Helmet</li></ul></li></ul>	<b>Study Corner Second Floor (Blue base)</b> <ul style="list-style-type: none"><li>• Armor<ul style="list-style-type: none"><li>◦ Helmet</li></ul></li></ul>
<b>Courtyard (Neutral)</b> <ul style="list-style-type: none"><li>• Weapons<ul style="list-style-type: none"><li>◦ Rocket Launcher (x1)</li></ul></li></ul>	
<b>Front Entrance (Neutral)</b> <ul style="list-style-type: none"><li>• Health<ul style="list-style-type: none"><li>◦ Medium (x1)</li></ul></li></ul>	
<b>South Entrance (Neutral)</b> <ul style="list-style-type: none"><li>• Health<ul style="list-style-type: none"><li>◦ Medium (x1)</li></ul></li></ul>	

## Metrics

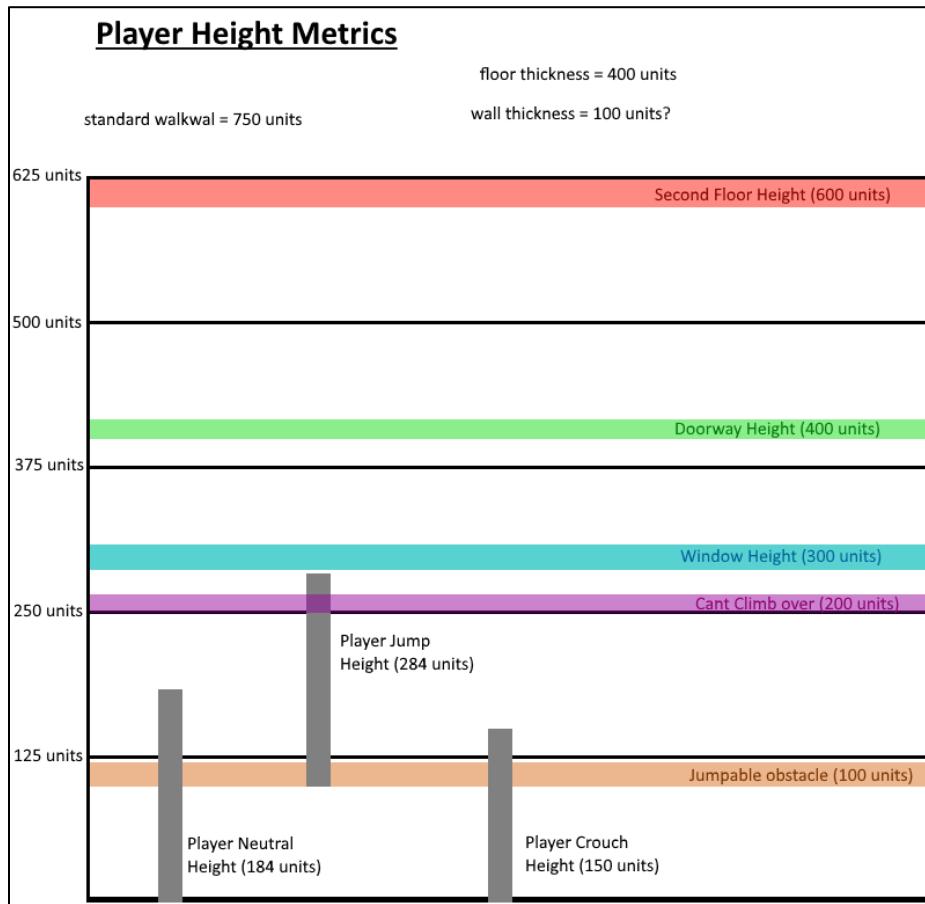


Figure 28 - A graph of the player's height metrics

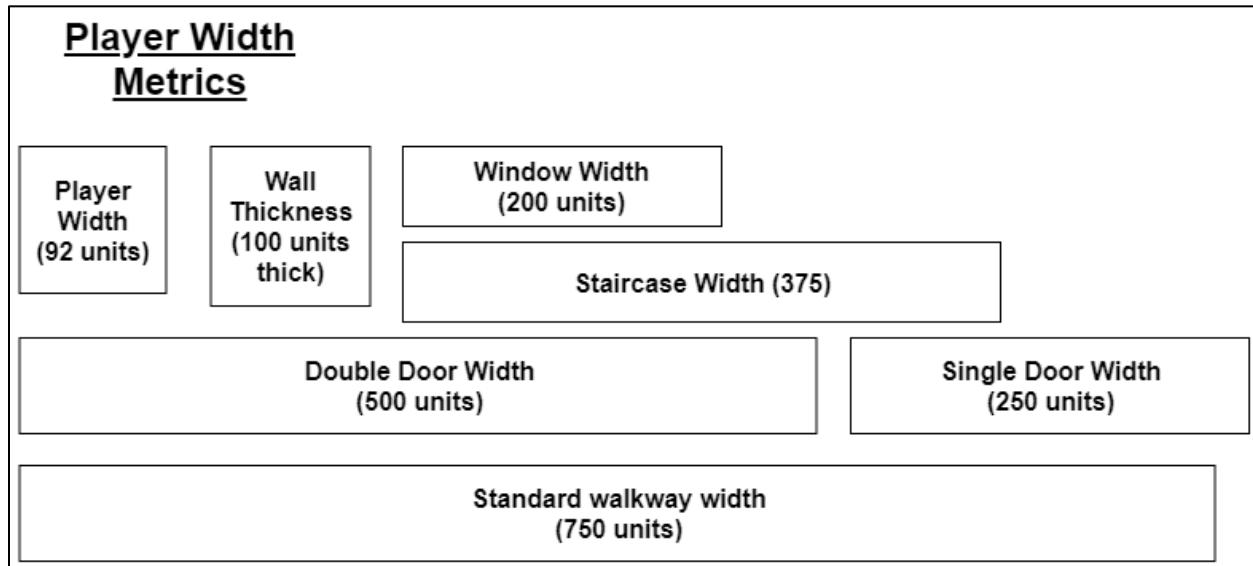


Figure 29 - A graph of the player's width metrics

## Diagrams

### Flow Diagram (Bubble Diagram)

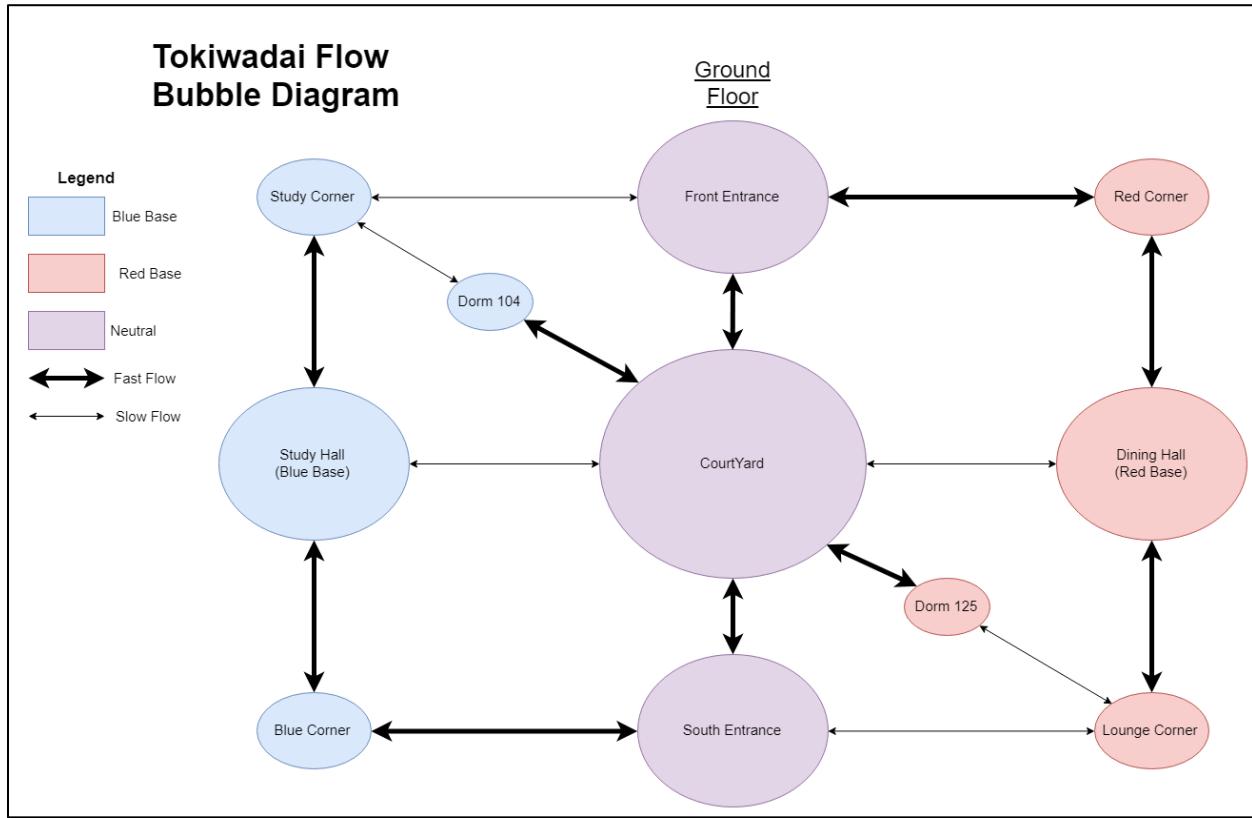


Figure 30 - A diagram showing the flow of gameplay for the first floor

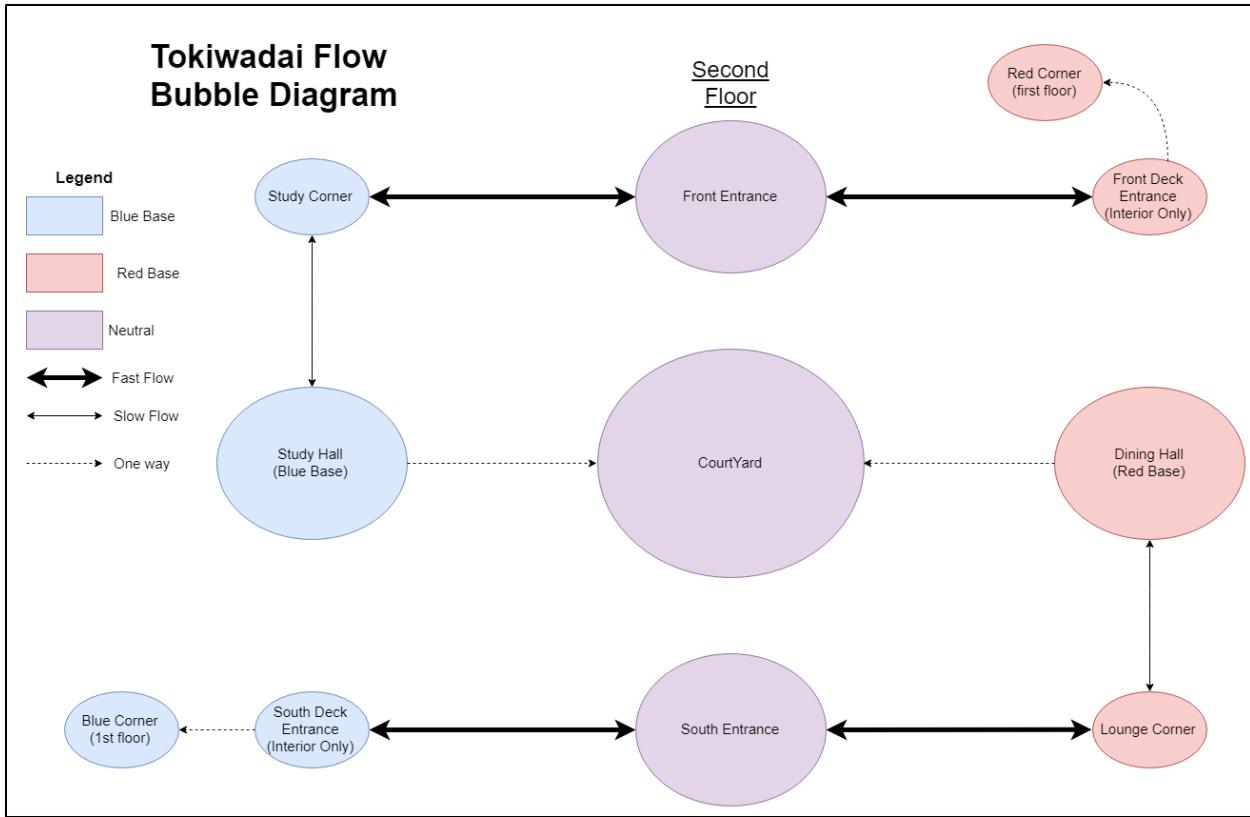


Figure 31 - A diagram showing the flow of gameplay for the second floor

## Gameplay Diagram

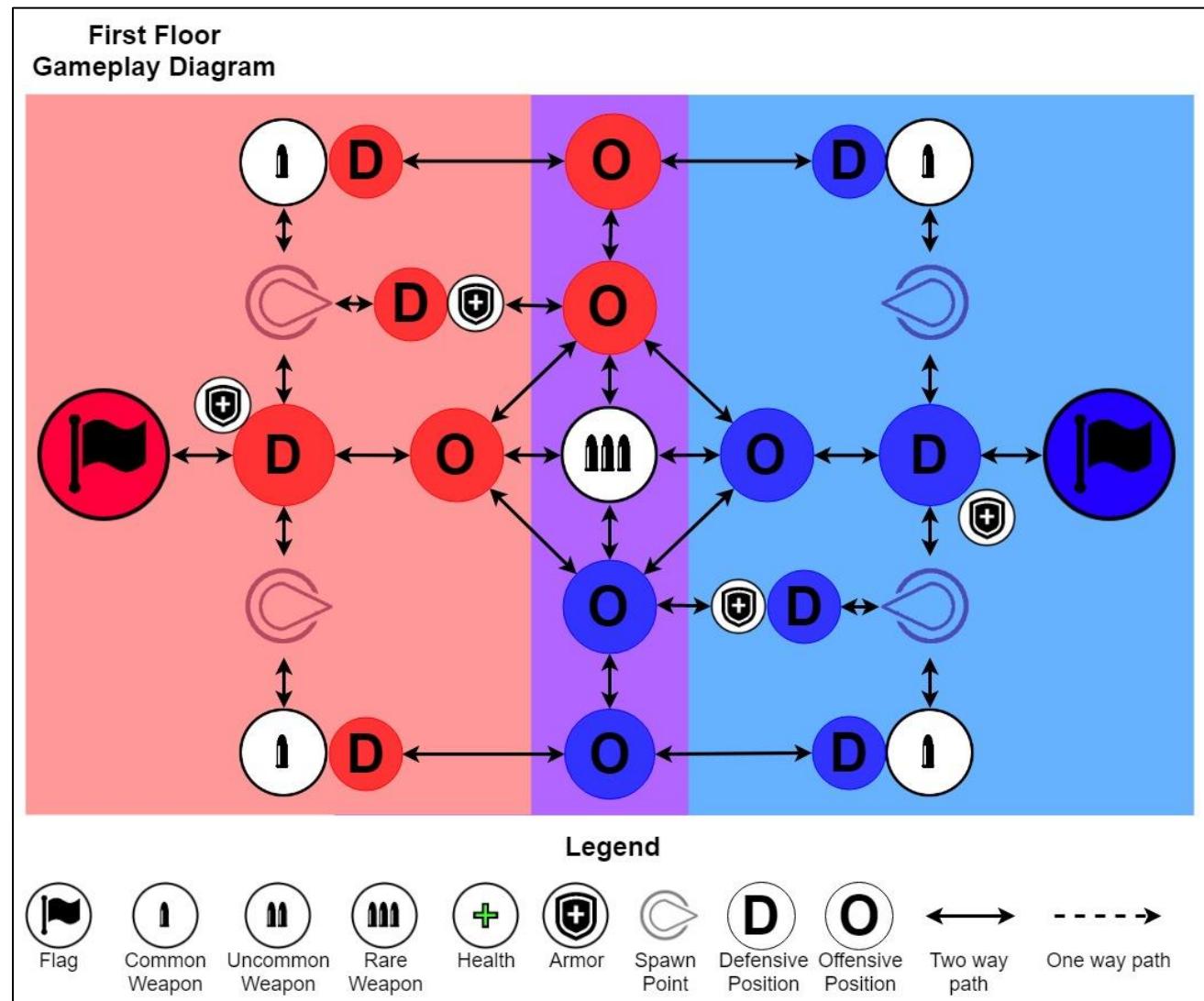
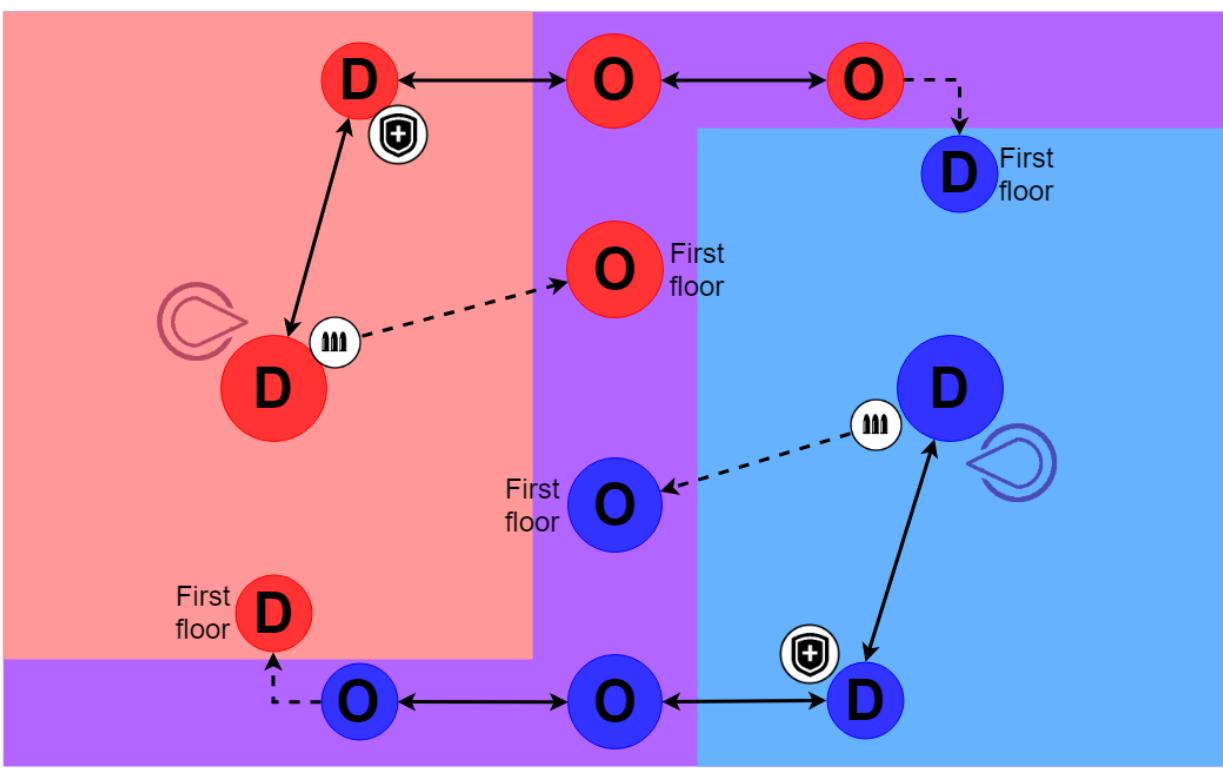


Figure 32 - A gameplay diagram of the first floor

**Second Floor  
Gameplay Diagram**



**Legend**

- |  |      |  |               |  |                 |  |             |  |        |  |       |  |             |  |                    |  |                    |  |              |  |              |
|--|------|--|---------------|--|-----------------|--|-------------|--|--------|--|-------|--|-------------|--|--------------------|--|--------------------|--|--------------|--|--------------|
|  | Flag |  | Common Weapon |  | Uncommon Weapon |  | Rare Weapon |  | Health |  | Armor |  | Spawn Point |  | Defensive Position |  | Offensive Position |  | Two way path |  | One way path |
|--|------|--|---------------|--|-----------------|--|-------------|--|--------|--|-------|--|-------------|--|--------------------|--|--------------------|--|--------------|--|--------------|

Figure 33 - A gameplay diagram of the second floor

## Greybox Diagram

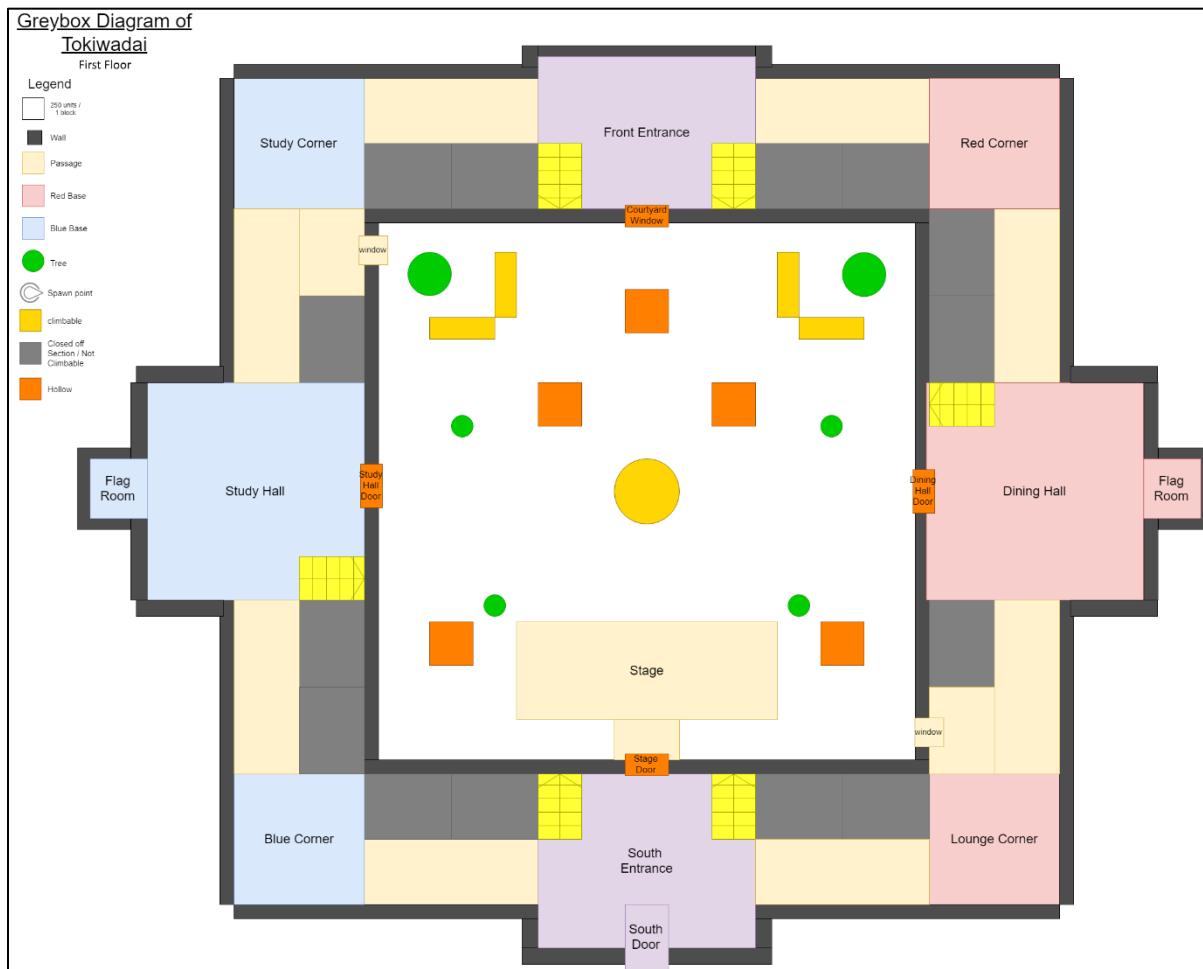


Figure 34 - A greybox layout of the first floor

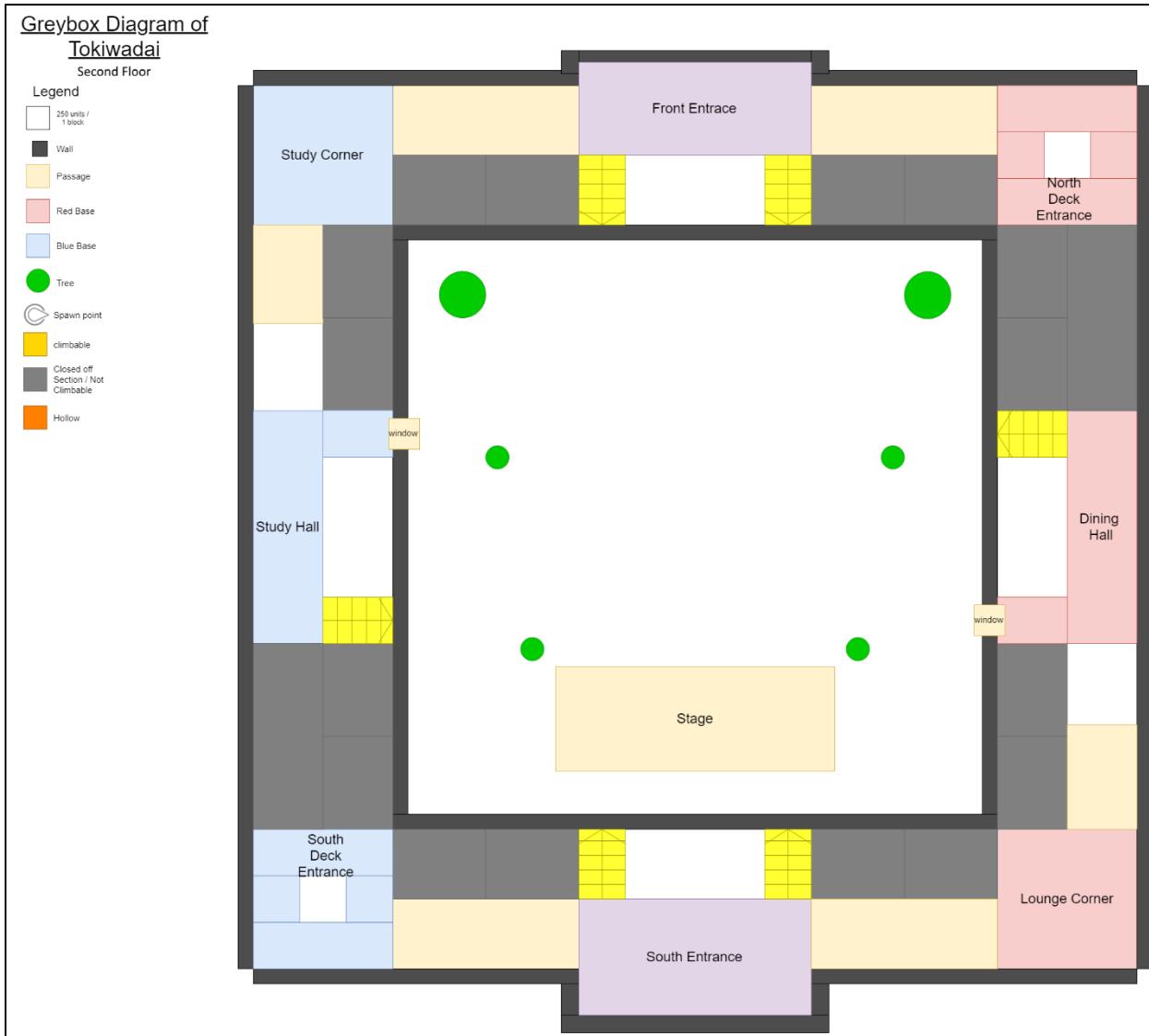


Figure 35 - A greybox diagram of the second floor

## Areas of Engagement Diagrams

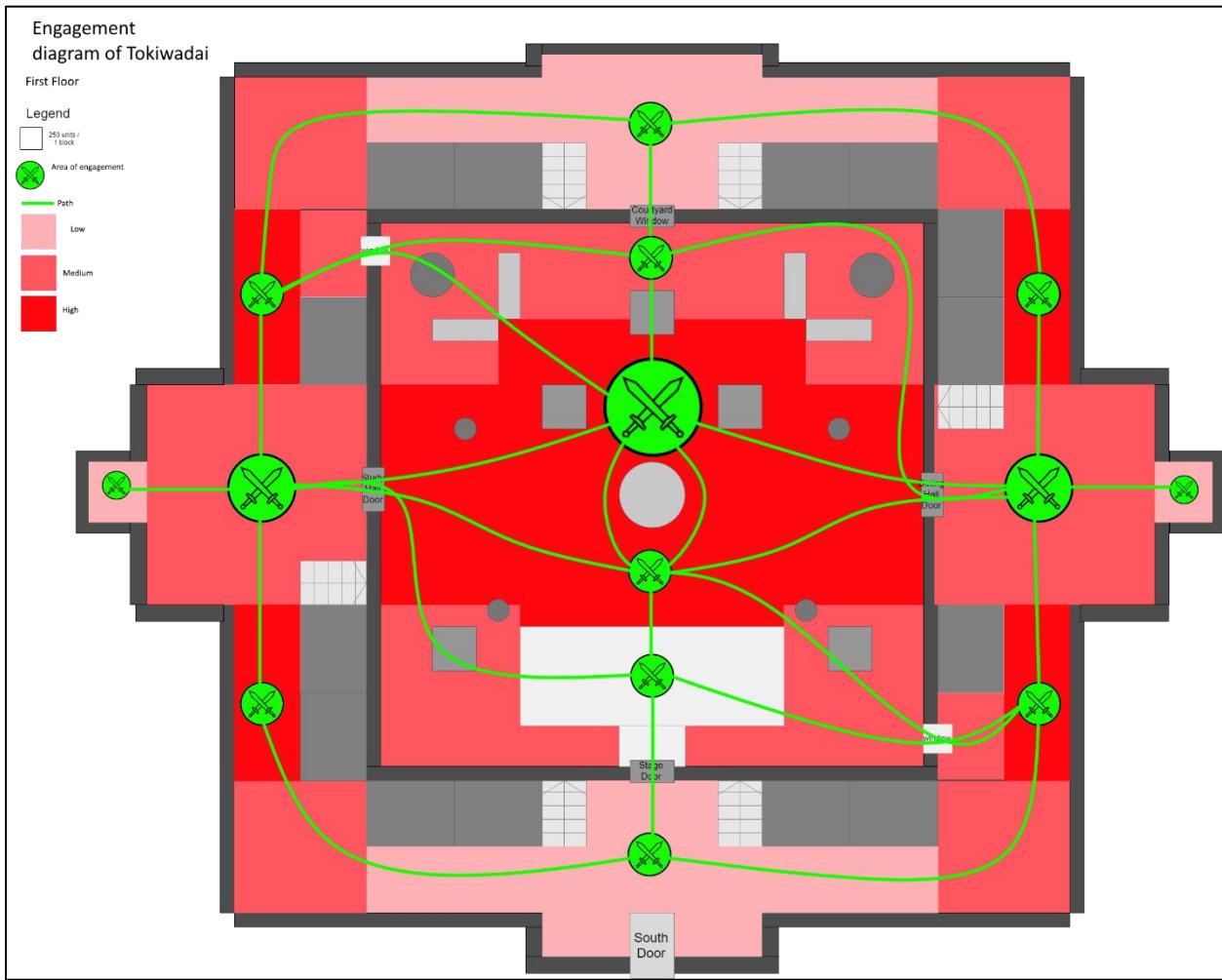


Figure 36 – The frequency of engagements on the first floor

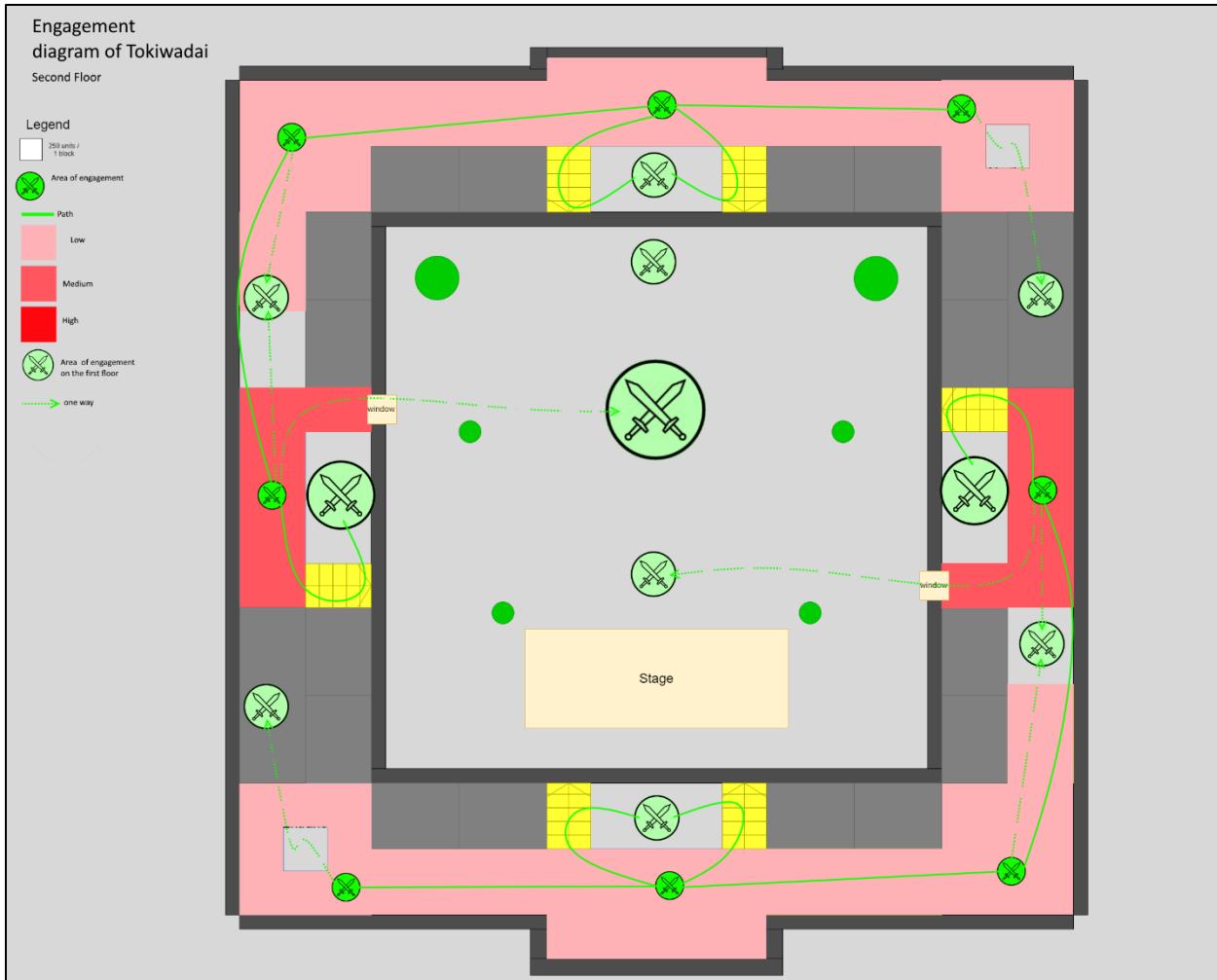


Figure 37 - The frequency of engagements on the 2nd floor

## Prop Placement Diagram

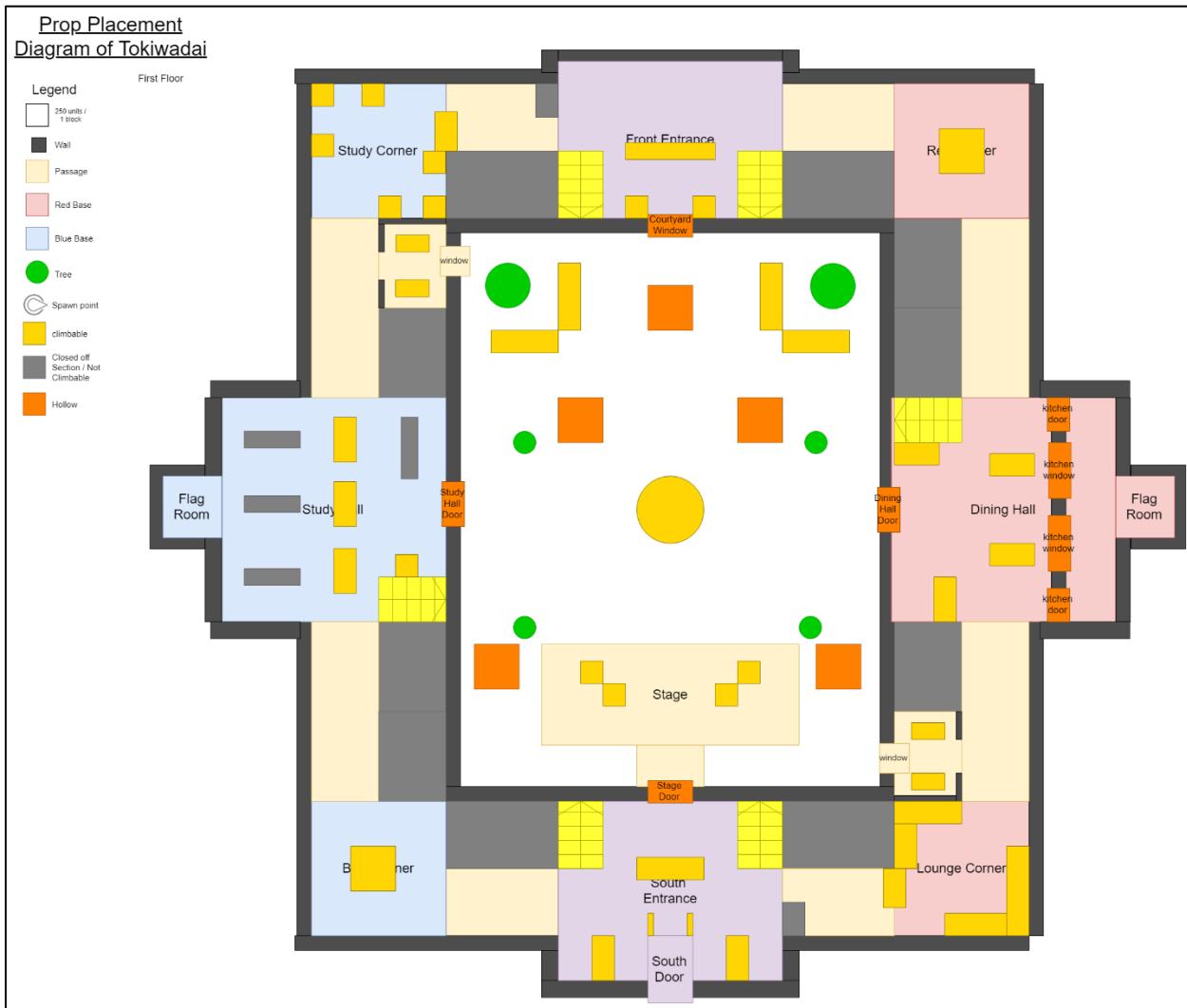


Figure 38 - The placement of props and cover on floor 1

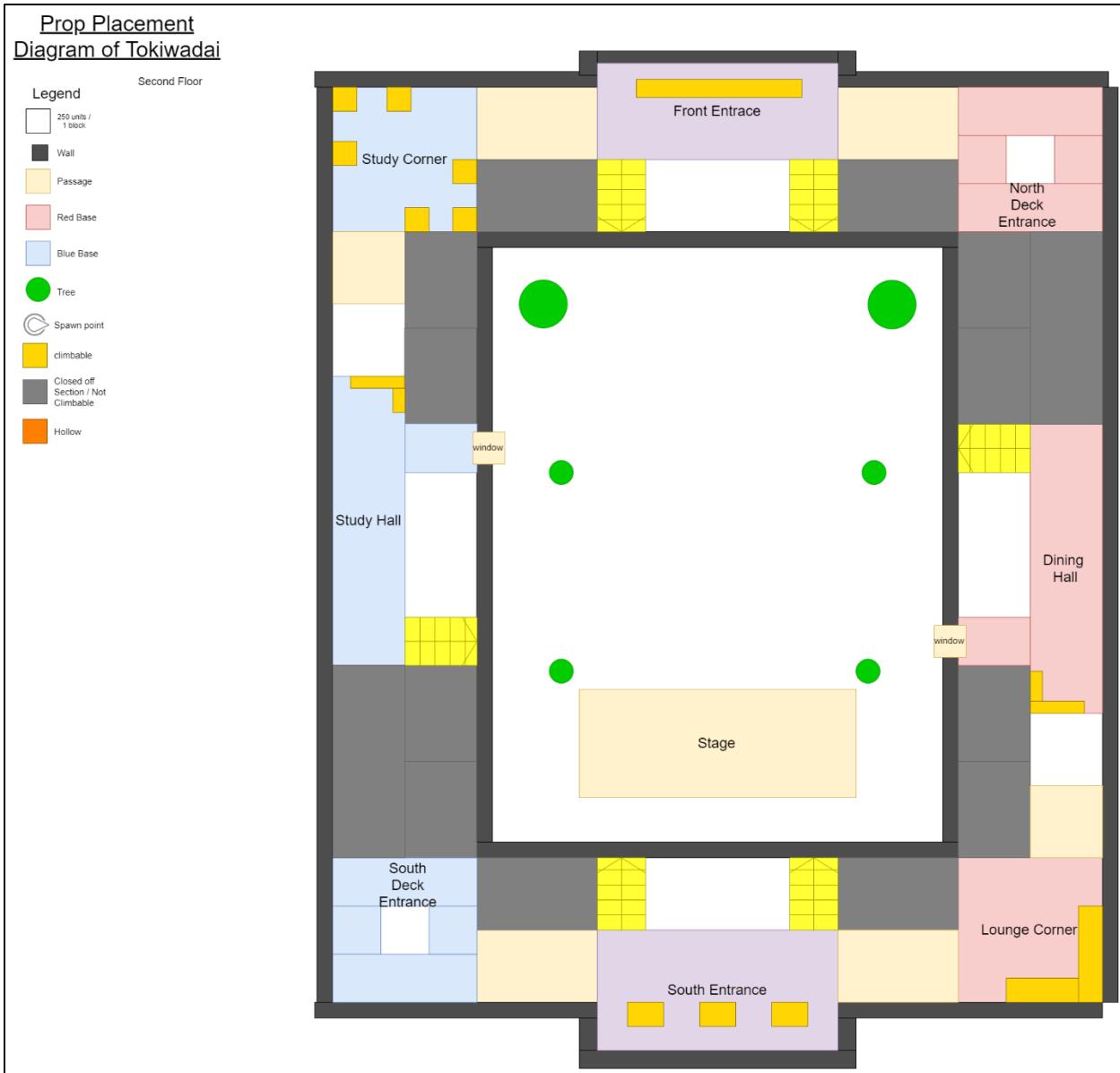


Figure 39 - The placement of props and cover on the second floor

## Map

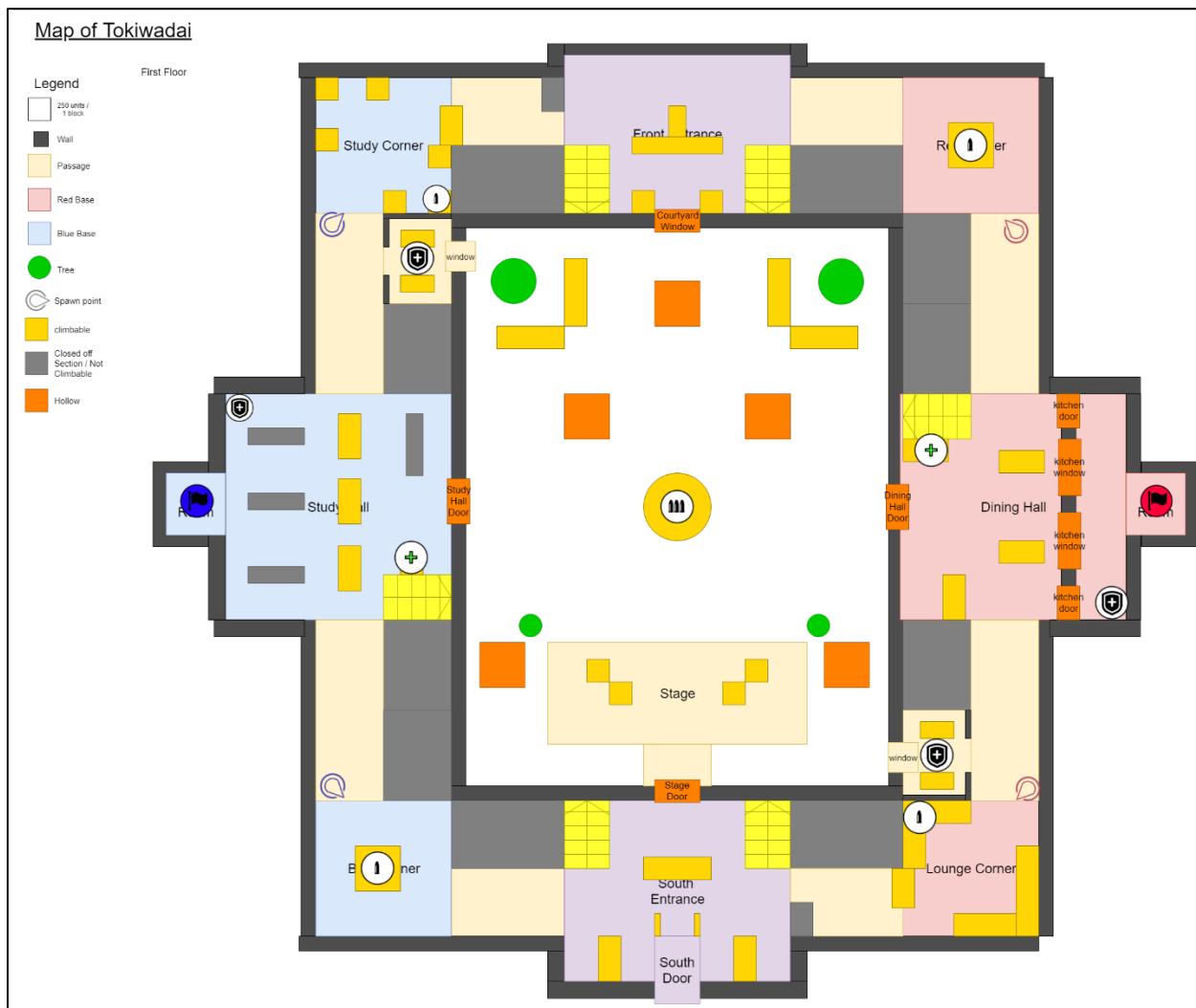


Figure 40 - Gameplay map of Tokiwadai – First floor

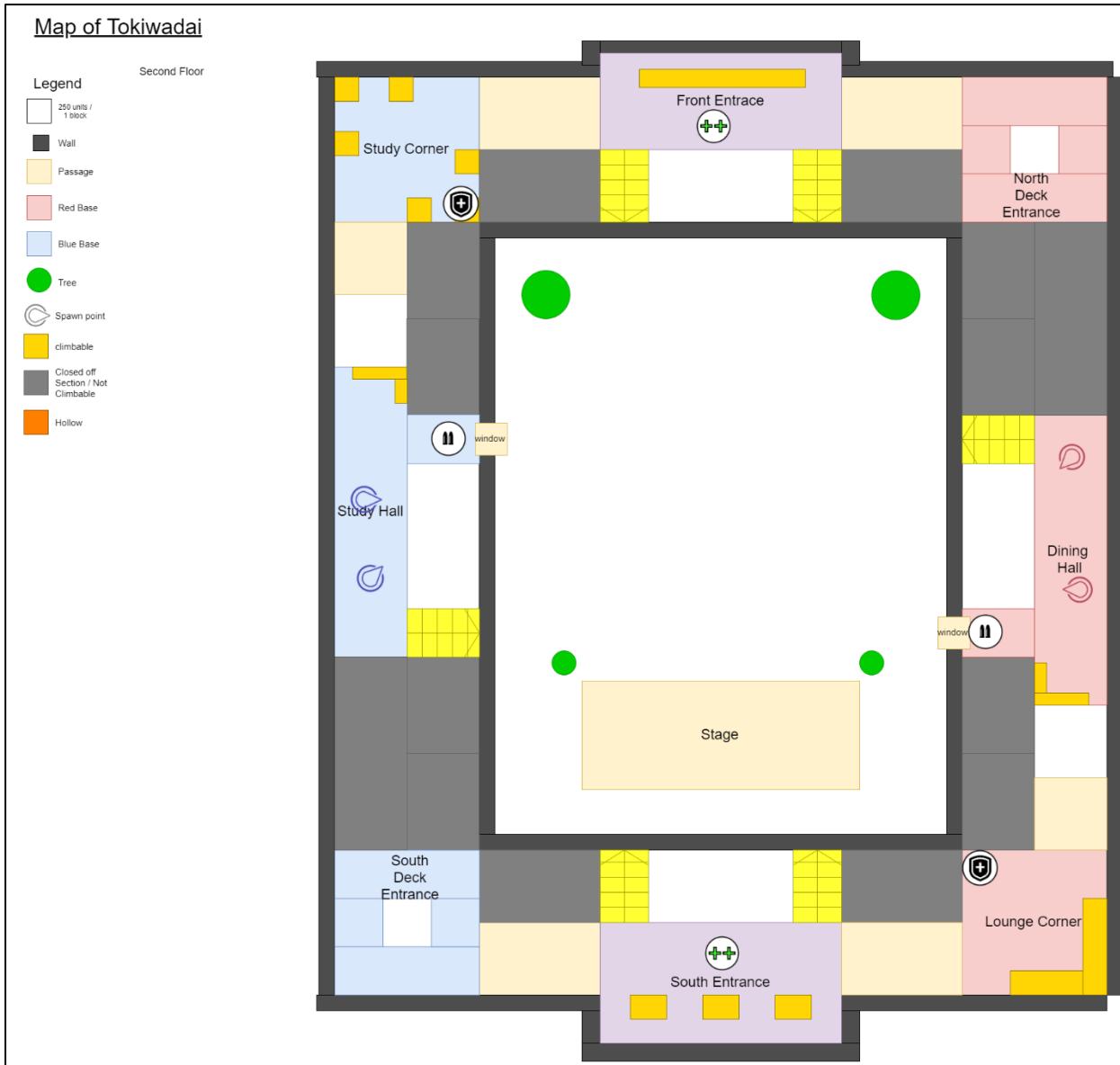


Figure 41 - Gameplay map of Tokiwadai - 2nd floor

## Schedule

### Timeline

Week 7 – Story & Reference

READING WEEK

Week 8 – SPRINT WEEK

Week 9 – 3v3 Playtesting

Week 10 – Network Setup

Week 11 – Network Focus Testing

Week 12 – Assignment Due

Week 13 – Regional Kits

## Regional Prop Kits

### Courtyard (Neutral)

Region	Sub	Object	Amount	Package or Custom
Neutral	Base	Walkway	7	Custom
		Grass Patch	2	Custom
		School Walls Exterior - Plain wall	16	Custom
		School Walls Exterior - Closed Window	22	Custom
		School Wall Exterior - Roof Overhang	4	Custom
Detail	Detail	Walkway EndCap	3	Custom
		Walkway T-shape	1	Custom
		School Walls Exterior - Corners	4	Custom
		Rectangular Bushes	4	Custom
		Trees	4	Package
		Large Speaker	4	Custom
		Small Speaker	2	Custom
		Tents	5	Custom
		School Walls Exterior - Small Opened Window	7	Custom
		School Walls Exterior - Opened Door	2	Custom
Hero	Hero	Fountain	1	Custom
		Stage	1	Custom