**ARCANE BASTION**

**Documentation**

**Game Overview**

**Epic:**

*As a player, I want to defend my wizard tower from waves of enemies so that I can survive as long as possible.*

**🎯 Core Mechanics**

* First-person, 3D action game made with **Unity, Blender, and Visual Studio 2022**.
* The player controls a **wizard with elemental powers** (fireball, lightning, etc.).
* The goal is to **defend the tower** against **waves of enemies**.

**🎮 Target Audience**

* Casual and **mid-core gamers** who enjoy **fast-paced action**.

**Sprint 1: Core Gameplay**

**User Stories & Acceptance Criteria**

**🧙 Player Movement & Controls**

*As a player, I want to move smoothly on top of the tower so that I can dodge enemy attacks and position myself strategically.*

✅ The player can move using **WASD**.  
✅ The player can jump with **Spacebar**.  
✅ The player can rotate using **mouse movement**.

**🔥 Spell Casting System**

*As a wizard, I want to cast elemental spells so that I can attack enemies with different effects.*

✅ The player can shoot a **fireball** using **Left Click**.  
✅ The fireball explodes **on impact**, dealing damage in a small radius.  
✅ The fireball applies **knockback** to enemies.  
✅ The casting of the fireball has **cooldown**.

**👿 Enemy AI: Basic Behavior**

*As an enemy, I want to attack both the tower and the player so that I can inflict damage.*

✅ Enemies spawn **at designated points**.  
✅ Enemies **move toward the tower/player**.  
✅ If an enemy reaches the tower, **it deals damage**.  
✅ If an enemy is hit by a fireball, **it takes damage and gets knocked back**.

**Sprint 2: Advanced Combat & Enemy Types**

**User Stories & Acceptance Criteria**

**⚔️ Additional Enemy Types**

*As a game designer, I want different enemy behaviors so that combat feels dynamic and challenging.*

✅ **Trolls:** Slow, strong melee attacks, high health.  
✅ **Goblins:** Fast but weak, melee attacks.  
✅ **Skeletons:** Ranged attacks with poison effect.

**💥 Explosion & Shockwave System**

*As a player, I want my fireballs to cause an explosive shockwave so that I can push enemies away.*

✅ Upon collision, fireballs create an **explosion effect**.  
✅ Nearby enemies take **damage and knockback**.  
✅ Knocked enemies **stop moving for 2 seconds**, then resume.

**Sprint 3: Progression & Upgrades**

**User Stories & Acceptance Criteria**

**🔺 Spell Upgrades & Unlocks**

*As a player, I want to unlock new abilities so that I can become more powerful over time.*

✅ The player can unlock **Lightning Spell** (increase damage of attack).

✅ The player can **upgrade** **the Lightning Spell** (increase damage of attack).  
✅ The player can **upgrade Fireball** (larger explosion radius).

✅ The player can unlock **Runestone** (turret base object that shoots enemies and slows them).  
✅ The player can **increase mana pool** to cast more spells.

**🏆 Score & Progression System**

*As a player, I want to track my performance so that I can aim for higher survival times.*

✅ Players earn **points** for each wave defeated.  
✅ Score/wave increases **over time based on survival**.  
✅ Players can **spend points on upgrades**.

**Sprint 4: UI/UX & Final Touches**

**User Stories & Acceptance Criteria**

**📊 User Interface (UI)**

*As a player, I want a clear interface that shows my health, mana, and score.*

✅ Display **health and mana bars**.  
✅ Show **enemy waves**.  
✅ Add **pause menu with settings**.

**🎨 Visual & Audio Polish**

*As a player, I want immersive visuals and sound effects so that the game feels exciting and magical.*

✅ Add **spell casting sound effects**.  
✅ Improve **enemy animations & reactions**.  
✅ Add **background music and ambient sounds**.