

PROJECT 4 GAME CONCEPT DESIGN

CRIMSON EMBERS

By Kang.S

Genre: TD, Strategy, RTS

Control: Mouse + Keyboard

Created by KANG SHUD

1 Introduction

This game is a turn-based strategy game that combines dynamic terrain and time-rewinding mechanisms, set on a volcanic planet with frequent disasters. Players need to protect buildings and defeat enemies in the face of enemy sieges and lava invasions, and create unique strategic advantages through time manipulation mechanisms. The game is designed to provide an exciting tactical experience and let players feel the satisfaction of high-pressure decision-making.

2 Story Background

The story takes place on a planet that is on the verge of extinction due to intense crustal activity. This is a mineral-rich colony in the universe, but as the frequency of volcanic eruptions increases, humans are forced to evacuate. As the commander of the last rescue team, the player is tasked with rescuing civilians and uncovering the secret of time confusion. The active channel of the volcano is not only a hidden danger to the planet's ecology, but also implies the nature of the disaster caused by "time and space anomalies".

3 Inspiration

The inspiration for this game comes from Into the Breach and other strategy games that incorporate time manipulation mechanics. Into the Breach is characterized by its precise, compact turn-based strategy and enemy action previews, offering players a sense of accomplishment through achieving optimal strategies with limited resources. Building on this foundation, I introduced the "time reversal" mechanic, inspired by films like Source Code and Edge of Tomorrow. This feature allows players to attempt and refine their decisions, encouraging deeper thought and creative problem-solving. Additionally, the dynamic volcanic terrain draws from the uncontrollable forces of nature, adding tension and strategic depth to the gameplay. The overall inspiration aims to convey the thrill and satisfaction of resolving crises through intelligence within constrained turns while exploring the interactions between humans, nature, time, and space.



4 Core Experience

Dynamic lava terrain

Active lava channels are the core feature of the level. Players need to predict terrain changes and lead enemies to dangerous areas, or use pushing skills to protect themselves and buildings.

Time rewinding and strategic adjustment

Time rewinding not only allows players to undo decision errors, but also changes the active path of future lava channels. Players need to weigh whether to use this feature to avoid the appearance of powerful "time afterimages".

Decision-making pressure and sense of accomplishment

Each round is accompanied by a sense of urgency with terrain changes and enemy attacks. Players will gain a high sense of accomplishment after repelling enemies and successfully protecting buildings.

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5 Game Dynamics

Time rewind dynamics

Time rewind not only allows players to retry, but also directly changes the next activation time and location of the terrain active channel.

Players need to predict the changes in the situation after time rewind by memorizing terrain changes and enemy behavior logic.

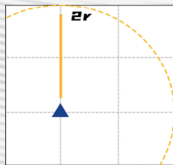
"Time afterimage" is a special enemy generated after time rewind. Its position is not fixed and its attack power is strong, which adds randomness and challenge to the level.

Dynamic terrain impact

The volcanic channel expands and turns into lava after the round ends. In different levels, the expansion mode of the lava channel may be affected by enemy skills or player intervention, for example:

Some mechas can repair or block the lava path.

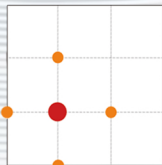
6 Game Mechanism



Enemy attack range and path:

The blue triangle is the enemy spawn point.

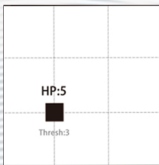
The orange dotted line represents the enemy's movement path, and the attack range is represented by a dotted circle (radius 2).



Lava channels and expansion paths:

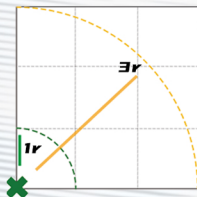
Red dots represent the initial locations of lava channels.

Orange dots (semi-transparent) show potential lava expansion paths that may be activated in subsequent rounds.



Building HP and threshold:

Next to each building is the initial HP (HP) and destruction damage threshold (Thresh)



Mech starting point:

The green "X" symbol indicates the mech's initial position.

Push skill

Attack radius: 1 square (melee range) The range is represented by a dotted circle (radius is 1).

The push skill can only be used on enemies or targets within 1 square around.

Slowdown skill

Attack radius: 3 squares (long-range range) The range is represented by a dotted circle (radius is 3).

The slowdown skill is a range skill that can apply a slowdown effect to any enemy within 3 squares, slowing down the enemy's movement speed or attack.

Round process

Round 1:

Player action: Players can use the skills of the mech to push away enemies (one square up, down, left, or right) or slow down the enemy's attack speed. The mech can adjust its movement or attack according to the enemy's position.

Enemy action: Enemies begin to move toward the target building, and elite enemies may trigger the activation of the lava channel.

Round 2:

Lava path: The lava channel is activated. Players must use the skills of the mech to guide the enemy into the lava area, or use deceleration skills to slow down the enemy.

Time rewind: Before round 3, players have a chance to rewind time, and can adjust the positions of the mech and the enemy to change the timing and path of the lava channel activation.

Round 3:

Time rewind: After the player triggers the time rewind, the mech and the enemy positions are rearranged. At this time, the lava channel will be reactivated according to the adjustment of the rewind, and the enemy path may change.

Enemy action: Elite enemies may begin to trigger the lava channel, and the enemy continues to advance towards the building.

Round 4:

Final Action: Players use mech skills and lava channel terrain to make enemies enter the lava path, or use pushing skills to move enemies away from the building.

Building Survival Check: The health of the building will gradually decrease according to the threat of enemy attacks and lava channels. If the health of the building drops to 0, the game ends.

Dynamic Terrain

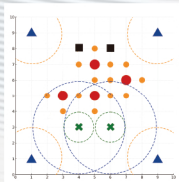
The role of the lava channel: The lava channel is not only a dangerous terrain, but also provides players with a tactical opportunity. Players can change the timing of the lava channel activation by rewinding time, blocking enemies or forcing them into the lava area to cause damage.

Victory Condition

If the player can protect the building and defeat all enemies before the end of the round, and the health of the building is not 0, the player successfully passes the level.

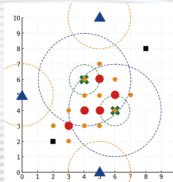
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7 Level Map



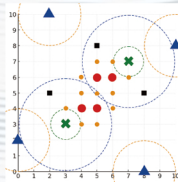
Level 1: Volcanic Prelude
Objective: Protect two buildings and repel at least five enemies.

Layout:
The map's center features four active Lava channels (marked in red), expanding every two turns. The player starts with two mechs: Push Mech: Pushes enemies into hazardous terrain, Slow Mech: Temporarily halts Lava expansion or slows enemies. Enemies spawn from four directions. In the third turn, an elite enemy, the Lava Activator, appears, capable of accelerating Lava channel activation.
Time Reversal:
In the third turn, the player can activate time reversal to reposition mechs and enemies, while altering the activation timing of two lava channels. Time remnants will appear near the adjusted channels and attack nearby areas, increasing the challenge.
Outcome:
Players must strategically use time reversal, pushing mechanics, and dynamic terrain to repel enemies and protect the buildings. Special enemies can activate more lava areas, increasing the danger.



Level 2: Lava Maze
Objective: Protect civilians and repel six enemies before lava engulfs the buildings.

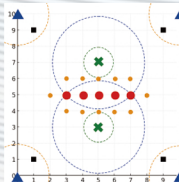
Layout:
A new "Lava eruption" random mechanic introduces unexpected lava channels each turn, restricting mech movement further. The Lava Activator enemy returns, accelerating Lava expansion. The buildings are scattered on both sides of the map, requiring split defense.
Time Reversal:
Time reversal alters the random positions of lava eruptions, giving players a chance to recalibrate their strategies. The number of time remnants generated correlates with the player's usage of time reversal, discouraging over-reliance.
Outcome:
Players must adapt to dynamic Lava changes and balance the priorities of repelling enemies and defending buildings.



Level 3: Temporal Rift
Objective: Protect three buildings and repel eight enemies before time remnants appear.

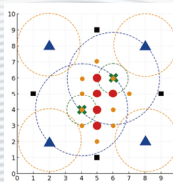
Layout:
The central area features "temporal rift" terrain, which randomly becomes hazardous tiles, limiting mech deployment. Temporal rifts affect enemy spawn patterns, potentially creating strong enemies or accelerating Lava expansion. Introduces a new enemy type, the Rift Stalker, a highly mobile unit that targets buildings.
Time Reversal:

Reversal adjusts both enemy and lava positions and may trigger temporal rift expansion. Time remnants prioritize spawning near rift areas, increasing pressure.
Outcome:
Players must predict rift behavior and use time reversal effectively while dealing with the dual threats of rift expansion and time remnants.



Level 4: Multi-Front Crisis
Objective: Protect four buildings and defeat the elite enemy, the Lava Overlord.


Layout:
The map splits into two distinct zones, each with independent Lava expansion paths. Players must manage two battlefronts simultaneously with limited mech resources. The Lava Overlord, an elite enemy, can generate new Lava channels and deal area-of-effect damage.
Time Reversal:
Reversal adjusts mech positioning and alters the attack range of the elite enemy while modifying some lava paths. Time remnants prioritize spawning in the weakest defended area.
Outcome:
Players must leverage terrain and time reversal strategically to defeat the elite enemy while safeguarding all buildings.



Level 5: Cataclysmic Apex
Objective: Protect all buildings and repel all enemies under limited time reversal opportunities.

Layout:
The central volcano enters full eruption mode, doubling Lava expansion speed and activating multiple channels each turn. A new boss enemy, the Lava Colossus, appears. It can redirect Lava flows and deal massive area damage. Buildings are widely dispersed, requiring extensive defensive coverage.
Time Reversal:

Players are limited to two time reversals and must carefully plan their use. Time remnants become faster and more powerful, directly threatening buildings.
Outcome:
Players must overcome limited resources, rapidly changing terrain, and powerful enemies to successfully protect all buildings and defeat the boss.

-  Initial position of the mecha
-  Initial position of the mecha
-  Enemy spawn points
-  Location of building.

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B Game UI

