# **Game Design Document**

#### **Gameplay & Narrative Design [40 points out of 100]**

- Is it fun? We want to make sure gameplay is fun and engaging, so we'll need to be able to understand the rules of your design and be excited to play it!
- Creative Use of the Brand [30 points out of 100]
- Does your fandom show? Your concept document should showcase your creative vision for the Universal property you select. Let's see the creative way you work with these characters and worlds to show us how inspired you are by your love of the brand!
- Capability [20 points out of 100]
- Can you do it? Ability to demonstrate that you have the expertise necessary to create a PC gaming experience. Unity Connect projects required with your submissions will be considered as an example of your team's capabilities, and should reflect the best of your portfolio. Remember, your profile has to be 80% completed to be eligible!
- Integration of Tools & Technology [10 points out of 100]
- What's under the hood? Do you have a new, exciting way to integrate the
  Mixer API into your game? Have you considered what you can do with
  Unity's Timeline for creating cutscenes? Are you an early adopter of
  Unity 2018.1 and want to showcase what you can do with the C# Job
  System or Scriptable Rendering Pipeline? Show us how you may
  integrate Unity, Microsoft and Intel technology into your game.

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### **Game Overview**

Title:

Back to the Future: Time Looper
Platform: PC Standalone
Genre: 2D Puzzle Platformer
Rating: ESRB (10+)
Target Audience: Casual Gamer
Release Date:
Publisher: Isaac Ng
Time Looper is a 2D puzzle platformer with the screen split in half horizontally with the player controlling Marty on the bottom screen and the temporal NPC copies of Doc play on the top half. The player plays as a "rescuer" (customizable player character) sent to retrieve Doc from the terrorists that Doc stole the plutonium from (Biff is their leader), who have found out about the time traveling technology and are trying to chase down and silence Doc. To help you, they've left behind their temporal copies which are looping through the top half of the level. The copy will run on a fixed path through the top half until it reaches the end of its level, where it will

vanish, while the player character will run through the other part of the level. The intro of each level will show a cinematic of the copy going through the level, affecting your bottom half of the

level as it triggers doors, platforms, etc. This is also a perfect time for the copies to leave

messages via text boxes as the intro plays. The main way of progressing through the level and reaching the end will be to send the copies through its section to activate certain triggers that will affect the player's section, helping them reach the goal. The timing and order of these activations are dependent on how the player times when the copy/robot/person starting it's path. The copy is activated via a keybind (1) that will reset the copy at the start of its path no matter where it is in the level. There are a limited number of temporal copies that the player can activate unless they pick up a lightning pack (insert lightning in a bottle pun here) that has 1.21 gigawatts needed for an additional temporal copy.

# **High Concept**

The Doc have been journeying through time periods in order to evade the terrorists that are chasing them. He needs Marty's help in order to escape his pursuers and is relying on Marty to find him. Luckily for you, the Doc has left behind their temporal copies which are looping through time trying to help you. Pay attention to what the copies do and say as they progress through the level as you only have a limited number of temporal copies that they left behind to help you come rescue them!

# **Unique Selling Points**

- Story Tie In
- Level Customizability
- Allows for Different Settings
- Innovative Game Mechanic
- Art Style

# Platform Minimum Requirements

PC Standalone

OS: Windows 10, Steam OS+

Graphics Card: DX9 capabilities; anything since 2004

### Competence Titles

2D Puzzle Platformer

# **Synopsis**

Doc is running from Biff + the terrorists. You, sent as the rescuer Marty, must find him and bring him back, no matter the time period and no matter the obstacles!

## Game Objectives

The objective of the game is to get to the end of each level using the temporal copies, while trying to get certain pickups (three pickups per level, if you get three pickups, improves score while maybe unlocking bonus content) and avoid enemies/obstacles. Each level will make up part of a certain "world", and each "world" will consists of a different themed time period (Western, 1955, 1985, etc.). By completing all worlds, the player will have completed the game.

#### Game Rules

The game level takes part in a square 2D environment set in the differing time periods with the temporal copies running on the top half of the screen. You can move around the level and try to get around the differing obstacles and enemies via setting lose the temporal copies to run free on the top. The player scores points by avoiding taking hits, acquiring pickups, and using as few temporal copies as possible. At the end of each level, the points will be totaled and the score will be shown. At the end of the game, there will possibly be differing endings depending on how the player scored (bad, good, neutral).

#### **Game Structure**

Start Menu - Play, Level selection, settings Level 1-1, 1-2, 1-3

Level 2-1, 2-2, 2-3

Level 3-1, 3-2, 3-3

Character - Gameplay - Losing Screen, Winning Screen to next level/world



Figure: Sample Start Menu (Need to add Level Select)

# Gameplay

Spawn Copy 1 - 1

Spawn Copy 2 - 2

Spawn Copy 3 - 3

P - Pause Game

Enter - Select Options in Menu

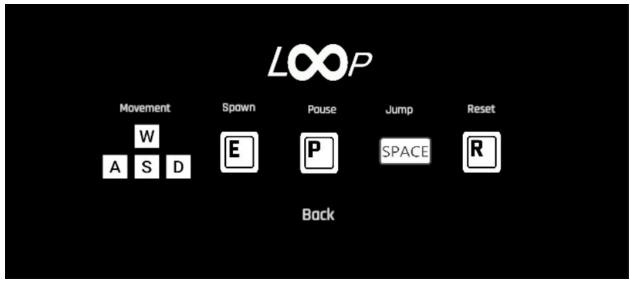
W/Arrow Up - Jump

A/Arrow Left - Move Left

S/Arrow Down - Crouch

D/Arrow Right - Move Right

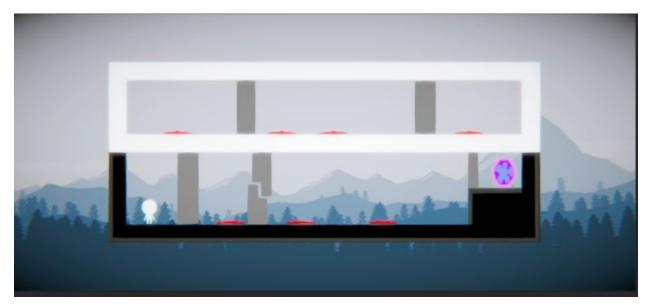
Space - Jump



**Figure: Controls Menu** 

#### Game Camera

The Game Camera will initially focus on the main menu canvas. Once you decide to play the game, the camera will zoom out from the temporal copy to showcase the whole level, at which point it will stay static as the cutscene plays out and as you later play through the level. Passing the level will bring up the ending score menu, which will tally the score, and provide options to replay the level, go back to level select, or proceed to the next level. Failing the level will bring up a screen of the player character slowly spiraling into a green black hole.



**Figure: Game Camera of the Scene** 

# HUD

Hud will have Player Health (3 hearts), Number of Copies Left, Time, (will not have number of resets)



Figure: Preliminary HUD

## Player

#### **Player Characters**

**Marty:** The main character and protagonist trying to rescue Doc from another sticky situation as he races through time.

**Doc:** Unlocked after the game is beat. There will potentially be another campaign with Marty.

Both characters will be able to change their clothes with the time period and be able to unlock various outfits for them to wear.



Figure: Body Created, Have to combine with Marty and Doc sprites

### **Player Metrics**

**Speed:** Variable on Level Design, have one standard running speed (Skateboard?)

Health: 3 Hearts, may be able to change depending on unlockables later

Jumping Height: Will be set at a fixed height

#### **Player States**

**Idle:** Stands there idly, may have separate idle animation after 15 or so seconds (will say

catchphrase and do something cool) **Run:** Standard running animation **Jump:** Standard jumping animation

Crouch: Crouch will be similar to 2D's GameKit's for Ellen where she bends down

Death: Death animation will be Marty crumpling with head in hands (Sound effect optional due

to annoyance of sound effect)

### **Player Weapons**

None (for now)

# **Character Lineup**



Figure: Pictures of Characters here, would like to include additional characters in cutscenes and various scenes, (Need terrorist sprite)

### **NPC Enemies**

For now, we will only have standard terrorists. They will spawn in certain parts of the level and roam around that part. They will cause one heart of damage. You will potentially be able to kill them using various traps and puzzle solving platforming. (Maybe a weapon later on that can shoot panels and enemies)

#### **Terrorist**

Speed: Standardized speed

Health: 1 Heart Attack: 1 Heart

Time to Attack: 1 Second

### **Enemy States**

Idle: Idle animation when they are in one spot for some time

Move: Will idly walk around their stage

Attack: Will bring out melee or projectile and attack with their weapon

**Death:** Will trigger standard death animation falling over backwards onto ground upon sustaining damage

### **NPC Allies**

Will be the temporal copies (Doc) that spawn on the top triggering various buttons.

#### Art

### Setting

We will have three settings. All will generally follow the same level design of being a rectangular level. They will take place with different backgrounds and foregrounds depending on the differing levels. The Wild West levels will have Wild West props while the 1984 scenes will also possess temporally related items. The goal is to have pixel art that is endearing, yet nostalgic, making the user emotionally connected to the game through its various settings and characters.

### Level Design

The level design will be complicated due to having to develop viable yet intellectually stimulating puzzles for the user to solve. They will require thinking and a certain amount of trial and error that prods them to understand the mechanics and how to best apply them to the level. Finishing the level should be provided as a goal to many paths.

### Audio

#### More Audio to be added later.

Name	Category	Description
menu_music	Background Music	Menu Music
music_11	Background Music	1-1 Music
music_12	Background Music	1-2 Music
music_13	Background Music	1-3 Music

music_21	Background Music	2-1 Music
music_22	Background Music	2-2 Music
music_23	Background Music	2-3 Music
music_31	Background Music	3-1 Music
music_32	Background Music	3-2 Music
music_33	Background Music	3-3 Music
Mcrouch	FX	Marty's Crouch Sound
Mjump	FX	Marty's Jump Sound
Mrun	FX	Marty's Run Sound
ButtonPress	FX	When Button Pressed
Spawn	FX	Temporal Copy Spawn Sound effect
Trun	FX	Enemy's Run Sound
Tjump	FX	Enemy's Jump Sound
Tmelee	FX	Melee Attack Sound Effect
Tprojectile	FX	Projectile Attack Sound Effect
Tdeath	FX	Enemy's Death Sound
Quote1	FX	Marty's idle quote
Quote2	FX	Marty's idle quote
Teleport	FX	Teleport sound effect upon entering

# Integration of Tools & Technology

We will Unity's Timeline to create various cutscenes and dialogue options. Mixer API can be used to potentially build levels for streamers to play as well as make the levels more and more difficult by adding various obstacles. We could convert this to a VR/AR due to the simplicity of the game (running in 2D space).

# MVP (Minimum Viable Product)

- One Player character
- Complete game built for PC Platform

### Wishlist

- Level Customizability
- Port to iOS and Android
- Voice Acting
- Make your own level feature
- Potential Story
- Mixer Integration
- Easter Eggs
- Costumes
- Characters with different abilities
- More time periods (jules and verne, einstein)
- Bonus content (maybe concept drawings, preliminary stuff)
- Multiple copies
- Pickup energy capsules that allow them to generate the 1.21 gigawatts to make another temporal copies
- Cutscenes where the copy narrates
- Notes left behind that may change based on what you do in the level
- Level can change based on what you do
- Have them fall into time loop at end of level spiraling in as score comes up, goes to next level
- Have timed levels
- Coop mode
- Another campaign with Doc as the main character

- Boss Fights
- Weapons