# Predestination/I know what happens

# Game Overview

## Game Concept

Choice-driven time-warping dungeon exploration ~~steampunk cyberpunk~~ maybe just fantasy? RPG set in XIX century Serbia (or not).

## Genre

Roguelike / turn-based rpg

## Game Flow Summary

Two phases: Young Me (YM) and Old Me (OM)

**Young Me**

Player progresses through a dungeon made up of a couple of floors. Each floor consists of rooms with one entrance and two exits (doors) to choose from.

In each room, the game AI controls the OM and gives advice as to which door leads towards the next floor. Player can listen or ignore the OM.

Every time player ignores the OM advice, they create a paradox. After every paradox, Old Me is present in fewer rooms to give the player space for exploration without creating more and more paradoxes.

Apart from doors, rooms can contain encounters such as enemies or traps. Player must deal with them in turn-based combat or by making a dialogue-based choice.

The objective of this phase is to reach the end of a dungeon floor.

**Old Me**

Upon reaching the end of dungeon floor, player turns into OM and tries to resolve the paradoxes created when they were playing as YM. They do so by visiting rooms in which OM (controlled by game AI) was present and give YMs advice as to which way they should go.

Note that there are many instances of YM:

* the original one (controlled by the player)
* the paradox ones (one for every paradox, controlled by game AI)

The behavior of paradox YMs is as follows:

1. In the room where given paradox was created, the paradox YM follows the OM advice and chooses door different than the player did.
2. In subsequent rooms, the YM is controlled by game AI until death or reaching the end of floor.

The player can see the floor map with the paths of all YMs highlighted and the rest of the floor hidden. Then, the player can spend mana to jump to a given room and give advice to YM, thus changing his path.

The objective of this phase is to destroy the paradox YMs, either by giving advice so that YM enters deadly rooms, directly fighting the YM or connecting the YM’s path with the path of another YM, merging the two of them.

Not all paradoxes have to be resolved. This is a player’s decision based on available resources.

**Time Demon (TD) TODO**

**Saving the Princess TODO**

## Look and Feel TODO

# Gameplay and Mechanics

## Gameplay

**Resources**

* Stat-based
  + Health (HP) - good ‘ol HP. If we find ourselves overwhelmed by traps or monsters, we lose health. If we drop below zero, we die (and maybe take control of one of the paradoxes?)
  + Mana (MP) - We need it to cast spells in trap/monster rooms and for “Old Me Slots”. We can pay with mana for each appearance in any room during Old Me playthrough. Basicly we pay with mana for a chance to deal with paradoxes.
  + Integrity (IP) - The lower integrity the lower tier of magic spells we can cast. We lose it with each paradox, so with each paradox it is harder for us to progress in the dungeon. During Old Me playthrough we can take care of those paradoxes and gain integrity back. If we leave unsolved paradoxes behind (we ran out of mana or don’t want to spend all of it) we start next levels with permament debuff to integrity.
* Items - can be collected in item rooms, which should cost a reasonable amount of other resources. Give bonuses to stats and enable damaging the TD.

**Game Progression**

* Dungeon floor
  + YM
    - Collecting items
    - Saving enough health and mana to regain lost integrity
  + OM
    - Spending health and mana to regain integrity
* Dungeon
  + Collecting combination of items that makes it possible to defeat the TD
* Meta-game
  + Learning game mechanics and lore
  + Gaining bonuses for dungeon playthroughs and completed achievements

**Mission/challenge Structure**

Main challenge is managing your stats to progress through the game without dying.

* Young Me
  + During Young Me run we need to carefully manage our integrity to explore the dungeon in search for items and avoid Time Demon - an entity that traverses the dungeon as well and is aware of our optimal path (knows a thing or two about time magic as well).
  + By creating paradoxes we deviate from the optimal path and can therefore “sneak around” the Time Demon. When it is close (a room or two from Young Me) a player is notified by glitching graphics, etc. The more paradoxes, the more confused Time Demon is (it updates the optimal path less frequently. It is the same derate as with Old Me less frequent appearances with more and more paradoxes).
* Old Me
  + During Old Me playthrough we can spend mana to regain integrity. The key challenge is to strategically plan appearances ahead to regain the most integrity at the cost of minimal mana and health if Old Me is forced to battle Young Me.
  + If Time Demon catches Young Me instance before Old Me can deal with it, it kills it without the player regaining integrity - therefore putting a permament integrity debuff on him. It is crucial to avoid those situations.
  + OM interface is different: it consists of a series of minimaps: each from every choice, made by YM. So on the first one we see one YM in a single room. In second we see how he moved to another room and therefore we have two rooms in this map. After each paradox we can track each YM iteration, so we have more insight into the structure of the dungeon, but not whole except the case that we and other YMs really explored it whole. We can choose a map from this variety and appear in a room and guide one instance of YM in another direction, therefore changing his decision - after that all next minimaps change according to this decision. Challenge here is to predict if this appearence will benefit us: after analysing all maps we can judge if the decision will be worth invested mana.

**Puzzle Structure TODO**

Maybe puzzles in some rooms. For trap disarm/raising the curiosity of the room. Possible Young Me and Old Me cooperation puzzles.

**Objectives – What are the objectives of the game?**

*  Beat all levels
*  Kill the Time Demon
*  Save the Princess

**Play Flow – How does the game flow for the player? TODO**

## Mechanics

**Room types**

* Normal
* Lore
* Item
* Double-penetration
* Puzzle - requires YM and OM cooperation
* Trap
* Enemy

**Movement in the game**

As YM the player orders the avatar to take paths. No movement inside rooms, just possible puzzles, interactable lore or turn based fights.

As OM the player can teleport between rooms. No movement inside them as well.

**Items – how to pick them up and move them**

Items are added to player’s equipement. Each item downgrades Time Demon’s shield and add additional bonus. Those include:

* + Regaining health/mana
  + Slow down Time Demon’s progression through the labirynth
  + Dungeon mapping
  + New spells (more mana optimal?) for each tier
  + Maybe some kind of defense buff

Items are picked up automatically after entering an item room.

**Combat**

Final Fantasy or Pokemon like.

**Economy – What is the economy of the game? How does it work?**

As there is no currency, there is no economy as such. There can be rooms used as merchants, where the player can trade one statistic to influence another.

**Additional game mechanics ideas:**

* Recurring memories - sometimes when playing as OM traveling back in time can lead to a memory: a kind of collectable, served as additional insight to lore. It can later be viewed from collectables menu. The chance can be slight and memories can be triggered independently from progression of game, so each encounter would be unique, kind of like shiny pokemon. Or the more progression, the more chance, to show that time magic is getting unstable. As to what memory is exactly, it can be a cutscene, or minidungeon with just lore rooms.
* Meta-game - normal roguelikes have permadeaths. I propose that the game should be hard enough that it wouldn’t be easy or even possible to beat it in one playthrough but, as opposed to in-game death, when we lose, some kind of time magic shenanigas happens and we end up at the beginning of the game (with cause and effect somehow preserved, I’m on it). The difference is, we keep some of the bonuses from previous playthroughs, so next time it isn’t that hard. One of the bonuses would be an item recovery - items should be scarce, so if we encounter an item for the first time, it should be saved in collectables tab and in next playthroughs if we don’t encounter it, we can summon it, because we know of its existence. Of course it should be expensive to do, so this option should be profitable only if we really need it.
* Predictable dungeon layout - I am rather in for procedurally generated levels, so map memorization is off-limits, but we can use the same kind of structures, so next time a player encounters it, he can expect what is in the next room, or smth. The mechanic of secret room from Binding of Isaac is based on similar idea. Map is procedurally generated, but after a few playthroughs we know where to expect Secret Rooms.
* Double-penetration rooms - because of inability to enter a previous room from the same side, we can create a room whose effect is triggered during the second entrance. For example we enter a room, see that we can gain an item if we enter it the second time, so then we can invest our time to look for a way around to enter this room again.
* Krzyś-minded map - to keep the integrity of a map, we can add teleportation (we enter a door on one side of the map and enter another room on the other). As we teleport, we don’t know in which part of the dungeon we are exactly, so there should be two minimaps - one with our current progression and one with progression until teleport. They can be connected after encountering the familiar room.

## Screen Flow -- A graphical description of how each screen is related to every other and a description of the purpose of each screen TODO

Player can view current room and minimap. No view of past rooms.

## Replaying and Saving

I vote for permadeaths. During playthrough it would be possible to unlock bonuses and different paths, levels etc. which lasts for all next playthroughs but if we die, we end up at the begining with the difference of skipping the tutorial.

Save scumming is for pussies. Saves should be implemented just as a measure to resume game if interupted, but not as a way to play some choices differently.

## Cheats and Easter Eggs TODO

# Story, Setting and Character TODO

## Story and Narrative – Includes back story, plot elements, game progression, and cut scenes. Cut scenes descriptions include the actors, the setting, and the storyboard or script.

## Game World

**General look and feel of world**

**Areas, including the general description and physical characteristics as well as how it relates to the rest of the world (what levels use it, how it connects to other areas)**

**Characters. Each character should include the back story, personality, appearance, animations, abilities, relevance to the story and relationship to other characters**

# Levels TODO

## Levels.

Each level should include a synopsis, the required introductory material (and how it is provided), the objectives, and the details of what happens in the level. Depending on the game, this may include the physical description of the map, the critical path that the player needs to take, and what encounters are important or incidental.

# Interface TODO

## Visual System.

If you have a HUD, what is on it? What menus are you displaying? What is the camera model?

## Control System

Arrows / WSAD for choosing direction and mouse for interactions and battle options.

## Audio, music, sound effects

Summon Robson

## Help System / Tutorials

# Artificial Intelligence

## Opponent and Enemy AI

* The active opponent that plays against the game player and therefore requires strategic decision making
* AI for Time Demon to allow him to track the optimal path the player should take.
* Basic AI for monsters to allow them to deal damage to player during encounters.

## Non-combat and Friendly Characters AI

* AI for Old Me during Young Me playthrough to allow him to guide the player on the optimal path.
* AI for paradox YMs to choose path and play options in the labirynth
* Maybe NPCs in some rooms. Dunno about their purpose yet tho.

# Technical

## Target Hardware

* Primary platforms: Windows / Linux / macOS
* Secondary platforms: Android / iOS

## Development hardware and software, including Game Engine

Engines worth considering:

* <https://love2d.org> - Lua
* [~~https://godotengine.org/features~~](https://godotengine.org/features) ~~- C# / C++~~
* ~~Making it in the browser, not fucking around and just drawing on the canvas - javascript / elm~~

# Game Art TODO

Key assets, how they are being developed. Intended style.

# Problems/Ideas to address

* How do we regain mana?
* Permadeaths
* Idea: if we die we take control of one of the paradoxes. Discuss possible problems and gains.
* Idea: possible time travel during Young Me playthrough