

Steamwell

Team 5: Cogs in the Machine

Meet the Team!

 **Atilla Istami**
Programmer

 **Edward Ramon**
Narrative,
Game Designer

 **Joy Ekechukwu**
Programmer,
Game Designer

 **Lila Mali**
Concept Artist,
UI/UX Designer

 **Maxmillion
Maldonado**
Scrum Master,
Audio/Level Designer,
Technical Lead

 **Patrice Hayes**
3D Artist

 **Stephen Ozan**
Programmer



-High Concept-

- Engineer makes mistake
- Nearly destroys world
- Venture back to fix it
- Solve puzzles and repair your past!



Initial Designs

Concept

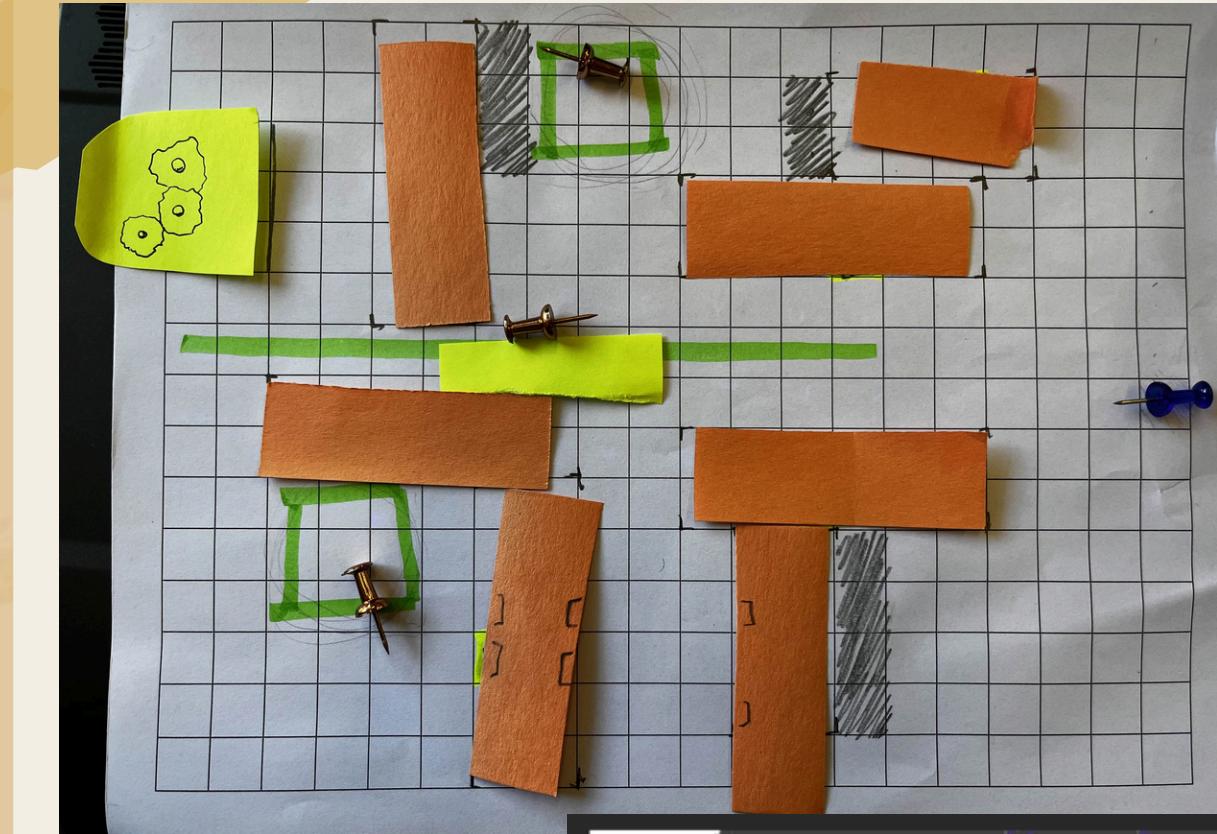
Narrative puzzle game: play story as Spokesperson, venture into factory!

Mechanics

Solve puzzles, evade enemy bots!

Aesthetics

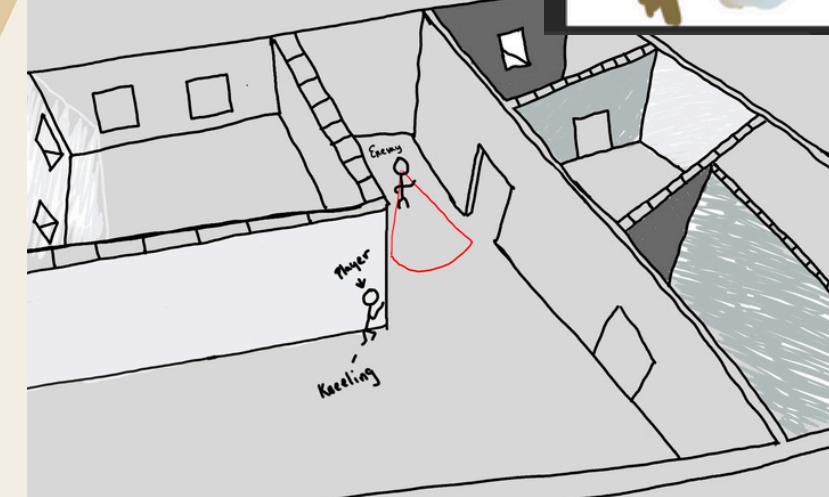
Emphasis on strategy and feelings of adventure.



Early Level 1 Design



mailroom



Core Mechanics

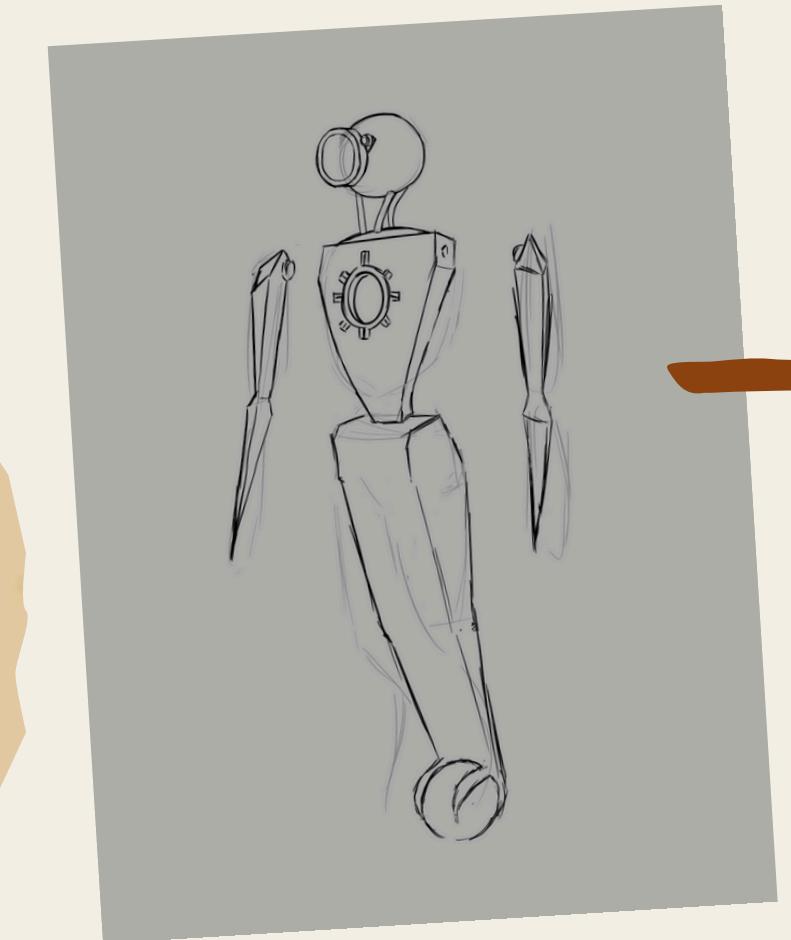
Interactables

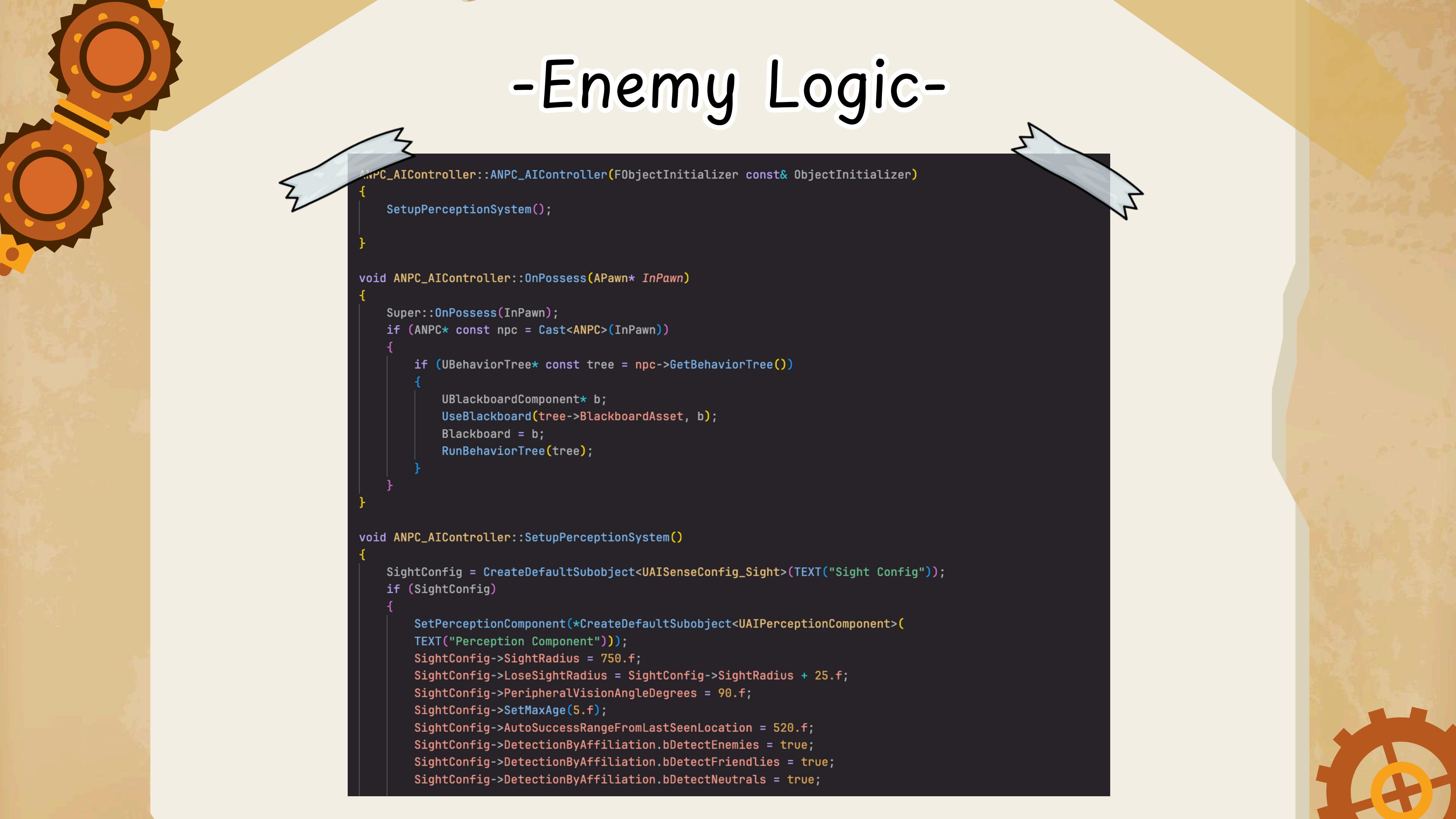
- Push/Pull Objects
- Object matching/alignment
- Podiums



Enemy Bots

- Avoid their lasers
- Lose LOS
- Don't get close!





-Enemy Logic-

```
ANPC_AIController::ANPC_AIController(FObjectInitializer const& ObjectInitializer)
{
    SetupPerceptionSystem();
}

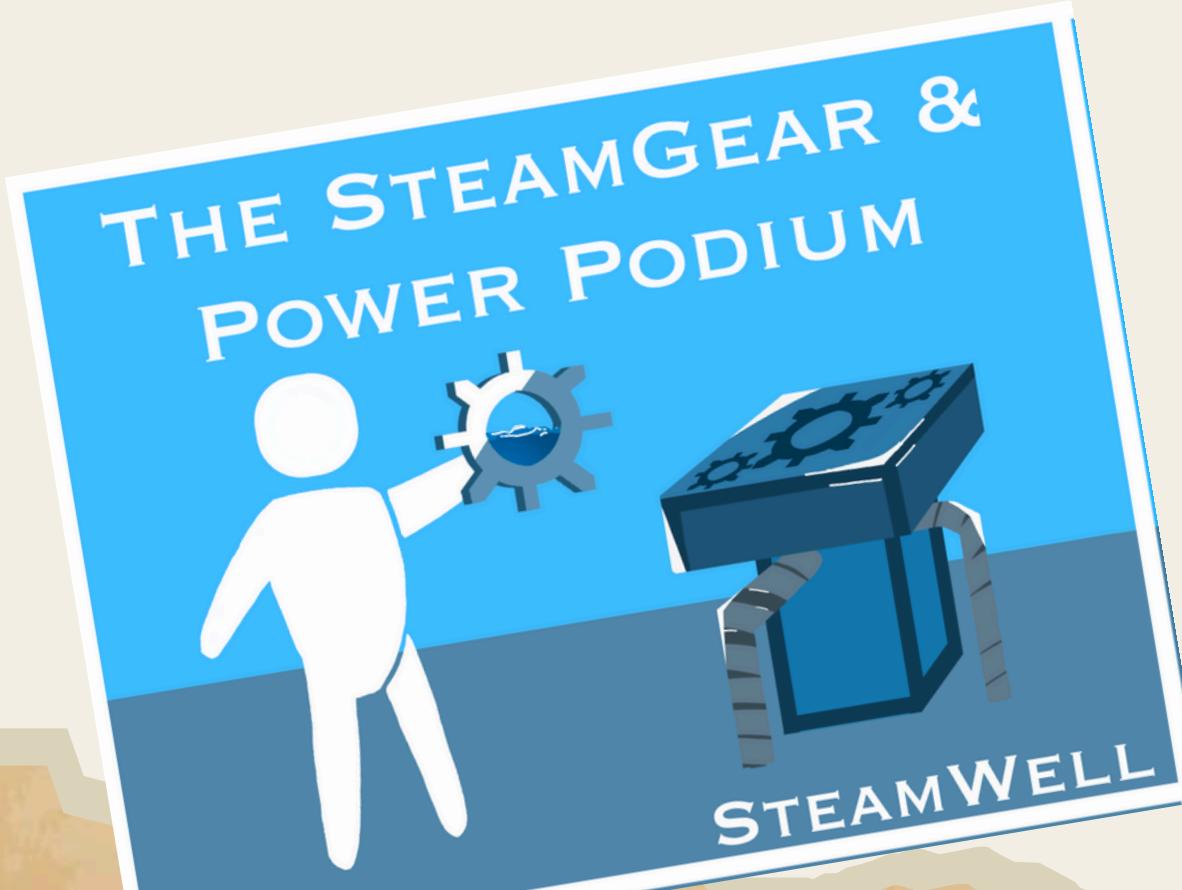
void ANPC_AIController::OnPossess(APawn* InPawn)
{
    Super::OnPossess(InPawn);
    if (ANPC* const npc = Cast<ANPC>(InPawn))
    {
        if (UBehaviorTree* const tree = npc->GetBehaviorTree())
        {
            UBlackboardComponent* b;
            UseBlackboard(tree->BlackboardAsset, b);
            Blackboard = b;
            RunBehaviorTree(tree);
        }
    }
}

void ANPC_AIController::SetupPerceptionSystem()
{
    SightConfig = CreateDefaultSubobject<UAISSenseConfig_Sight>(TEXT("Sight Config"));
    if (SightConfig)
    {
        SetPerceptionComponent(*CreateDefaultSubobject<UAIPerceptionComponent>(
            TEXT("Perception Component")));
        SightConfig->SightRadius = 750.f;
        SightConfig->LoseSightRadius = SightConfig->SightRadius + 25.f;
        SightConfig->PeripheralVisionAngleDegrees = 90.f;
        SightConfig->SetMaxAge(5.f);
        SightConfig->AutoSuccessRangeFromLastSeenLocation = 520.f;
        SightConfig->DetectionByAffiliation.bDetectEnemies = true;
        SightConfig->DetectionByAffiliation.bDetectFriendlies = true;
        SightConfig->DetectionByAffiliation.bDetectNeutrals = true;
    }
}
```

Dynamics & Aesthetics

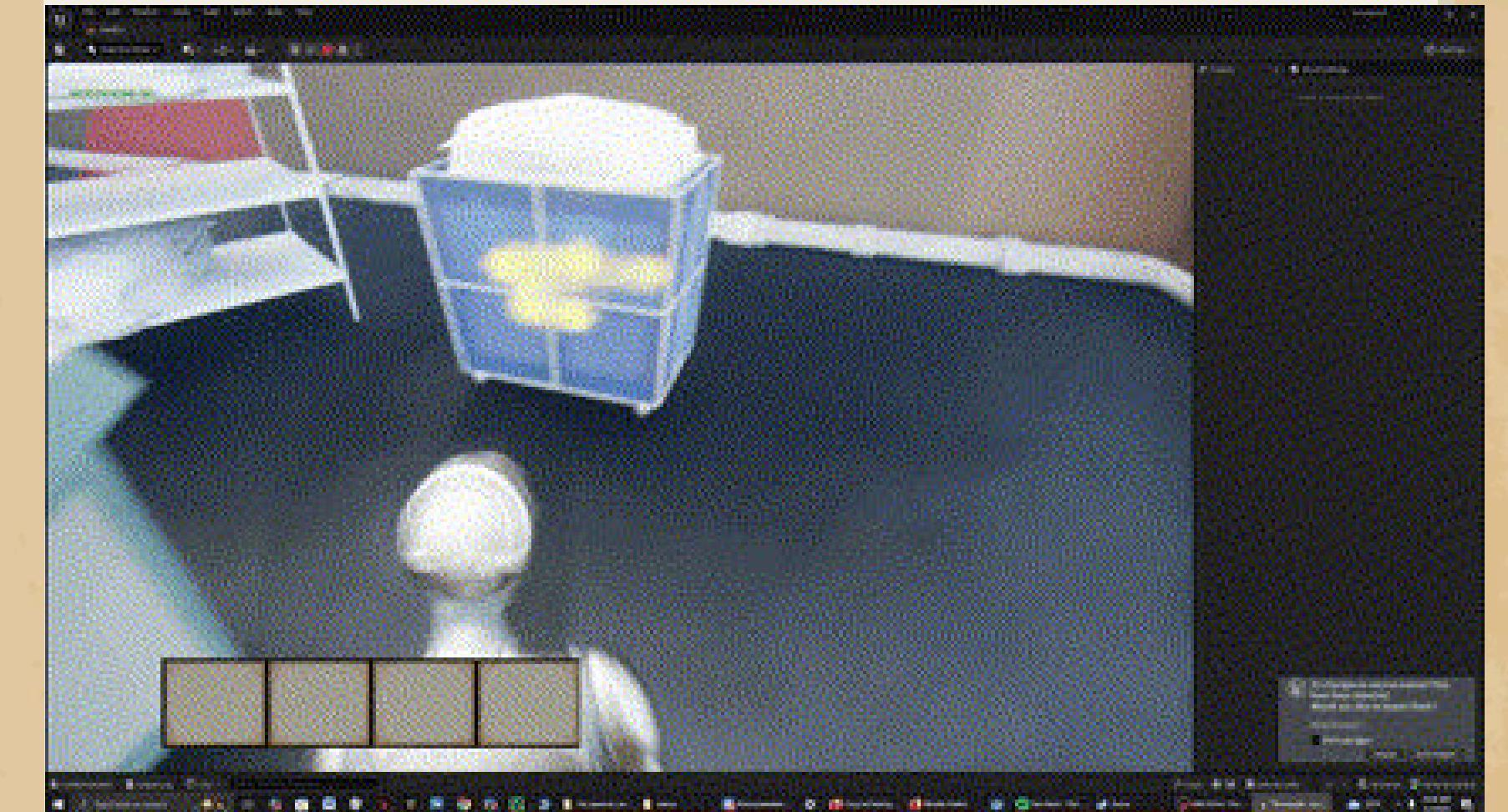
Dynamics

- **Strategy:** Avoid bots, use previous tactics to solve harder puzzles.
- **Narrative:** Discover ways to solve through lore blueprints.



Aesthetics

- **Intuitive:** Player feels smart for solving puzzle.
- **Ominous:** Moody, dark, brown/blue.
- **Industrial:** 2010 PC games, low poly steampunk visual.



Art: Assets

Artistic Aesthetic

- Low poly
- Steampunk
- Decayed

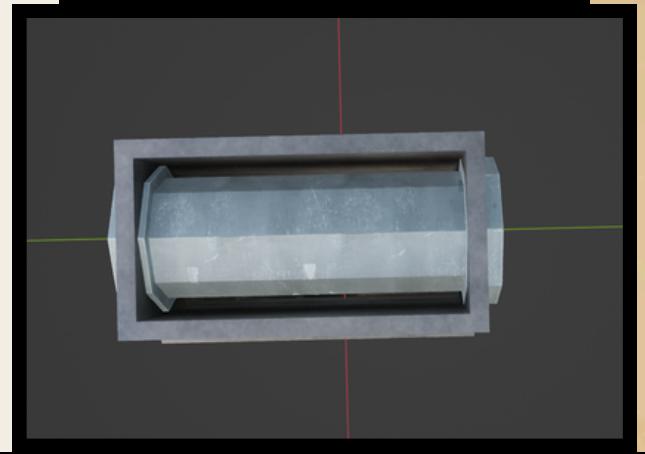
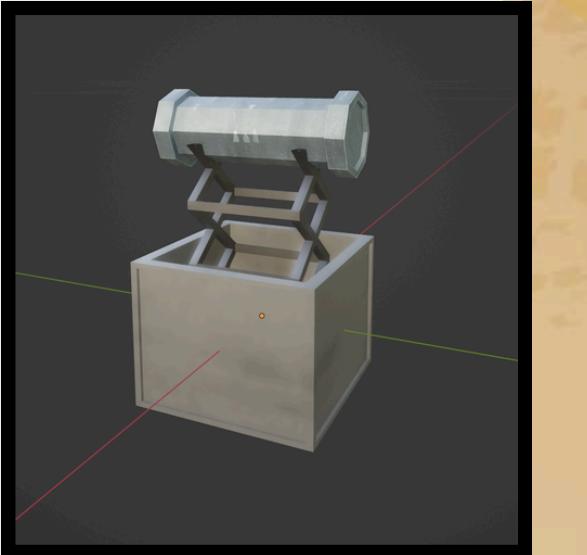


Model



Texture

Featured Assets



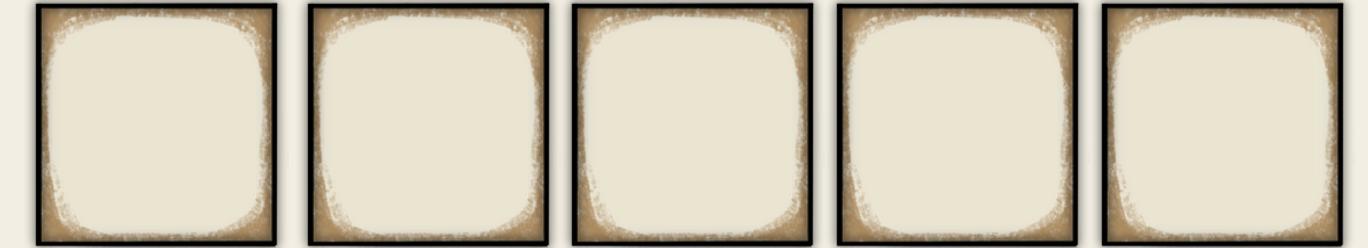
Art: UI

Artistic Aesthetic

- Steampunk
- Decayed



Featured UI



Inventory bar

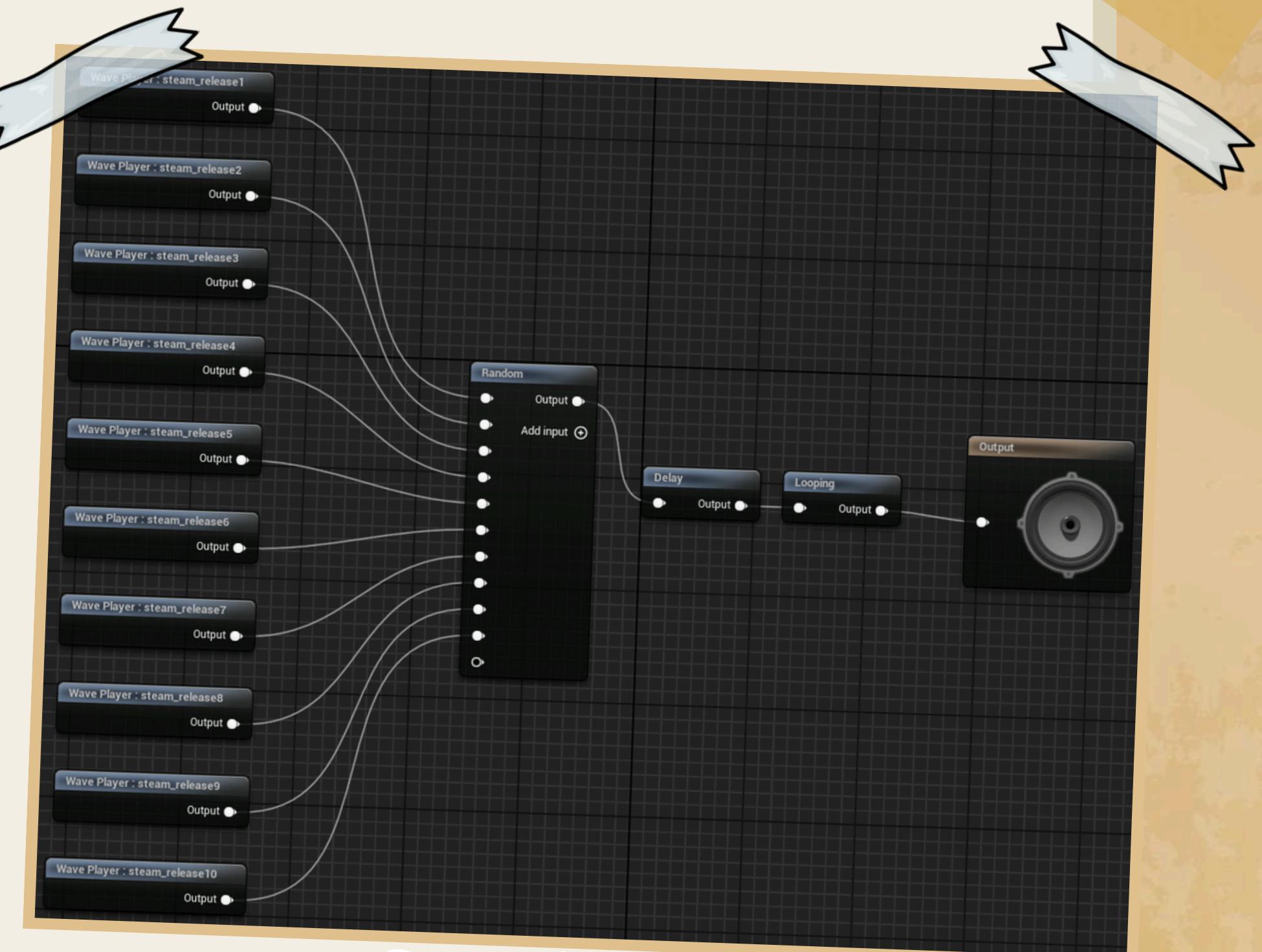


Key Controls

Mouse right click

-Sound-

- Industrial Ambience
- Steam machinery
- Reactive Music



Sound Cues

-Levels-

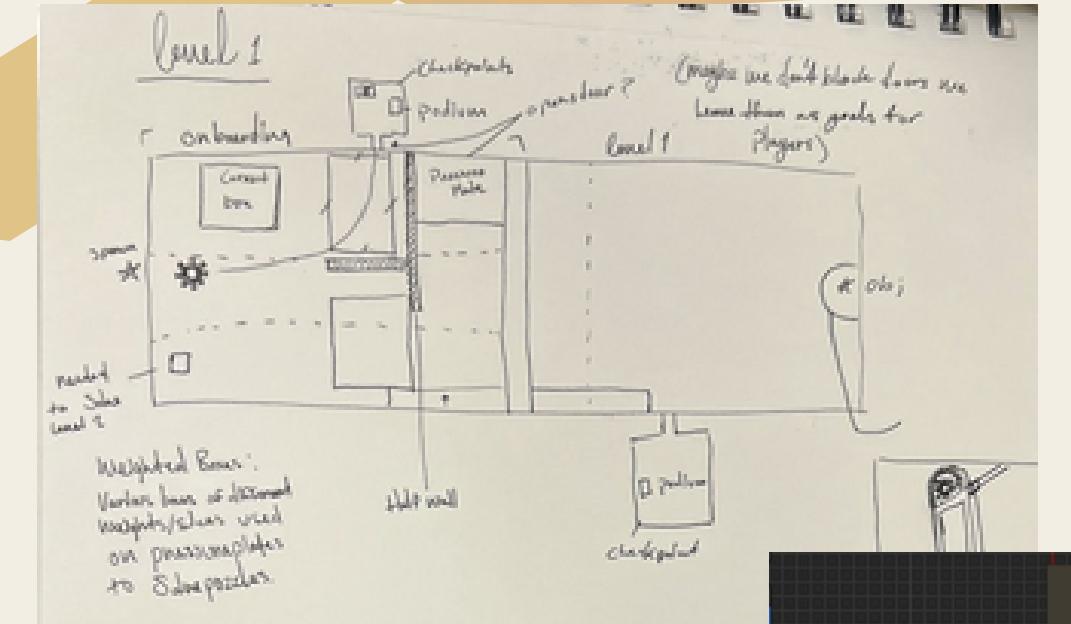
Level One - The Mailroom

Objective

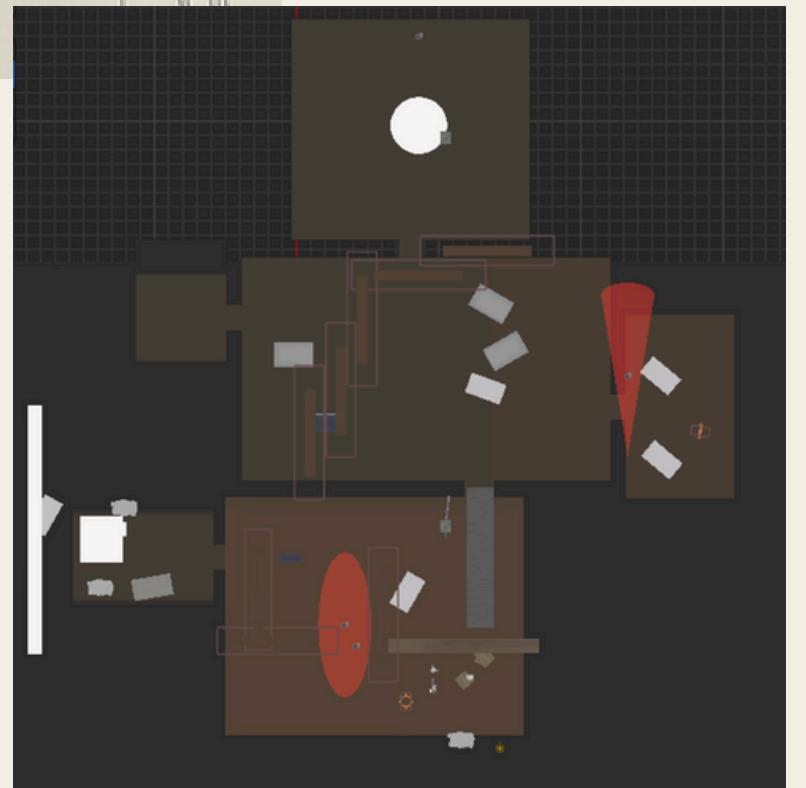
Get gears to correct podium, unlock using pressure plates!

Featured Mechanics

- Push/Pull
- Pressure Plate
- Podium



Level 1
Design
Pipeline



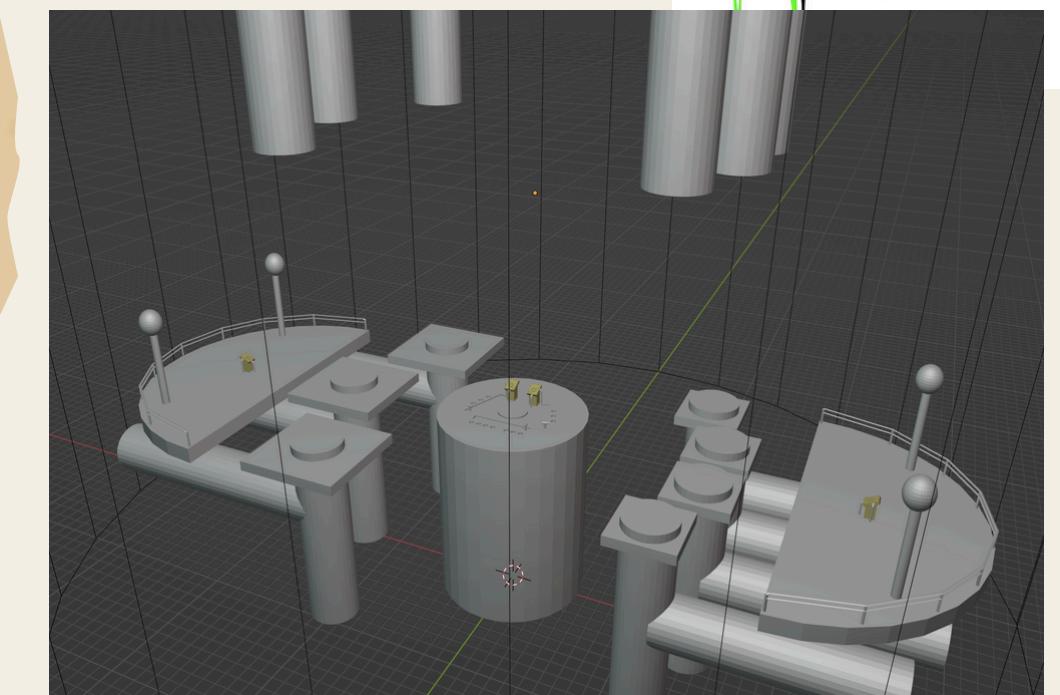
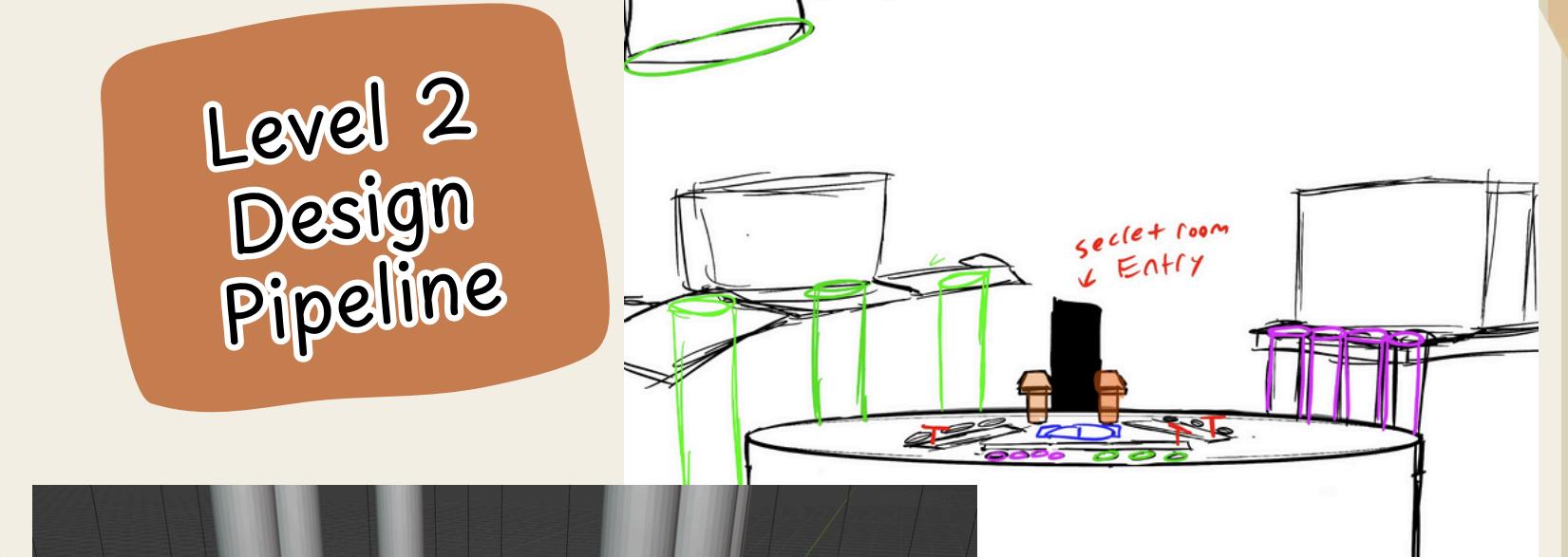
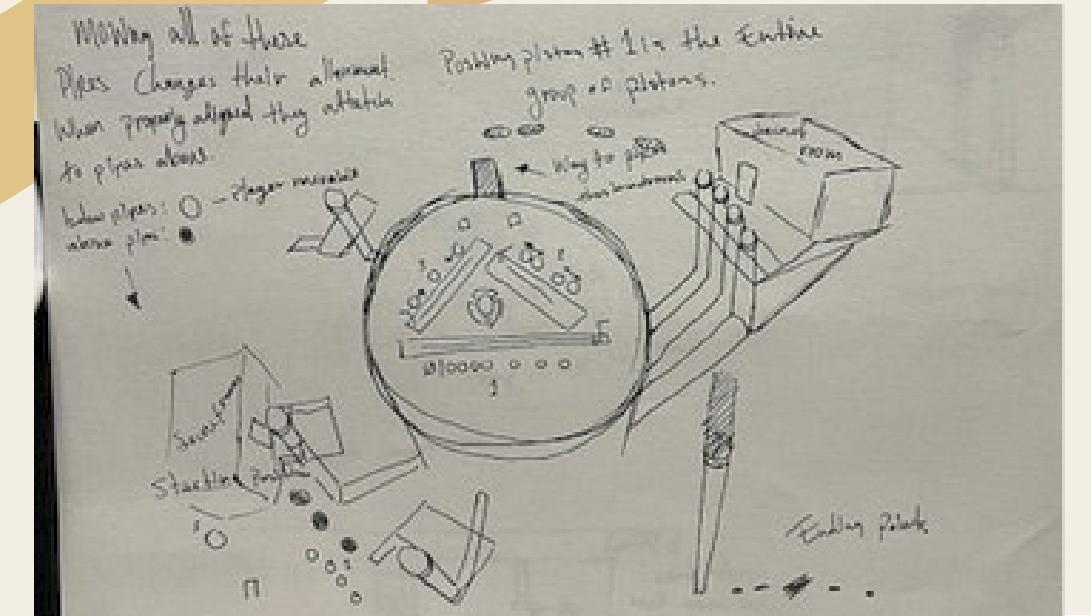
Level Two - The Mechanism

Objective

Align pipes, avoid enemies!

Featured Mechanics

- Push/Pull
- Podium
- Crank
- Two Enemy Bots



Level Three - The Heart of Steamwell

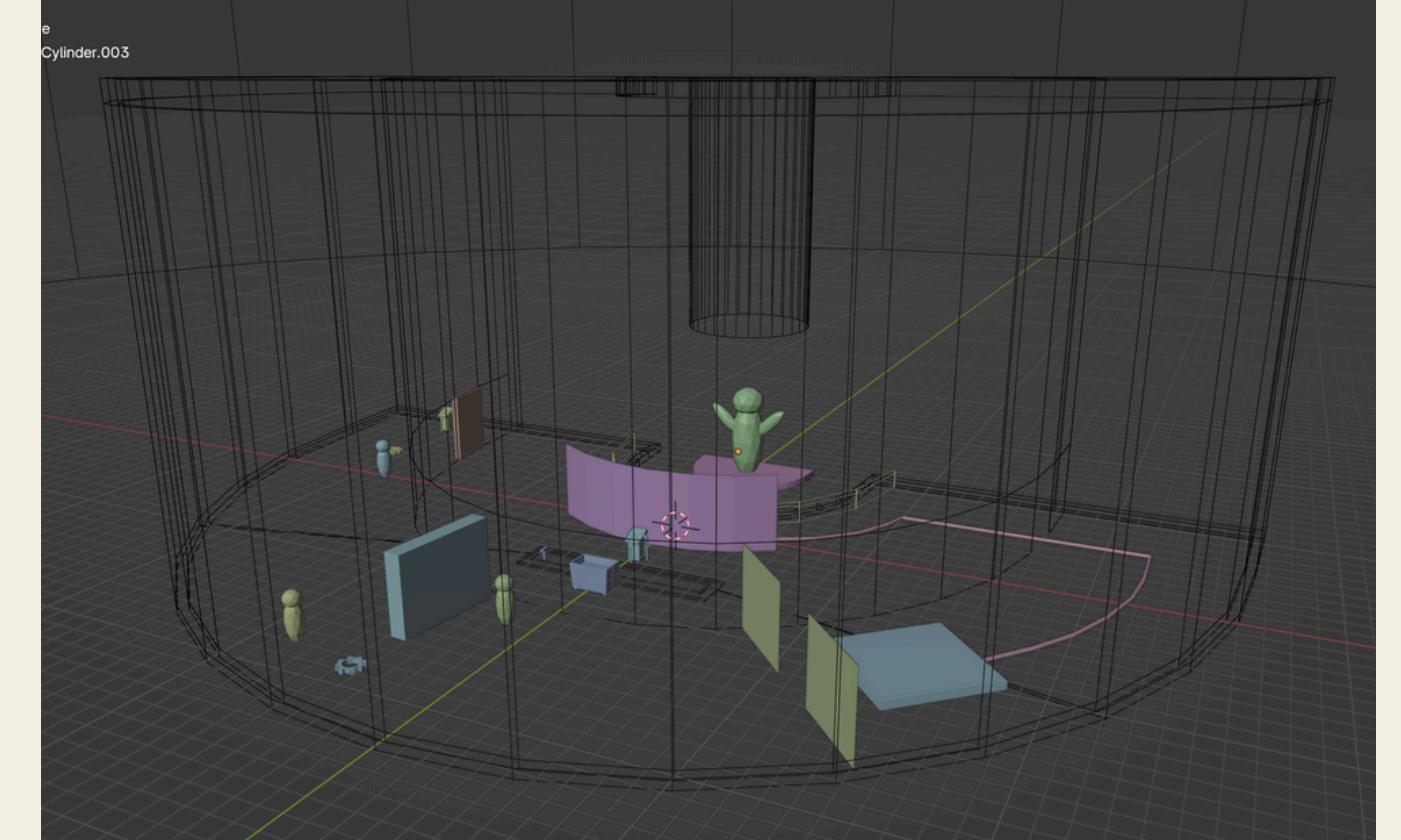
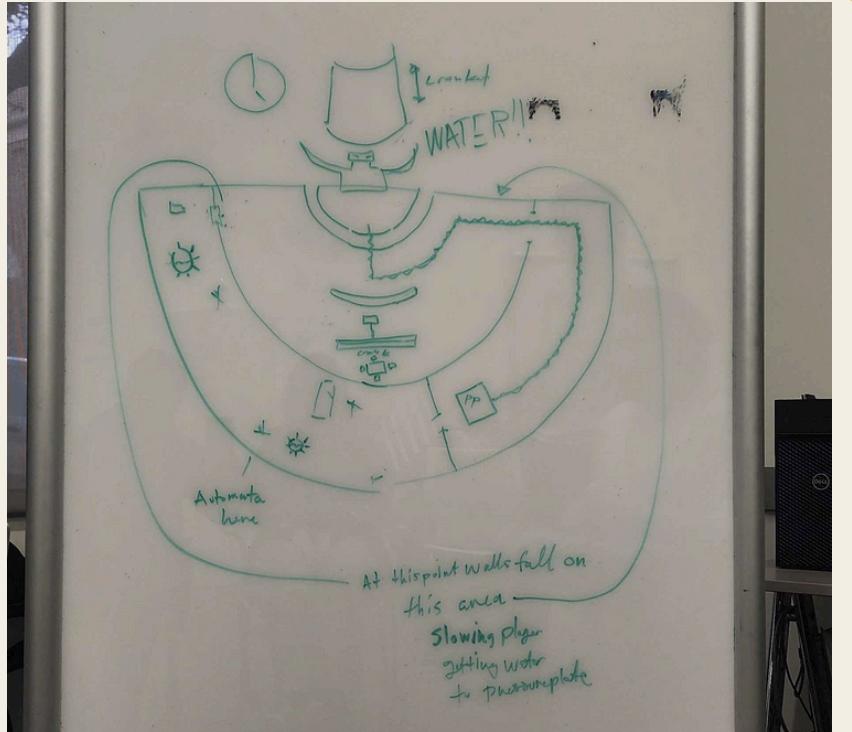
Objective

Use previous mechanics to face off against boss automata!

Featured Mechanics

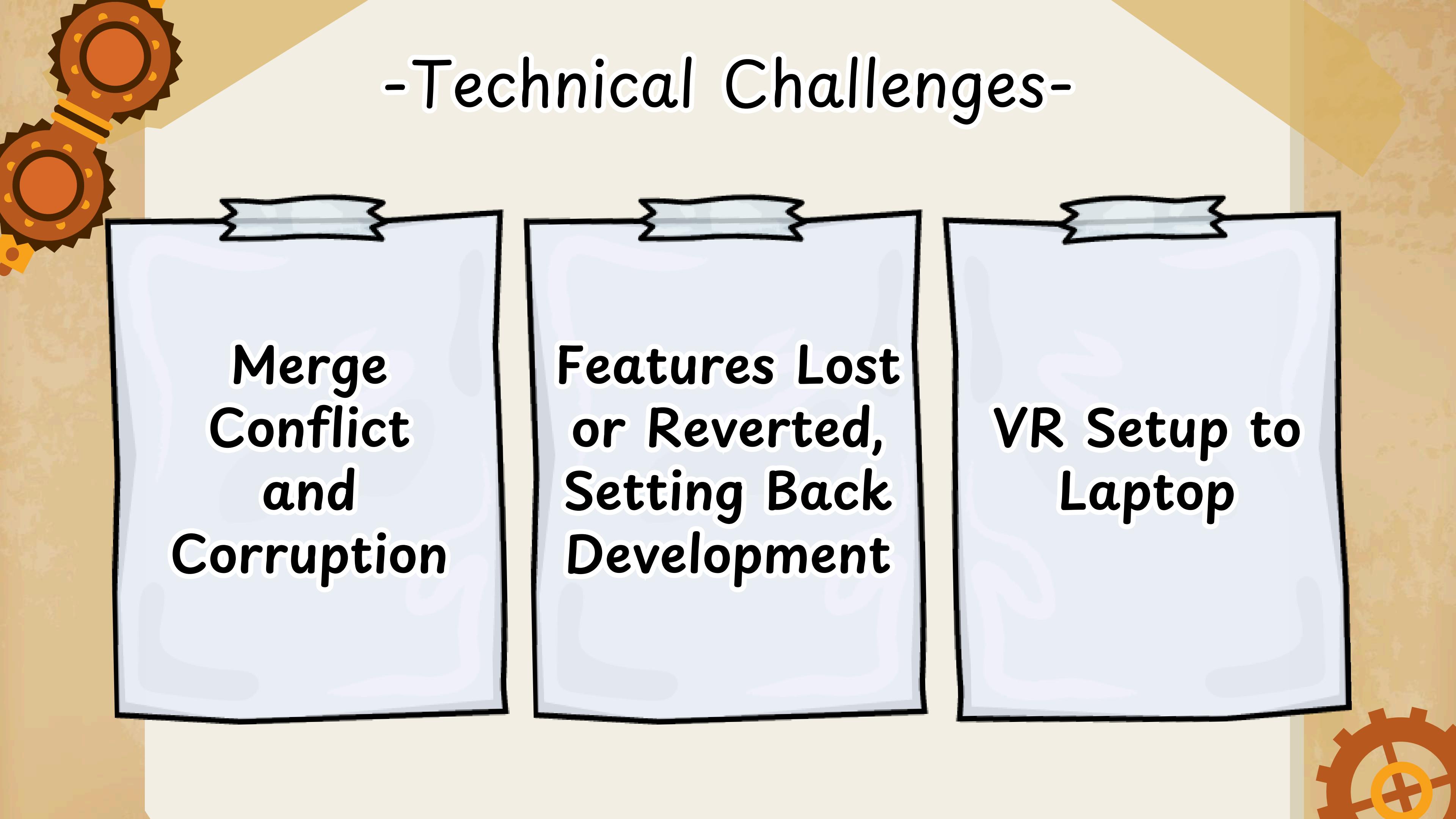
- Push/Pull
- Pressure Plate
- Podium
- 3 Enemy Bots
- Boss

Level 3
Design
Pipeline





-Retrospective-

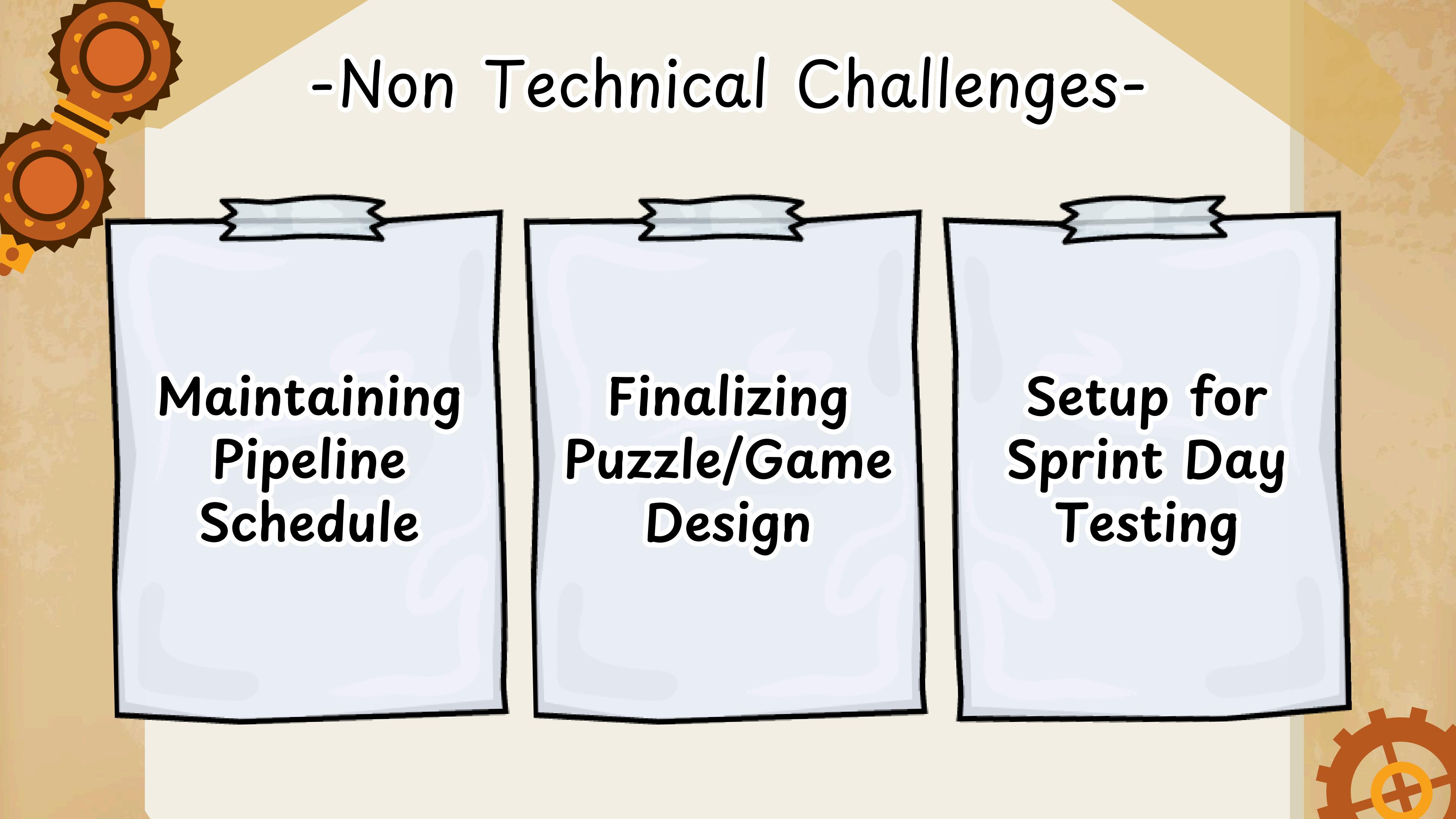


-Technical Challenges-

**Merge
Conflict
and
Corruption**

**Features Lost
or Reverted,
Setting Back
Development**

**VR Setup to
Laptop**

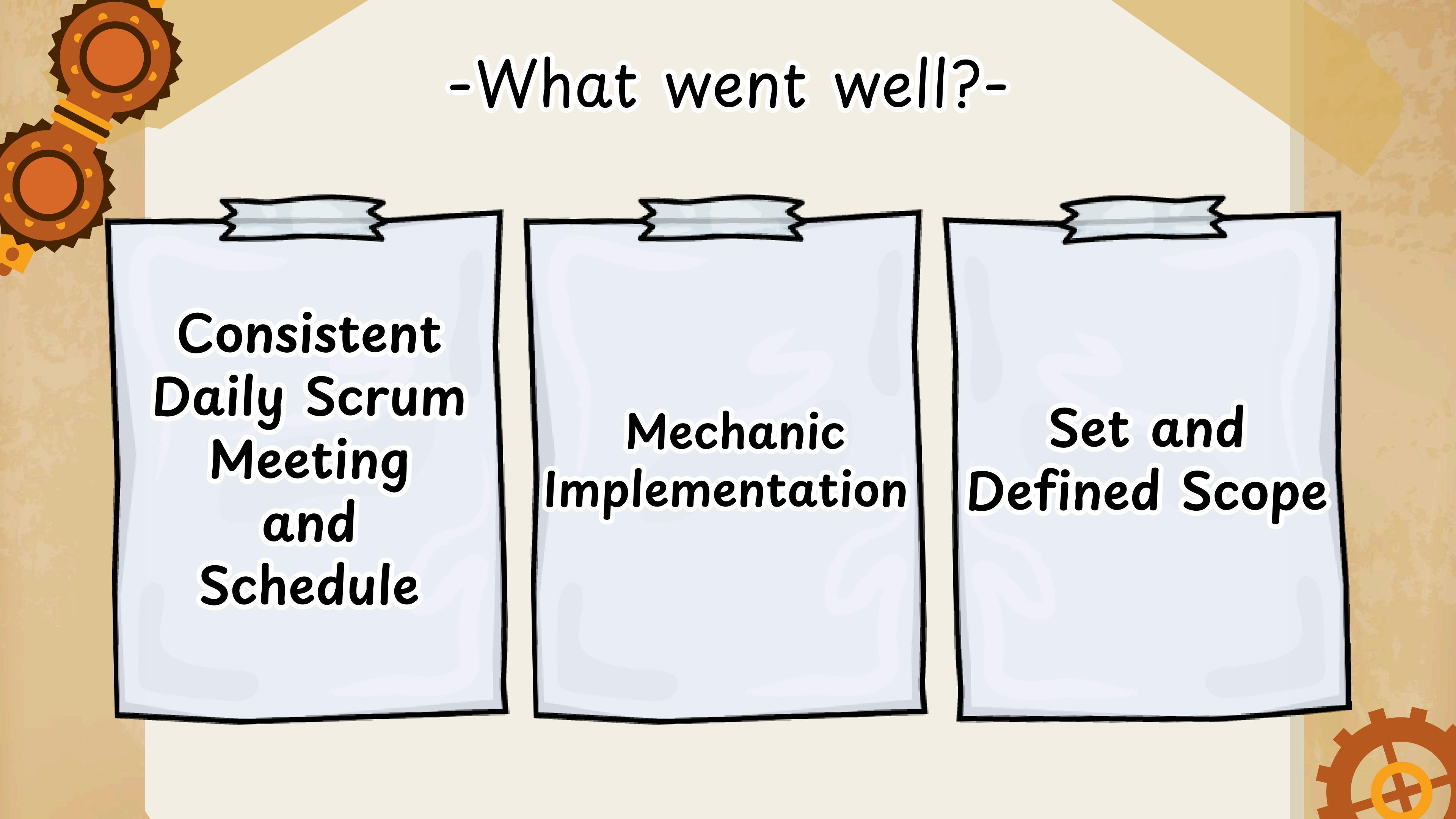


-Non Technical Challenges-

**Maintaining
Pipeline
Schedule**

**Finalizing
Puzzle/Game
Design**

**Setup for
Sprint Day
Testing**



-What went well?-

**Consistent
Daily Scrum
Meeting
and
Schedule**

**Mechanic
Implementation**

**Set and
Defined Scope**



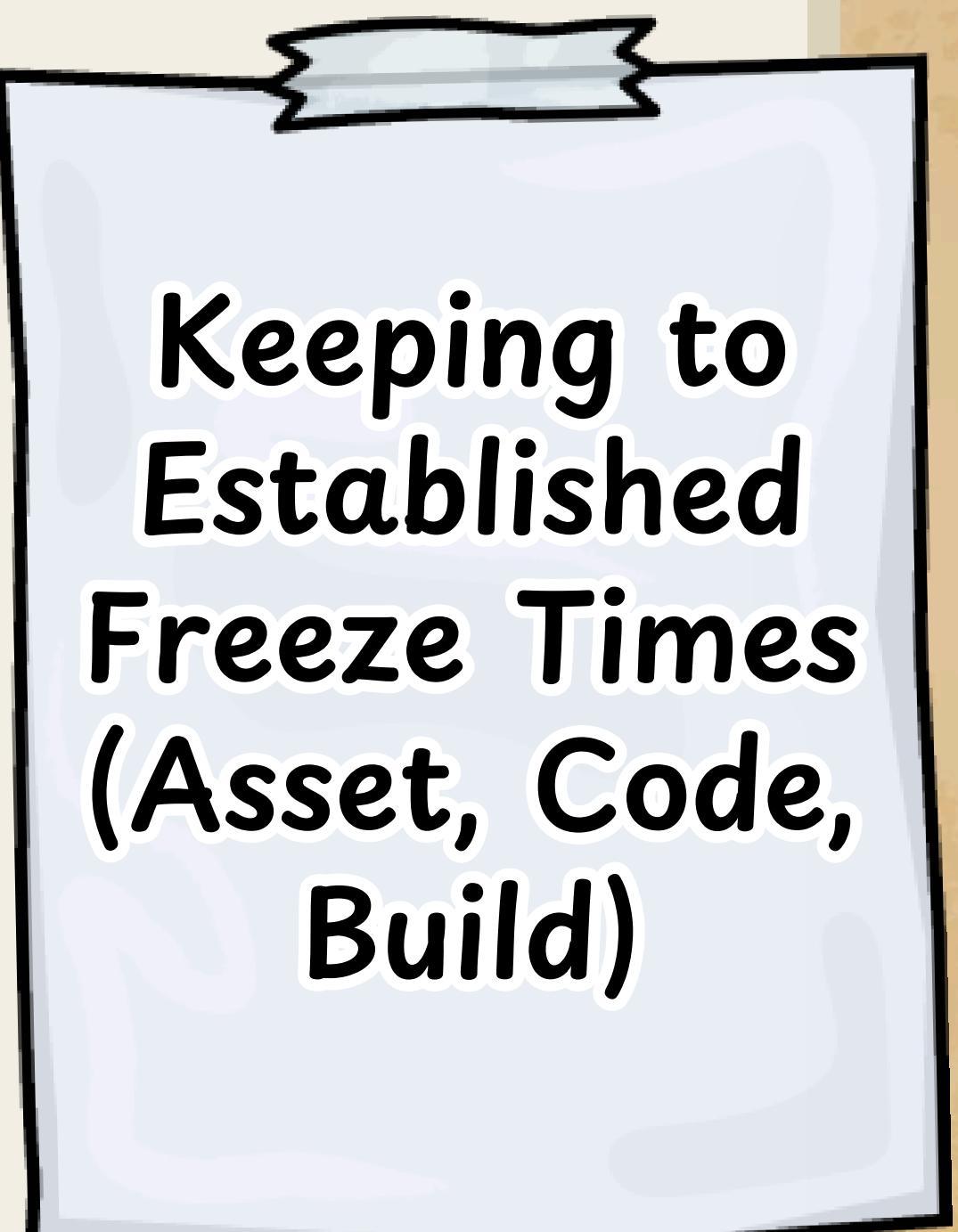
-What could be better?-



**Keeping
Stricter
Development
Pipeline**



**File Locking
and Daily
Merges**



**Keeping to
Established
Freeze Times
(Asset, Code,
Build)**



-Lessons Learned-

Merge Daily
and Pull Often

More Meetings
= More Progress

Polish Features
as Developed

Maintain Constant Communication on Pipeline Status



Thank You!