



Game Design Document

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Concept and Intent

Bring Your Spells is a first-person action-adventure game in which the player controls a mage who must wield a variety of spells to defeat enemies and progress through a series of levels to take down the big bad boss. This game is unique for the genre because it is designed to provide fast-paced, close-quarters gameplay and break the slow-casting and long-ranged stereotype that most games use when portraying mages. Each spell in the game is unique, meaning that each one has its own element, effect, and charge rate. Defeating an enemy with a spell from one element (such as [Energy]) will cause it to drop pick-ups that reduce the cooldown of spells featuring a different element (such as [Void] or [Nature]). This should encourage the player to choose their spell loadout strategically before beginning each level, along with pushing them to play quickly and aggressively.

Bring Your Spells will be developed in the Unity game engine, and we currently intend to release it for Windows computers. Its art style will feature dark colors such as blues and grays, along with sharp environments, to emphasize the dark fantasy theme. Enemies and spells, on the other hand, will be brightly colored or will feature glowing effects to stand out against the background. *Bring Your Spells* will appeal to players who want to enjoy a unique experience each time they play thanks to its large focus on customization. Randomized loot drops and limited spell space also allow the player to build their mage any way they want, encouraging many different play styles. Gameplay is fast-paced, and players should be able to complete an average level within 5-7 minutes.

Target Audience

Bring Your Spells is mainly aimed towards males ages 15-25, people who enjoy fast paced games that require quick decision making. Our target user would be an INFP on the MBTI test, a creative thinker who goes with the flow but is focused on personal improvement. They would be motivated by the exploration of both the levels and the spell interactions but would get excited by the fast paced action combat

Monetization

Bring Your Spells would be put up on Steam and possibly other platforms such as Itch.io and Epic Games Store for \$10 as a one time purchase. This is because publishing for money is good to show as completed project but we do not intend to make a large profit as this is a school project. If the project progresses even further we can expand what we create and increase the price point to match closer with similar existing games.

Marketing Approach

Currently *Wisely Studios* has no plans to market *Bring Your Spells* beyond Champlain College, however if we were going to continue forward with the project, Twitter and Discord would be the platforms of choice. These are two of the standard methods of advertising new game releases and could be used during production to relate progress on the game to fans. While these are good ways to sustain engagement they do not work as well for promotion. For gaining new fans, making posts on smaller Reddit gaming communities and getting Youtubers to play the game are common ways. These are both good ways to generate interest with little to no monetary investment.

Context and Narrative

General Narrative:

Bring Your Spells takes place in a dark fantasy world besieged by the forces of evil. The player controls an alchemist who can cast magic correlating to the elements of [Nature], [Void], [Energy], and [Force]. After falling asleep in their home one night, the alchemist awakens to find themselves locked in a jail cell at the bottom of a twisted tower that was once their home. They soon discover that their spouse, the most powerful mage in the land, has accidentally opened and become corrupted by an incredibly powerful demonic book. It is up to the alchemist to climb to the top of the tower, fighting monsters and earning spells as they strive to save their beloved - and perhaps their marriage, as well. Despite the dark atmosphere, creepy environments, and the high stakes storyline, *Bring Your Spells* has a relatively lighthearted atmosphere thanks to its silly spells, cute enemy designs, heavy use of puns, and semi-sarcastic dialogue.

Characters:

The Alchemist: The protagonist and player character, who must journey up the tower to defeat their loved one and free them from the vile book's curse. They have no innate magical ability, instead relying on a magical artifact to cast spells. Because of this, their magic tends to deal with several scientific elements, including [Nature], [Void], [Energy], and [Force].

The Mage: The apparent main antagonist of *Bring Your Spells* and the alchemist's spouse, the mage was once the most powerful and most virtuous spell-caster in the kingdom before they mistakenly opened the demonic tome. They are the master of the tower, controlling the monsters and other perils found therein.

The Dark Tome: A book that was bound to be evil, and the true main antagonist of *Bring Your Spells*. The dark tome is a cursed spellbook that corrupts anyone who reads its contents, twisting them into a shadow of their former self.

The Shopkeeper: A mysterious, cat-like, and foul-meowth-er, foul-mouthed figure who offers the alchemist new spells in exchange for gold coins. The origin of these spells is a mystery to all but their *purrveyor*, but it is obvious that the shopkeeper carries an insatiable lust for wealth and an incredibly sharp tongue. There may be more to this humble merchant than meets the eye... but probably not.

Narrative Risk Analysis:

Currently, the largest risk surrounding the narrative is whether or not we will be able to convey any of its elements before the Midmortem presentation. Our team has been focusing primarily on developing *Bring Your Spells*' gameplay since we began development in early September, with the narrative being an incredibly minor piece of our imagined vision. As such, while we would like to at least have a short introduction to the game showcasing its basic context before the end of our first semester, we are saving the majority of the writing process for the second one, should *Bring Your Spells* move forward.

Design Risk Analysis

As a whole, our team is confident in our ability to design and develop *Bring Your Spells* into a strong game. However, there are a few potential concerns that we plan to address, which are outlined below:

- **Developing a Strong Game Feel:** In order for us to make *Bring Your Spells* enjoyable to play, we must first ensure that its gameplay feels solid. This includes keeping the movement fast, fluid, and tight to keep with our intended fast pace. Likewise, we must continuously improve upon the combat mechanics to keep them similarly engaging. The final area of game-feel that we intend to focus on is player feedback, where various actions - such as dealing damage, taking damage, or acquiring gold - are impactful and easy to understand. We will develop each of these areas through rigorous testing, messing with the variables for movement, spells, and various forms of feedback until testers seem to (almost) universally enjoy them.
- **Sound Design:** Wisely Studios lacks a sound designer, and because of this, *Bring Your Spells* has a fairly subpar sound design. Most of our current audio effects come from free websites, which lack proper mixing or consistent volumes. This has heavily dampered our abilities to produce strong audial feedback. To rectify this issue, we plan to request a sound designer to join our team during the next semester. We will then trust this

designer to produce or otherwise acquire new sounds to replace our current selection, which will hopefully give *Bring Your Spells* a stronger sense of feedback.

- **Balancing:** One major concern our team faces is that, as of now, enemies and spells in *Bring Your Spells* both suffer due to a lack of proper balancing. The only enemy variety in the game is too slow and too weak to provide players with a proper challenge. Though we have made strides in making them more powerful by increasing their speed, detection radius, and attack radius, they still feel fairly uninteresting and die too quickly. This, combined with the general difficulty of developing new enemies in the first place, has led us to understand that designing and balancing enemies for *Bring Your Spells* is a major design risk without a dedicated AI programmer and a massive amount of testing. Likewise, we have been putting in quite a bit of effort lately to balance spells in relation to one another. The Bee spell, for example, is currently far weaker than the Magic Laser spell, as the latter shoots further, recharges more quickly, and has a larger number of maximum charges. We have many plans to fix this discrepancy, but it has still made us realize that as we continue to develop *Bring Your Spells*, we will have to create and balance an ever-growing library of spells against one another. Once again, this is an issue that we plan to solve (or at least treat) via constantly testing the game and iterating upon each spell time and time again.

Player Motivation

Players should find themselves feeling motivated to play through *Bring Your Spells* due to a variety of factors. These factors are as follows:

- **Experimenting with spells.** Players who are most invested in the magic-casting and magic-collection aspects of *Bring Your Spells* will be motivated to keep playing so they can obtain more of them and find new ways to make them synergize. Completionists will also be motivated to purchase every spell in the between-level shop.
- **Fighting enemies.** Players who most enjoy *Bring Your Spells*' combat will want to keep playing thanks to the variety of enemies and bosses, which provide multiple intricate combat scenarios. Like the experimenters listed above, these players will also toy around with spells, though they will primarily focus on defeating enemies quickly and efficiently, rather than seeking out synergy in general.
- **Exploring the levels.** For players who are most interested in exploration, each level's hidden treasure chests, rooms, and passageways will provide the main motivation to continue playing *Bring Your Spells*. They are also motivated by different level layouts and designs, along with different enemies, that provide a constant marker of progress.
- **Uncovering the story.** While *Bring Your Spells* features a fairly simple storyline (at least as of this point in development), some players will nonetheless find themselves invested in seeing it through to the end. For them, defeating enemies and exploring levels are mainly a means to an end, with the end in question being between-level cutscenes and dialogue.

Gameplay States

Level Start State: When the player chooses to begin a level, the screen will fade and the player will be placed at the level's designated "entry" point. Additionally, the player's spells will be set to their maximum number of charges, while they will gain a new gold count for the current level, which is set to zero.

Level End State: There are three ways to end a level in *Bring Your Spells*:

- If the player reaches the level's end (for levels that lack bosses), they win.
- If the player defeats the level's end boss (for levels containing one or more bosses), they win.
- If the player's health reaches zero, they lose. They are then given the choice to restart the level with a new spell loadout or to return to their most recent checkpoint with half their previous gold.

Between Levels State: Upon completing a level, the player is transported to a menu where they can save their progress, purchase spells, and set up their loadout before progressing to the next level.

Mechanics

Movement: The player can move the player character around each level by walking, jumping, and dashing. This allows them to explore the level, move up or down staircases and through rooms, and perform basic platforming. By selecting certain movement spells at the beginning of the level, the player can augment their jumping and dashing abilities to make them more powerful, allowing for more exploration. If the player walks off the edge of a platform, they will fall until they hit the ground or kill plane.

Casting Spells: Using one of the designated buttons, the player can cast any spell that has one or more charges remaining. Casting (and completing the cast for) a combat spell causes it to target a certain area, and if it strikes or more enemies, it will deal damage to them. Trying to cast a spell with no charges remaining will cause it to emit a negative sound effect, informing the player that they cannot currently cast it.

Interacting: If the player moves over to certain objects, they can press a specific button to interact with them. Doing this causes the player character to perform a certain action, such as opening treasure chests throughout the world.

Picking Up Items: The player can pick up items that enemies drop by walking over them, which gives them the items automatically. Enemies can drop the following items:

- **Gold**, which allows the player to purchase combat and movement spells in the between-level shop; and
- **Elemental recharge orbs**, which reduce the cooldown time for any spell of the associated element in the player's possession.

Purchasing Spells: While preparing to enter a level, the player can use their gold to buy combat and movement spells from an in-game store. The player can purchase as many spells as they can afford.

Setting Spells: Before the player enters a level, they are given the option to select the [3] combat spells, the [1] jump spell, and the [1] dash spell they want to bring along. The player cannot enter a level unless every slot is filled, unless they do not have enough spells from one category.

Systems

Player Systems:

Movement System: Whenever the player is exploring a level and has control over their character (as evidenced by the UI appearing on-screen), they can use the WASD keys or a controller's left analog stick to move around. While playing on a keyboard, they can tap the shift key while moving to start or stop sprinting, while they must tap the left analog stick to sprint on a controller.

- They can also press the spacebar, the A-button (on an XBox controller), or the X-button (on a PS4 controller) to jump
- Additionally, they can press the left trigger or right mouse button to dash in their facing direction.

Camera System: *Bring Your Spells* uses a first-person camera, meaning it will constantly point in whichever direction the player character is currently looking. The player can move the camera (and, consequently, the character's eyes) using either the mouse or the right analog stick. If one controller's sensitivity is too high or too low for the player's liking, they can adjust the horizontal and vertical values in the menu.

Health System: The player character has a set amount of health, which is constantly visible on-screen. This number decreases every time an enemy lands a successful attack on the player character. If their health reaches zero, the player must restart from the last checkpoint (the beginning of each level for the sake of the current version). If the player avoids taking damage for a certain number of seconds, their health will naturally begin to refill.

Spellcasting System: The player can move the mouse's scroll wheel, press the Q and E keys, or press a controller's left and right bumpers to toggle between their

three combat spells. When they have one or more charges left on the selected combat spell, they can press the left mouse button or the right trigger (on any controller) to cast it. When using a movement spell, the player will automatically cast their jump spell if they tap the jump button while in midair (the same input as a usual double-jump), and they can cast the dash spell via the right mouse button or the left trigger (on any controller).

- For most spells, casting occurs immediately, consuming one of its charges. Some spells, on the other hand, require the player to manually select their starting position, and a charge will not be consumed until the player does so. Energy spells also allow the player to hold down on the cast button to “charge” it up over time, and they can release the button to fire it off.
- The player can cancel certain jump spells, especially ones that leave them hanging in the air, by pressing the jump button while the spell’s effect is active.

Interaction System: By pressing the F key on the keyboard, the X-button on the XBox controller, or square-button on the PS4 controller, the player can interact with certain objects, such as treasure chests or (in future iterations) keys and locked doors. This allows them to perform certain actions they can normally not manage with spells alone.

Menu System: While the player is in control of their character, they can press the escape key on the keyboard, the menu button on the XBox controller, or the options button the PS4 controller to open up the menu. From there, they can choose to close the menu, restart the level, return to the title screen, or fiddle with various settings. These settings include the game’s brightness and camera sensitivity.

Enemy Systems:

General Enemy AI: For the most part, enemies will feature a zone of aggression (typically comprising either the room they are guarding or a cone in front of their heads), and if the player enters this zone, they will immediately pursue them. They will also move towards the player's position if the player attacks them first, such as striking them with a spell from behind or from far away.

Enemy Stats: Each enemy type has a variety of set stats, which determines their survivability and the damage they deal when attacking the player character.

- **Health** determines how much damage an enemy can take before it dies.
- **Attack** determines how much damage an enemy deals when it attacks the player. Certain enemy attacks may have separate multipliers that utilize this stat to determine their strength.
- **Speed** determines how quickly the enemy moves towards the player and how quickly it performs attacks.

Enemy Attack Types: Most enemies in *Bring Your Spells* utilize a variety of attacks to try and defeat the player character. These fall into two distinct categories:

- **Basic Attacks**, which are typically melee swings or physical projectiles, such as arrows.
- **Advanced Attacks**, which range from more complicated physical attacks to special attacks to magic spells. Fodder enemies will typically not have advanced attacks, but stronger opponents and bosses will have one or more, depending on their intended strength.

Enemy Drops: Killing enemies will reward the player with a number of items, including gold and elemental recharge orbs. The amount of gold and orbs each enemy drops is constant, while the type of orbs varies depending on the spell the player used to kill them.

Spell Systems:

Element System: Each combat spell in *Bring Your Spells* falls into one of four basic elemental categories: [Nature], [Void], [Energy], and [Force]. Movement spells also have their own unique element. A spell's element determines whether or not its cooldown will be reduced whenever the player picks up certain element recharge orbs.

Spell Types System: Spells fall into two basic categories:

- **Movement Spells** augment the player's ability to perform horizontal or vertical movement. The player can take [1] dash spell and [1] jump spell into a level.
- **Combat Spells** deal damage to one or more enemies. Some of them provide other benefits, such as stunning enemies or inflicting damage over a period of time. The player can take [3] combat spells of any elemental combinations into a level.

Cooldown and Charge System: Every spell has a limited number of charges. The player can only cast a spell as many times as charges they have remaining. Upon using a charge, the spell immediately enters a cooldown state, where the used charge will refill after a certain number of seconds.

Elemental Recharge System: After defeating an enemy with a combat spell of one element, it will drop a predetermined number of orbs from one or more different elements. Picking up these orbs will reduce the cooldown of any spells of the corresponding element. Each spell recharges a different combination of elements (i.e., one [Void] spell may cause an enemy to drop [Nature] orbs, while another [Void] spell might make them drop [Energy] and [Force] orbs, instead).

Level Systems:

Platforming System: At certain points during a level, the player will be expected to perform basic platforming to progress or to reach faraway enemies or treasure. Because they do not take damage from falling, there are usually no consequences for failure.

Locked Door System: Many dungeons will feature simple locked door puzzles, where the player must find a key elsewhere in order to proceed. Keys may be located in treasure chests or on enemies, in which case the player must defeat them to proceed.

Boss Battle System: At the end of each level, the player will typically have to defeat a boss to proceed onward. Entering a boss' chamber will prevent the player from returning to the rest of the level. Most boss rooms will have obvious entryways, such as large doors requiring a key to open or a hole leading in from above.

End Level System: Upon defeating a level's boss, the player is given 15 seconds to pick up any dropped items before the level automatically ends and takes them to the "Between-Level State".

Between-Level Systems:

Shop System: Using gold earned throughout each level, the player can purchase movement and combat spells from the in-game shop. Different spells have different prices, and once the player has made a purchase, they cannot rescind it.

Setting Spells System: Before the player begins exploring a level, they will receive a short blurb describing it and any dangers they are expected to face therein. They will then be allowed to select any [3] combat spells, any [1] dash spell, and any [1] jump spell to bring with them into the level.

Game Engine

Bring Your Spells will be developed in the Unity game engine. Specifically, we intend to use **Unity 2019.2.5f1**. This is because the majority of our teammates are most comfortable working in Unity, and it provides the ease of use we require to create the variety of interesting spells, levels, and enemies we would like to produce for *Bring Your Spells*.

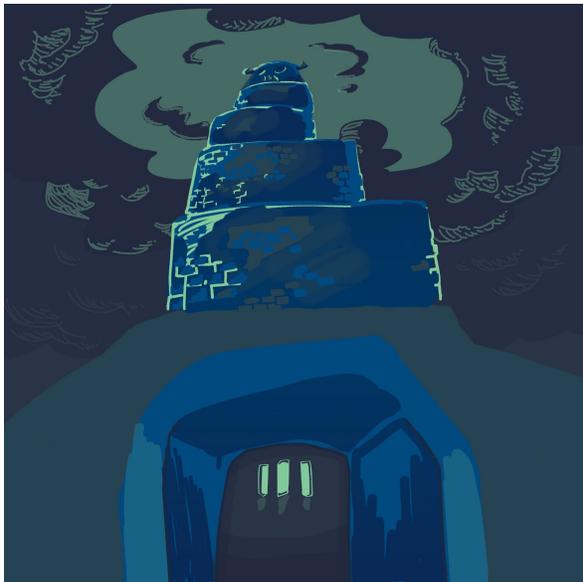
We will also be using at least one package to help us develop *Bring Your Spells*. These packages are as follows:

- **TextMesh Pro**, a Unity plugin that improves the UI in a number of ways, such as by adding checkboxes and giving developers more control over text.

Art Direction

Environment Art:

Because *Bring Your Spells* takes place in a dark fantasy world where the player must climb an evil wizard's tower, we intend to make the backgrounds feel dull, cold, and hostile. They will primarily feature blues and grays, with dark shadows and sharp edges to give the player the impression that they should not be in the area. We will also use green as a "pop" color to contrast the background, while purple will act as a compliment. All levels - at least until Midmortems - will also take place within the tower.



Other levels might feature slightly different color schemes to fit each level's theme, but the general principle of keeping levels dark and unfriendly will not change. Props will also utilize sharp-edged, random angles and a dull color palette, which will help them stand apart from the walls.

Enemy Art:

To contrast the sharp backgrounds, enemies in *Bring Your Spells* will feature bodies made from simple shapes. They will often feature angry colors such as reds and oranges, along with large, bright eyes. This will help draw the player's attention and make them stand out against the dark environments. Some enemies may also use colors like tan and gray to compliment their designs. However, these extra colors will be used more sparingly.



Spell Art:

Given that spells are the primary focus of *Bring Your Spells*, we intend to make them pop against the desaturated backgrounds. They will feature a wide variety of colors depending on their elemental affinity. Some of them may glow or otherwise appear very bright, which will also help them stand out more.

Sound Design

Music:

Currently, *Bring Your Spells* lacks music outside of the narrative scene and boss fight. We decided to take this route because our team currently lacks a sound designer or musician, so keeping our music options to a minimum should allow us to focus on more relevant parts of our design. In the future, should we acquire a sound designer, we may try to add more music to *Bring Your Spells*.

- The shop menu will feature fairly upbeat, vibrant music to reflect the shop's safety and the silliness of the shopkeeper.
- The dungeons will either feature darker, creepier songs or ambient noise to make them feel hostile and uninviting. However, regardless of which decision we take, they will feature some kind of background sound to keep them from feeling incredibly empty.
- Certain events will also feature music tailored to fit the occasion. Boss fights, for example, may feature more bombastic, intense soundtracks to make the atmosphere feel heavier.

Sound Effects:

Most of *Bring Your Spells'* current sound effects come from free online sources, since our team lacks a sound designer and we have no way to reliably create our own sound effects as of now. Should we acquire a sound designer, however, we will seek to rectify this issue immediately.

- Each spell features one or more sounds that are appropriate to its effects. For example, the [Nature] spell Bee Blast utilizes the sound of buzzing bees to accompany its projectile. The [Force] spell Frost Spike, on the other hand, features the sound of shattering ice to accompany the effect.

- Other sounds will come from a variety of sources, including:
 - Player (footsteps, landing, damage, etc.)
 - Fire (candles, etc.)
 - Lanterns (chain movement)
 - Enemies (footsteps, attack sounds, cries, etc.)