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# Project Fog

Game Design Document



Game Design Team  
MICHAEL CHIMICK

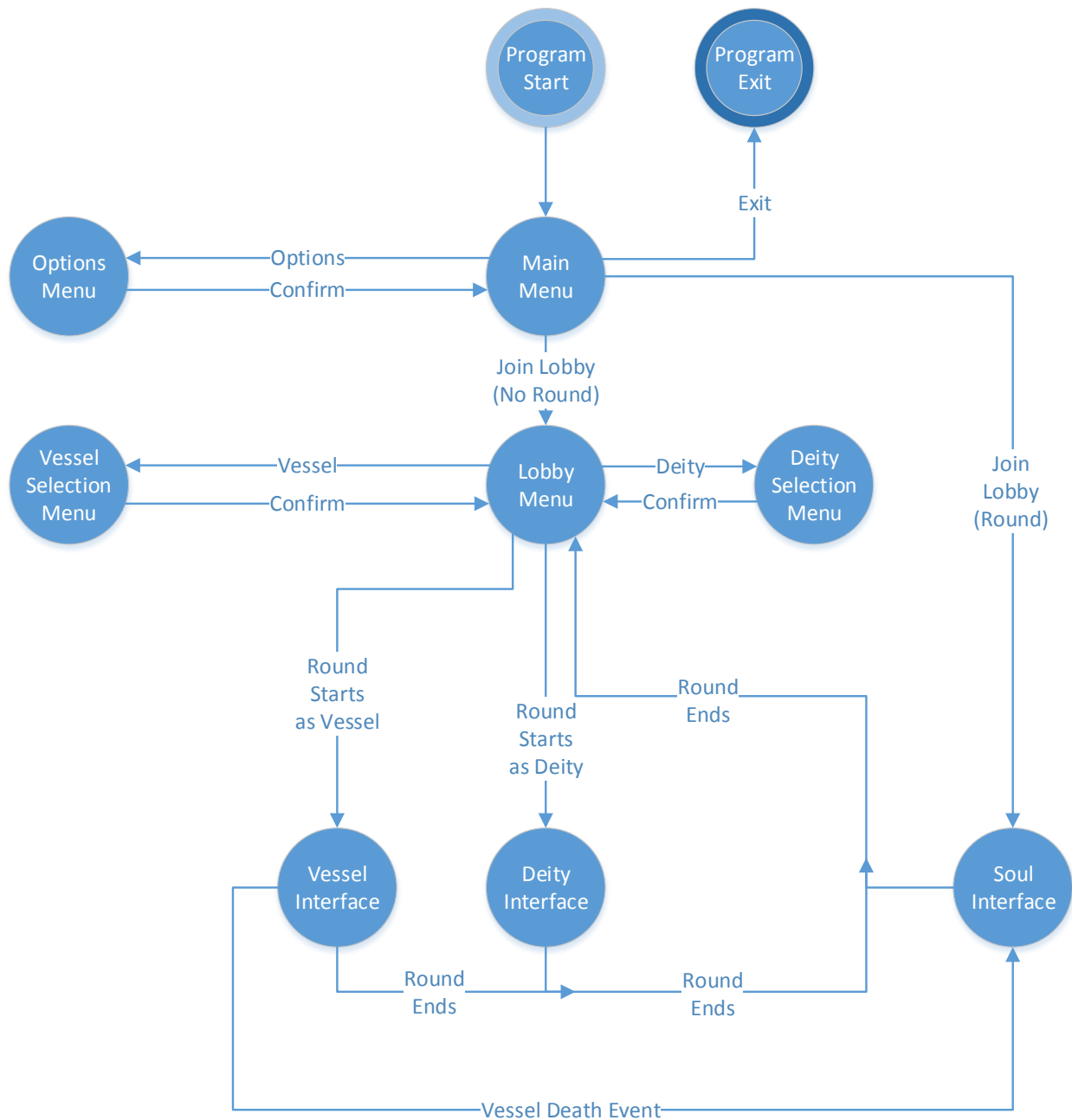
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# User Interface

## Flow Diagram



# Menu Interface

## Main Menu

The main menu will be displayed once the program is opened, it will display the title of the game on it and contain buttons.

**Button:** Connect to Server

Display a dialog box to the user. This dialog box will contain:

- **Input Field:** Name
  - This field defines a name that other users will use to identify you once a lobby has been entered. This name will only be used for user identification, not system identification.
- **Input Field:** IP Address
  - This field defines an Internet Protocol Address that the system will use to connect to a game lobby.
- **Button:** Enter
  - This button submits the dialog box contents to the system. On success, display the 'Lobby Menu'. On failure, display error message, then display 'Main Menu'.
- **Button:** Cancel
  - Display 'Main Menu'.

**Button:** Options

Display the 'Options Menu'.

**Button:** Exit

Close the program.

## Options Menu

This menu will be populated with any customizable technical or aesthetic aspects of the game, as per the needs and capabilities of the implementation teams.

## Lobby Menu

This menu can only be displayed upon successful connection to a server via the 'Connect to Server' Button on the 'Main Menu' or upon completion of a gameplay round. The menu will be populated with a visual table, a chat box, and buttons.

### **Display:** Leaderboards Table

This chart will display information on the current users in the lobby, and will contain:

- Ping: In relation to the user's connection with the server.
- Username: The name the user chose when submitting the 'Connect to Server' dialog.
- Role: Displays the role of the player in the previous match. Either Vessel, Deity, or Soul. This value defaults to Soul.
- Ability: Displays the abilities of the player during the previous round. Icons representing Aspects if the player was a Deity, and an icon representing a class if the player was a Vessel. This value defaults to blank.
- Score: Displays the score of the player in the previous round. This value defaults to 0.

This table is sorted by score (Descending), then by Username (Ascending).

### **Display:** Chat Messages

This box will display the chat messages of everyone in the lobby that have occurred since the user joined the lobby.

### **Input Field:** Chat input box

This input field will accept ASCII characters and digits and, once the Enter/Return key is pressed, display the message in the 'Chat Messages' box with the player's Username identifier.

### **Button:** Vessel

Display 'Vessel Class/Abilities Selection Menu'

**Button:** Deity

Display 'Deity Aspects Selection Menu'

**Button:** Ready

This button will alternate between green and red, and will mark the user as ready to the server. This button defaults to red.

## Vessel Class/Abilities Selection Menu

This menu will allow players the select the class and abilities for the next round, should they be chosen to play as a Vessel. It will be populated with buttons, and an icon display.

**Display:** Current Class and Abilities

This array of icons will display the currently selected class and abilities for the player. It will change dynamically as different 'Class' and 'Ability' buttons are clicked. The order the abilities are displayed matters, as it will affect gameplay. Clicking a class or ability icon will deselect it.

**Multiple Buttons:** Class

Clicking a 'Class' button will select the class as the player's choice for the next round. There will be a class button for every class the player could choose.

**Multiple Buttons:** Ability

Clicking an 'Ability' button will select the ability as the player's choice for the next round. There will be an ability button for every ability the player could choose. Three abilities can be chosen at any given time. The ability will fill the first unoccupied ability slot.

## Deity Aspects Selection Menu

This menu will allow players the select the aspects for the next round, should they be chosen to play as a Deity. It will be populated with buttons, and icon displays.

**Display:** Current Aspects

This array of icons will display the two currently selected aspects for the player. It will change dynamically as different 'Aspect' buttons are clicked. The order of aspects does not matter. Clicking an aspect icon will deselect it.

**Multiple Buttons:** Aspect

Clicking an 'Aspect' button will select it, and its cluster of abilities, as the player's choice for the next round. There will be an aspect button for every aspect the player could choose.

**Multiple Displays:** Abilities

For each 'Aspect' button, there will be a display of three ability icons. These icons will provide basic information when the cursor hovers over them. (See Deity Abilities)

## Gameplay Interface

### Vessel Display

The Vessel Display appears during a Round, when the player is playing as a Vessel. When this display occurs, it is mutually exclusive with the other Gameplay Interfaces. This display contains the following information.

**Graphic:** Health

The Vessel's current health, in a bar format, with a clear digit display of CURRENT HEALTH / TOTAL HEALTH.

**Graphic:** Experience

The Vessel's current experience, in bar format, with a clear digit display of CURRENT EXPERIENCE / EXPERIENCE TO NEXT LEVEL.

**Graphic:** Ability Bar

The Vessel's weapon and ability icons are displayed in sequence, with an indicator of their current cooldown.

**Visual Indication:** Buffs

The Vessel's currently active buffs, positive and negative, must be visually represented.

**Visual Indication:** Entity Health

Any Vessel or Gatekeeper entity must have a small health bar displayed above their figure on the screen. This indicator will be similar to the Vessel's own Health graphic.



**Graphic:** Chat box

The Vessel chat box must become visible whenever the player presses the Enter/Return key. The small prompt will accept ASCII text and digits and submit with another press of the Enter / Return key.

**Graphic:** Character

The Vessel will be represented in the center of the viewport as a small graphic. The character will always be in the center of the viewport.

## Deity Display

The Deity Display appears during a Round, when the player is playing as a Deity. When this display occurs, it is mutually exclusive with the other Gameplay Interfaces. This display contains the following information.

**Graphic:** Mini-map

This small map graphic will contain real time positions of the Vessels in the game. It responds to cursor input by moving the Deity viewport to the location clicked.

**Graphic:** Abilities

This array of icon displays the abilities of the Deity, they icons identifying them from one another, an indication of cooldowns, and a tooltip with basic information. (See Deity Aspects)

**Visual Indication:** Entity Health

Any Vessel or Gatekeeper entity must have a small health bar displayed above their figure on the screen. This indicator will be similar the Vessel's own Health graphic.

**Display:** Chat Messages

This box will display the chat messages of all deities, vessels, and souls.

**Input Field:** Chat input box

This input field will accept ASCII characters and digits and, once the Enter/Return key is pressed, display the message in the 'Chat Messages' box with the player's Username.

## Soul Display

The Soul Display appears during a Round, when the player is playing as a Soul. When this display occurs, it is mutually exclusive with the other Gameplay Interfaces. This display contains the following information.

**Graphic:** Mini-map

This small map graphic will contain real time positions of the Vessels in the game. It responds to cursor input by moving the Deity viewport to the location clicked.

**Visual Indication:** Entity Health

Any Vessel or Gatekeeper entity must have a small health bar displayed above their figure on the screen. This indicator will be similar the Vessel's own Health graphic.

**Display:** Chat Messages

This box will display the chat messages of all deities, vessels, and souls.

**Input Field:** Chat input box

This input field will accept ASCII characters and digits and, once the Enter/Return key is pressed, display the message in the 'Chat Messages' box with the player's Username.

# Mechanics

## Common

This section will define some mechanics that are common to all areas of the design.

### Projectile

A projectile is an entity that changes game variables when it comes into contact with other entities. Projectiles move across the game map and until they collide with Vessels, Gatekeepers, Static Obstacles, or they reach their maximum range. Each projectile contains the following information:

**Number:** Damage

Damage the projectile will deal to the entity it makes contact with, this number has a 1:1 relationship with the Health value of entities.

**Number:** Travel Speed

The speed at which the projectile moves across the game map, in meters per second.

**Number:** Range

The range a projectile can travel before it ceases to exist, in meters.

**Number:** Size

The radius of the projectile, in meters.

**Number:** Size increase per second

The radius increase in size of projectiles, in meters. This will commonly be 0, as it will only be used for certain projectiles.

**Vertex:** Point of origin

The coordinates of the entity that spawned the projectile.

**Vertex:** Point of direction

The coordinates of the point that the entity fired the projectile at. In Vessel terms, this would be where the cursor was clicked. (See Vessel Interaction)

## Buff / Debuff

A buff / Debuff refers to any effect that has a positive / negative impact on the statistics of an entity. They will have the following principles:

**String:** Effect type

This names the effect with a type, to help the user and developer to know its effect. An example could be 'Damage Up' or 'Healing'.

**Number:** Effect value

This specifies the quantity of the previous effect. This value will always be a percentage of the current entity value. For example, if the effect was 'Damage Up' and the effect value was 10; the Damage value of an entities Weapon would be increased by 10% for the Duration of the buff.

**Number:** Duration

The length of time the buff / debuff will be in effect, in seconds.

## Weapon

A weapon allows for a character to have a 'basic attack', the weapon does this by functioning as a projectile entity creator. A weapon contains the following values:

**Number:** Cooldown

This number defines the amount of time after creating a projectile that a character must wait before creating another projectile. This time is in seconds.

**Pointer:** Projectile

The weapon is linked to a specific projectile, which functions as a blueprint for every projectile that the weapon creates. (See Projectile)

## Player

### Vessel

A Vessel is a user playable character, and is the main focus of any given Round.

## *Statistics*

A Vessel object or class must contain the following elements:

**Number:** Current Health

Current Health will be used to reflect when 'damage' has been dealt to a Vessel, and will determine part of a Vessel's 'Loss Condition'. When Health is being modified, assume it refers to Current Health unless otherwise specified.

**Number:** Total Health

This refers to the total health that a Vessel could have, as their current level.

**Number:** Current Experience

The current amount of experience that the Vessel has at a given time. This value changes as the Vessel collects experience. (See Vessel Interaction)

**Number:** Total Experience to Next Level

This value represents the amount the current experience must be equal or greater to in order for the Vessel to Level Up. (See Vessel Interaction)

**Number:** Travel Speed

This represents the movement speed of a Vessel across the map, in meters per second.

**Pointer:** Weapon

Every Vessel has a Weapon, which allows them to create a specific Projectile. (See Weapon)

**Multiple Pointers:** Abilities

Every Vessel has three abilities, chosen by the user before a round begins. (See Vessel Abilities)

## *Interaction*

This section defines the ways that a user can interact with a Vessel during a Round. This is tied closely with the Vessel Interface.

**Input:** Movement

This allows the user to move their Vessel character and by extension the viewport of the screen. This is entirely keyboard input, and up to eight directions can be traversed with combination of the input keys.

- **Input:** W
  - Moves the character 'Up' in respect to the viewport.
- **Input:** A
  - Moves the character 'Left' in respect to the viewport.
- **Input:** S
  - Moves the character 'Down' in respect to the viewport.
- **Input:** D
  - Moves the character 'Right' in respect to the viewport.

#### **Input:** Attack

This input allows the Vessel to use their Weapon. It uses the Left Mouse Button, which fires the weapon projectile on a line created by the character graphic and the point of click.

#### **Input:** Ability

This allows the user to 'cast' the abilities that his character has available. This is based on keyboard input, and doesn't include the number pad on large keyboards.

- **Input:** 1
  - Cast the first ability on the Ability Display.
- **Input:** 2
  - Cast the second ability on the Ability Display.
- **Input:** 3
  - Cast the third ability on the Ability Display.

#### **Event:** Experience Gathering

This event occurs when a Vessel gains experience, and adds an appropriate value to their Current Experience. A vessel can gain experience in the following cases:

- **Event:** Killed Lost
  - This event occurs when a Vessel weapon or ability causes a Lost entity's Health to become less than or equal to zero.
- **Event:** Killed Guardian
  - This event occurs when a Vessel weapon or ability causes a Guardian entity's Health to become less than or equal to zero.
- **Event:** Killed Arbiter
  - This event occurs when a Vessel weapon or ability causes the Arbiter entity's Health to become less than or equal to zero.
- **Event:** Killed Vessel
  - This event occurs when a Vessel weapon or ability causes another Vessel entity's Health to become less than or equal to zero.

**Event:** Level Up

The Level Up event is caused by the Vessel Current Experience to become equal or greater to the Total Experience required for the next level. The result of the event is the increase of Vessel Statistics values, as well as the Vessel Weapon values and Vessel Ability values. In addition, the Current Experience of the Vessel will be set to zero, and the Total Experience required for the next level will be increased. (See Vessel Index)

**Event:** Score Gathering

This event occurs when a Vessel gains score. The score value is only used in the calculation of the Win Condition (See Game Modes). A vessel can gain score in the following cases:

- **Event:** Killed Lost
  - This event occurs when a Vessel weapon or ability causes a Lost entity's Health to become less than or equal to zero.
- **Event:** Killed Guardian
  - This event occurs when a Vessel weapon or ability causes a Guardian entity's Health to become less than or equal to zero.
- **Event:** Killed Arbiter
  - This event occurs when a Vessel weapon or ability causes the Arbiter entity's Health to become less than or equal to zero.
- **Event:** Killed Vessel
  - This event occurs when a Vessel weapon or ability causes another Vessel entity's Health to become less than or equal to zero.
- **Event:** Round Ended
  - If the Round ends, and the Vessel is not dead, then that Vessel gains score.

## *Vessel Abilities*

A vessel ability is a special effect or attack that a vessel can activate or 'cast', that is external from their Weapon or Class. Vessel Abilities can be one of two types:

**Type:** Buff

See Buff / Debuff for definition, see Vessel Index for examples.

**Type:** Special Projectile

See Projectile for definition, see Vessel Index for examples.

Additionally, Vessel Abilities have a special relationship to the 'Level Up' event. At the start of a Round, the user will have selected three abilities to use; however, only the ability in the first slot will be unlocked (See Lobby Menu). To unlock the other two abilities, the player must

reach 'level' 2, and then 'level' 4. This is done by causing the Level Up event once, and then an additional two times, as a vessel begins a Round at 'level' 1.

## Deity

A deity is a user playable role, and functions as a supplement to gameplay.

### *Statistics*

While a deity does not have a character graphic, as the Vessel does, but there are still values they connect to:

#### **Multiple Pointers:** Aspects

A deity is connected to two Aspects, which point to three abilities, leading to a total of six abilities pre Round. (See Deity Aspects)

### *Interaction*

This section defines the methods that a user can interact with the game as a Deity. This is tied closely to the Deity Interface.

#### **Input:** Movement

This allows the user to move the viewport of the screen. This is entirely keyboard input, and up to eight directions can be traversed with combination of the input keys.

- **Input:** W
  - Moves the viewport 'Up'.
- **Input:** A
  - Moves the viewport 'Left'.
- **Input:** S
  - Moves the viewport 'Down'.
- **Input:** D
  - Moves the viewport 'Right'.

#### **Input:** Ability

This allows the user to 'cast' the abilities that his character has available. This is based on keyboard input, and doesn't include the number pad on large keyboards.

- **Input:** 1
  - Select the first ability on the Ability Display.



- **Input: 2**
  - Select the second ability on the Ability Display.
- **Input: 3**
  - Select the third ability on the Ability Display.
- **Input: 4**
  - Select the fourth ability on the Ability Display.
- **Input: 5**
  - Select the fifth ability on the Ability Display.
- **Input: 6**
  - Select the sixth ability on the Ability Display.

Once an ability is selected, it can be 'cast' by clicking a target with the Left Mouse Button.  
(See Deity Aspects)

#### **Event:** Score Gathering

This event occurs when a Deity gains score. The score value is only used in the calculation of the Win Condition (See Game Modes). A deity can gain score in the effective use of their Abilities. Every ability will have a slightly different score method and value. It will be designed around the premise of rewarding a Deity for skillful use of an ability.

## *Deity Aspects*

A deity Aspect is a bundle of three deity Abilities. A deity Ability is a special effect or attack that a vessel can activate or 'cast'. In an aspect bundle, there will be a Quick Ability, a Common Ability, and a Grand Ability. The title for the ability reflects its effect value and cooldown. Deity Abilities can be one of three types:

#### **Type:** Buff

See Buff / Debuff for definition, see Deity Index for examples.

#### **Type:** Debuff

See Buff / Debuff for definition, see Deity Index for examples.

#### **Type:** Summon

Summon type abilities create a new entity into the game map, these will be an Environment entity; they are limited to Gatekeepers or Static Objects. See Deity Index for examples.

Basic information on an ability would be its description, effect value, and duration.

# Soul

A Soul is a user playable role, and functions as a spectator to gameplay.

## *Statistics*

As a spectator role, a Soul has no statistics.

## *Interaction*

This section defines the methods that a user can interact with the game as a Soul. This is tied closely to the Soul Interface.

### **Input:** Movement

This allows the user to move the viewport of the screen. This is entirely keyboard input, and up to eight directions can be traversed with combination of the input keys.

- **Input:** W
  - Moves the viewport 'Up'.
- **Input:** A
  - Moves the viewport 'Left'.
- **Input:** S
  - Moves the viewport 'Down'.
- **Input:** D
  - Moves the viewport 'Right'.

# Environment

## Map

The map refers to the defined rectangular gameplay area that users can interact within. The map will have a graphic baseline, and entities will be draw onto to the baseline. The map is divided into small meter by meter sections referred to as tiles. The Map will have the following elements:

### **Multiple Tiles:** Vessel Spawn

Vessel spawn tiles define a place where the vessel character graphic will start at in the beginning of a Round. For example, in the Free-for-All mode, there will be four spawn tiles, and they will be in the four corners of the map. (See Vessel)

### **Multiple Tiles:** Static Objects

Static Objects are entities that interact with Vessels and Gatekeepers when they come into contact with them. Objects can be hazardous and cause damage, cause a positive effect, or be a Static Obstacle which blocks movement and projectiles.

### **Multiple Tiles:** Gatekeeper Spawn

Gatekeeper spawn tiles define a place where gatekeeper characters can be created. For example, in the Free-for-All mode, most tiles will allow the Lost to spawn, there will be twelve tiles that allow Guardians to spawn, and one tile in the center will allow an Arbiter to spawn. (See Gatekeeper)

## Gatekeeper

Gatekeepers are AI controlled entities that interact with the other entities on the game map. They function similarly with Vessels, but are not controlled by any user. Gatekeepers are divided into three types:

### **Type:** The Lost

The Lost function as a minion class, where they are easily killed and whose power lies in numbers. They can move the same way a Vessel does, and they have a Weapon. There are multiple Archetypes within the Lost class. (See Gatekeeper Index)

### **Type:** Guardian

Guardians function as a mini-boss class, where they are not designed to be difficult to kill, but take significantly more than the Lost. They can move the same way a Vessel does, and they have a Weapon. There are multiple Archetypes within the Guardian class. (See Gatekeeper Index)

### **Type:** Arbiter

The Arbiter is the strongest member of the Gatekeeper faction, he is designed to be difficult to kill. There is only one Arbiter. The Arbiter can move the same way a Vessel does, has a Weapon, and also has two Abilities. (See Gatekeeper Index)

## *Statistics*

All members of the Gatekeeper faction share these traits, except the Arbiter, who has two Abilities in addition to the following traits:

**Number:** Current Health

Current Health will be used to reflect when 'damage' has been dealt to a Gatekeeper, and will determine when a Gatekeeper is destroyed. When Health is being modified, assume it refers to Current Health unless otherwise specified.

**Number:** Total Health

This refers to the total health that a Gatekeeper could have.

**Number:** Travel Speed

This represents the movement speed of a Gatekeeper across the map, in meters per second.

**Pointer:** Weapon

Every Gatekeeper has a Weapon, which allows them to create a specific Projectile. (See Weapon)

## *Interaction*

Gatekeepers can only interact with the user by proxy of a Vessel or Deity.

## *Arbiter Abilities*

An arbiter ability is a special effect or attack that the arbiter can activate or 'cast', that is external from his Weapon. The Arbiter abilities are predefined, and are both special projectiles. (See Gatekeeper Index)

# Game Modes

This section will define the available game modes and their rules.

## Free-for-All

This section defines all mechanics special to the Free-for-All mode.

## *Map*

In the Free-for-All mode, there are some special additions to the map mechanics:

**Event:** Black Fog

Surrounding the map area will be a circle of black fog. At the start of a Round the black fog will begin to enclose upon the center. The speed of the fog is defined so that at the eight minute mark after a round has begun, the fog will cover the map. The black fog does ten damage per second to any entity within.

*Win Condition*

To win a round of Free-for-All, you must have the most score at the end of a Round. The round ends when there is only one Vessel still alive. The Vessel or Deity with the highest score will win the round, regardless of which vessel was alive at the end of the round.

# Content

## Player

This section defines all the designed player elements. All table measurements in this section will be in meters, seconds, or meters per second. Any constants in this section may be changed for balancing purposes.

### Vessel Index

This section will define the currently designed Vessel classes, weapons, and abilities.

#### *Classes*

This section will explain the intent behind the currently designed classes, and have a table of their statistics.

**Class:** Warrior

The warrior class is a close range Vessel, with a large amount of health. The warrior will be slower, but it can afford the damage it will likely take as it moves into closer range. In other designs, this could be referred to as a 'tank' class.

**Class:** Shaman

The shaman is a medium range, high damage class. It has a lower amount of health, so a shaman has to be careful, and hit its attacks precisely. In other designs, this could be referred to as a 'glass cannon' class.

**Class:** Hunter

The hunter class is a long range class that has a lower amount of damage, but should be able to easily hit targets. The hunter has an average amount of health, and so is less fragile than the shaman.

**Class:** Scout

The scout is a very quick, very close range Vessel, with a low weapon cooldown. The scout will need to get very close to its enemy, and so tactical kiting will be crucial.

### Chart of Base Vessel Character Statistics:

Class	Total Health	Travel Speed	Weapon	Weapon Cooldown
Warrior	150	5	Spear	0.75
Shaman	75	6	Fireball	1.25
Hunter	100	6	Javelin	0.75
Scout	125	7	Sword	0.5

### Chart of Base Vessel Weapon/Projectile Statistics:

Weapon	Damage	Travel Speed	Range	Size (Radius)	Size increase
Spear	30	30	2	0.2	0
Fireball	40	8	8	0.4	0
Javelin	25	15	10	0.2	0
Dagger	25	30	1	0.3	0

### Chart of Vessel Statistics Increase per Level:

Class	Total Health	Travel Speed	Weapon Damage	NOTE:
Warrior	25	0.25	5	These are the only statistics that increase per level.
Shaman	10	0.3	7	
Hunter	15	0.4	3	
Scout	20	0.5	3	

## Abilities

This section will define all the abilities currently designed in the Vessel Abilities pool. Abilities can be of the following types:

#### Type: Buff

See Buff / Debuff for definition. The buff would be applied to the vessel upon cast, and would last a specific duration.

#### Type: Special Projectile

See Projectile for definition. The projectile would differ from a more common projectile as they can cause a debuff on the entity that collides with the projectile.

The specific abilities are defined as follows:

**Buff: Rage**

Rage is a buff that increases Damage dealt while active. The amount of extra damage dealt is a percentage of the base damage of the weapon or ability used, which scales per level.

**Buff: Healing**

Healing is a buff that causes an instant increase to current health. This is a static value that scales per level.

**Buff: Quick Fingers**

Quick fingers is a buff that reduces the weapon cooldown time for a duration, the amount decreased is a number that scales with level. The duration also scales with level.

**Buff: Dash**

Dash is a buff that increases movement speed for a duration, the amount increased is a number that scales with level.

**Buff: Bobble**

Bobble is a buff that increases the size of the vessel's weapon projectiles for a duration. The amount increased by is a number that scales with level. The duration also scales with level.

**Projectile: Poison Dart**

Poison Dart is a projectile that does a base amount of damage on contact and also damages the target overtime. The initial damage and the damage per second are both numbers that scale with level.

**Projectile: Net**

Net is a projectile that prevents a target from moving for a duration. The duration scales with level.

**Projectile: Smash**

Smash is a close range attack that does a large amount of damage, and scales with level.



### Chart of Statistics for Buff Abilities:

Ability	Effect Value	Duration	Cooldown
Rage	$(10 + 2 * level)\% + damage$	$2 + level$	25
Healing	$10 + 2 * level += current health$	instant	20
Quick Fingers	$-0.05 * level + current cooldown$	$5 + \frac{level}{2}$	30
Dash	$2 + level + current speed$	1	20

### Chart of Statistics for Projectile Abilities:

Ability	Damage	Damage Overtime	Duration	Travel Speed	Range	Size (Radius)	Size Increase	Cool down
Poison Dart	$15 + 2 * level$	level	$2 + level$	15	10	0.1	0	20
Net	0	0	level	10	6	0.2	2	20
Smash	$20 + 7 * level$	0	instant	30	1	0.5	2	20

## Deity Index

This section will define the currently designed Deity Aspects and Abilities.

### Aspects & Abilities

This section will define all the aspects currently designed in the Deity Aspect pool. Aspects contain three abilities, which can be of the following types:

#### Type: Buff

See Buff / Debuff for definition. It would be casted onto a target, and would last a duration.

#### Type: Debuff

See Buff / Debuff for definition. It would be casted onto a target, and would last a duration.

#### Type: Summon

Summon type abilities create a new entity into the game map, these will be an Environment entity; they are limited to Gatekeepers or Static Objects.

For each ability, the number of score a deity will gain through their use has a direct relationship to the amount of damage caused or health given through the use of the ability. The specific aspects are designed as follows:

**Aspect: Life**

The Life aspect focuses on healing a character, and its abilities will give score based on the number of health points healed.

- **Quick:** Buff Shield Character
  - Raises the targets current and total health by a number for a duration. At the end of the duration, the total health given is removed, and the current health is truncated if it is higher than the new total health.
- **Common:** Summon Healing Circle
  - Summons a static entity that heals any character that moves overtop it. Characters that stay on top continue to be healed at a per second rate.
- **Grand:** Buff Heal Character
  - Raises the current health of a targeted character by a static number.

**Aspect: Death**

- **Quick:** Summon Illusion Lost
  - Summons a Lost with a weapon damage of zero, and a total health of ten.
- **Common:** Summon Damage Circle
  - Summons a static entity that damages any character that moves overtop it. Characters that stay overtop it continue to take damage at a per second rate.
- **Grand:** Debuff Damage Overtime
  - Damages a targeted character overtime at a static rate.

**Aspect: Augmentor**

- **Quick:** Buff Reduce Weapon Cooldown
  - Lowers the target character's weapon cooldown by a percentage of its current cooldown.
- **Common:** Buff Increase Travel Speed
  - Increases a target's travel speed by a static number.
- **Grand:** Buff Increase Damage
  - Increases a targets damage by a static number.

**Aspect:** Debilitator

- **Quick:** Debuff Increase Weapon Cooldown
  - Increases the target character's weapon cooldown by a percentage of its current cooldown.
- **Common:** Debuff Reduce Travel Speed
  - Reduces a target's travel speed by a static number.
- **Grand:** Debuff Reduce Damage
  - Reduces a targets damage by a static number.

**Aspect:** Gatekeeper

- **Quick:** Buff Lost Stats
  - Increases the weapon damage, travel speed, and total health of a Lost.
- **Common:** Summon Lost
  - Summons a random Lost.
- **Grand:** Buff Guardian Stats
  - Increases the weapon damage, travel speed, and total health of a Guardian.

**Aspect:** Soul

- **Quick:** Debuff Lost Stats
  - Reduces the weapon damage, travel speed, and total health of a Lost.
- **Common:** Debuff Damage Gatekeeper
  - Lowers the current health of a Gatekeeper.
- **Grand:** Debuff Guardian Stats
  - Reduces the weapon damage, travel speed, and total health of a Guardian.

### Chart of Aspect / Ability Statistics:

Ability	Effect Value	Duration	Size (Radius)	Cooldown
Buff Shield Character	50	5	N/A	10
Summon Healing Circle	10	8	2	30
Buff Heal Character	100	N/A	N/A	60
Summon Illusion Lost	N/A	N/A	N/A	10
Summon Damage Circle	10	8	2	30
Debuff Damage Overtime	10	6	N/A	60
Buff Reduce Weapon Cooldown	50%	5	N/A	10
Buff Increase Travel Speed	3	10	N/A	30
Buff Increase Damage	20	8	N/A	60
Debuff Increase Weapon Cooldown	50%	5	N/A	10
Debuff Reduce Travel Speed	3	10	N/A	30
Debuff Reduce Damage	20	8	N/A	60
Buff Lost Stats	50%	5	N/A	10
Summon Lost	N/A	N/A	N/A	30
Buff Guardian Stats	50%	10	N/A	60
Debuff Lost Stats	50%	5	N/A	10
Debuff Damage Gatekeeper	75	N/A	N/A	30
Debuff Guardian Stats	50%	10	N/A	60

## Gatekeeper Index

This section will define the currently designed Gatekeeper characters.

### Archetypes

This will define all the archetypes in each hierarchy of the Gatekeeper faction. They all have one thing in common: every gatekeeper will flee from the Black Fog.

## **Type:** Lost

The Lost are the weakest of the Gatekeepers, and are characterized by their lesser intelligence, and weaker statistics. A vessel will gain 10 experience and 50 score for killing a lost.

- **Archetype:** Fast Melee
  - The fast melee is a quick, very short range type. An aggressive type, the fast melee will wander aimlessly around until a Vessel comes within vision. It will then beeline towards the vessel, ignoring any hazards in its path. It will attack the vessel until death.
- **Archetype:** Melee
  - The melee is a larger, smarter version of the fast melee. The melee will still wander until a vessel moves into vision, when it will beeline towards it. The melee, however, will navigate around any static objects in its path. It will attack the vessel until death.
- **Archetype:** Tough Melee
  - The tough melee is a slow, longer range, melee type. It has a high damage, but skilled vessels should find it easy to defeat. The tough melee will still wander until a vessel moves into vision, when it will beeline towards it. The tough melee will also navigate around any static objects in its path. It will attack the vessel until death.
- **Archetype:** Fast Ranged
  - The fast ranged is a weak, but fast ranged type. The fast ranged will wander aimlessly until a vessel is in sight, where it will move just close enough to be in attack range. It will then attempt to kill the vessel as fast as possible, only moving if the vessel moves out of range. It will attack until death.
- **Archetype:** Ranged
  - The ranged class is the most well-rounded and intelligent Lost. The ranged will dutifully patrol an area around its spawn point until a vessel comes into vision. The ranged will then move into attack range of the vessel, but will move away from the vessel if the vessel comes within four meters. It will attack until death.
- **Archetype:** Tough Ranged
  - The tough ranged has the longest range of the Lost, and has the most special attack. The tough ranged functions the same way as a fast ranged, the only difference between the two being the stats and that the tough range's attack is multi-projectile. That is, when the tough ranged fires its weapon, three projectiles fire towards the vessel, with a slight spread between them.

## **Type:** Guardian

The Guardians are much stronger and smarter than the Lost, and will be much more difficult to kill. A vessel will gain 50 experience and 200 score for killing a guardian.

- **Archetype:** Plant
  - The Plant is the only stationary gatekeeper. It cannot move whatsoever. It will merely attack any vessel within range. The plant does, however, have a special attack; it fires five widely spread projectiles at once.
- **Archetype:** Wolf
  - The Wolf is the fastest guardian, and the most aggressive. The wolf will patrol an area around its spawn point, and charge any vessel that comes within vision range. The wolf will avoid any static objects in its way. It will attack until death.
- **Archetype:** Bear
  - The bear is the slowest guardian, but it has the highest damage. The bear will patrol an area around its spawn point, and attempt to attack any vessel that comes within sight. The bear, however, will attempt to flee from the vessel if its health goes below 25%.
- **Archetype:** Insect
  - The insect is the only mobile ranged guardian. The insect will patrol an area around its spawn point, and move into attack range of any vessel that comes into vision. It will try to maintain four meters between itself and the vessel. It will avoid any static objects. It will attack until death.

## **Type:** Arbiter

The arbiter is the most powerful and strongest gatekeeper, he has a weapon as well as two abilities, both of which are special projectiles. The arbiter will wait patiently on his spawn point until a vessel comes into vision range. The arbiter will then aggressively beeline into attack range and use both his abilities as often as he can. He will assault the vessel until death. If the arbiter can no longer see any vessels, he will return to his place at the center of the map. A vessel will gain 200 experience and 800 score for killing the Arbiter. The arbiter's abilities are defined as follows:

- **Multiple Projectile:** Sweep
  - The sweep is a seven shot multi-projectile with a wide spread. The middle shot is aimed at a vessel and will help the arbiter against multiple vessels.
- **Projectile:** Snipe
  - The snipe is the longest range projectile in the game. It functions as an anti-kite mechanism for vessels against the arbiter. It is a very fast single-shot ability; almost certain to hit its target.

### Chart of Lost Statistics:

Archetype	Total Health	Move Speed	Damage	Range	Projectile Speed	Projectile Size	Cooldown
Fast Melee	60	5	20	1	30	0.3	0.6
Melee	80	4	30	2	30	0.4	0.75
Tough Melee	100	3	40	3	30	0.5	1
Fast Ranged	40	4	10	6	7	0.1	0.75
Ranged	60	3	20	8	8	0.2	0.8
Tough Ranged	80	2	30	10	9	0.2 (x3)	1

### Chart of Guardian Statistics:

Archetype	Total Health	Move Speed	Damage	Range	Projectile Speed	Projectile Size	Cooldown
Plant	400	0	40	12	15	0.4 (x5)	0.75
Wolf	400	5	60	4	30	0.8	1.25
Bear	600	4	80	3	30	1	1.25
Insect	300	4	50	8	8	0.6	1

### Chart of Arbiter Statistics:

Archetype	Total Health	Move Speed	Damage	Range	Projectile Speed	Projectile Size	Cooldown
Arbiter	2000	2	100	15	10	1.25	1.5

### Chart of Arbiter Ability Statistics:

Ability	Damage	Range	Travel Speed	Size (Radius)	Size Increase	Cooldown
Sweep	75	10	5	1 (x7)	0	5
Snipe	40	20	20	0.4	3	6

# Glossary

This section defines any terms that might not be common language.

## *Chat*

In this context, refers to the text-based chat box that allows users to broadcast messages to the other users.

## *Cooldown*

An amount of time, in seconds, that something must wait before it can be used again.

## *Viewport*

The view screen for a user, represented on the program window.