SpeedRoute

Design Document

SpeedRoute is a web-based tool that allows its users to create, share and view “routes” for the purposes of speedrunning games. (Speedrunning: <https://en.wikipedia.org/wiki/Speedrun>). SpeedRoute presents an easy way to create top down, map-based routes to be used in speedrunning, complete with explanations and notes. In this manner, a person new to speedrunning can more easily understand the routes to use in videogames by looking at routes made by the more expert in the community, while the advanced players can more easily identify problems with their current routes and discover new possibilities.

This document outlines the basics of the services provided by SpeedRoute, including the various concepts used, and then goes more into detail on the technical aspects of the platform and how it should be implemented.

# High level concepts

## Game profiles

Because routes are specific to the game being played, there is a need for SpeedRoute to collect all the assets needed for all the games on the platform. A game profile encompasses the map or maps used to represent the game world, customized assets, including but not limited to, icons, pins, images, colours, sounds, etc. A game profile also includes meta data about the game it is representing. This includes title, developer, release date, description and other such information, along with speedrunning specific information, such the world records for that game and category and links to other resources.

Because new videogames are constantly being speedran by players, and because of the need to keep the list of game profiles updated, the list of game profiles supported by the platform represents a very real problem of maintainability. Because of this, SpeedRoute offers its users the ability to easily create and submit new game profiles to the service, so that they are available to other users. On submitting these new game profiles, the platform does very little work on the items in question, and this responsibility is mainly transferred onto the user in question.

Game profiles submitted by the community can be accepted into the system, and if so happens, they are available for other users on the platform to use and view. At any one time, there should only be one version of a game profile on the system for a given game. While users are informed if they try to submit a game profile for a game already on the platform, submitting a copy is allowed, under the guise that this new version is somehow improved over the current version. If such happens, these will be considered on a case by case basis, as updating a game profile for which routes already exist might make these.

## Routes

The main element of the service. Routes represent all the steps players take to complete a game in a speedrunning environment. These are built upon the resources provided in the game profile for which they were made, and are encompassed mainly by a series of checkpoints interconnected in line segments, with notes, videos, images and explanations given by the creator of the route.

The route also includes meta data including its name, description, date of creation, times achieved using the route, links to external resources, as well as meta data relevant to the game in question, such as the category of the route (any%, 100%, glitchless%, …).

Users can create as many routes as they want, for how many games they want, provided these exist on the platform. A user may create multiple routes for the same game and category, should he wish to.

Routes may also have versions. As speedrunning routes constantly evolve, these changes can be represented on the routes in the system with versions. Versions work like forking, where the create of the route may clone the route with a new version number and update this new version accordingly. While viewing a route, a user can very easily cycle through the various versions that the route has taken throughout its lifetime. Note that users may edit their individual routes without creating new versions. This is useful if the route contains a mistake, in which case, creating a different version of the route would not make sense.

Routes are publicly published on the platform, and can be seen by any visitor. These routes can be rated by other users, who can also leave comments about it.

## Route workshop

The route workshop is the place users and visitors alike can search for routes. Routes can be searched based on their game, category and title, and ordered by a multitude of different properties, such as date of creation or overall rating.

The workshop allows logged in users to rate and leave comments on routes that they visit. Routes may also be flagged for inappropriate content.

# Use cases

# Interfaces

# Implementation

# Testing

# Discussion

# Credits