- **Basic Information:** Speed of Speedrunning, Isaiah Gentle, ijgentle@dons.usfca.edu, https://igentle292.github.io/project/

- **Background and Motivation**: I enjoy watching speedrunning videos, and seeing the progression of records and play is intriguing to me. Speedrunning is the act of completing a game as quickly as possible. This trend has gained massive popularity over the years, and many games, such as Super Mario 64, have become central to this trend. Exploring the progression of speedrunning through the records and players can help to spread the word of speedrunning. I will do this for Super Mario 64, one of the most popular speedrun games

- **Project Objectives**:
  - Demonstrate the improvement of speedruns over time
  - Show the growth/decline in popularity of the game
  - Show where the best players are playing from

- **Features**: Scatter Plot to represent improvement of speedruns over time, a Diverging Bar chart to show change in the amount of runners per year, and a Tree Map to show the origins of the runners. Simple sketches are included at the end

- **Must-Have Features**:
  - Demonstrate the improvement of speedruns over time with a Scatter Plot
  - Show the amount of players per year to demonstrate the growth/decline in popularity with a Diverging Bar Chart
  - Show where the best players are playing from by using a Tree Map to show the Continent and Country they are playing from
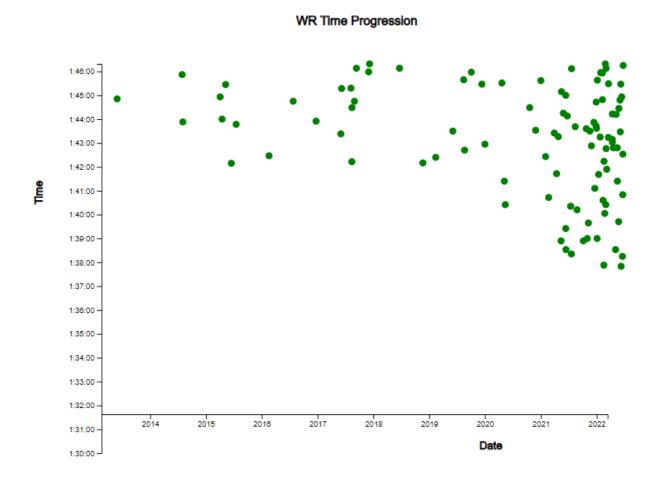
- **Optional Features**:
  - Greater interactivity and tooltips
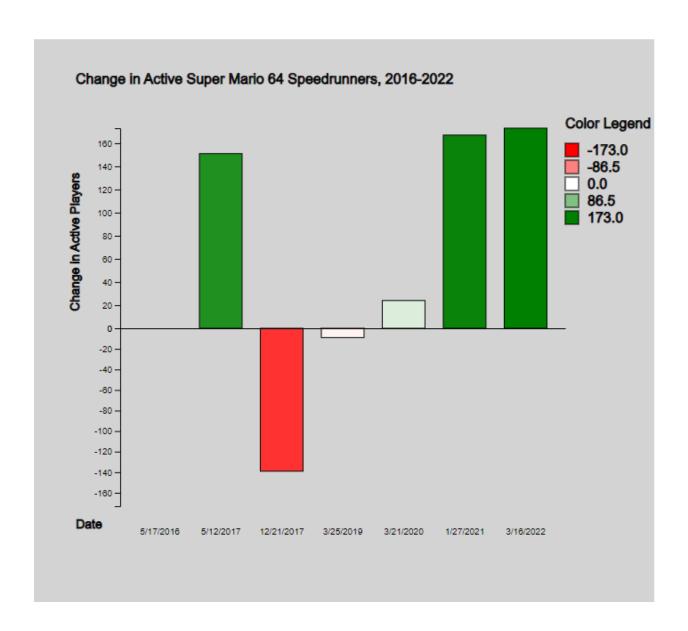
- **Related Work:**

- Brewer, Christopher G., "Born to Run: A Grounded Theory Study of Cheating in the Online Speedrunning Community" (2017). Master's Theses. 311. https://aquila.usm.edu/masters_theses/311
- Sher, Stephen Tsung-Han, and Norman Makoto Su. "Speedrunning for charity: How donations gather around a live streamed couch." Proceedings of the ACM on Human-Computer Interaction 3.CSCW (2019): 1-26.
- Scully-Blaker, Rainforest. "A practiced practice: Speedrunning through space with de Certeau and Virilio." Game Studies 14.1 (2014).
- Lafond, Manuel. "The complexity of speedrunning video games." 9th International Conference on Fun with Algorithms (FUN 2018). Schloss Dagstuhl-Leibniz-Zentrum fuer Informatik, 2018.
- Heubl, Ben. "The new retro-gaming kings." Engineering & Technology 16.6 (2021): 58-60.
- **Milestones**:
  - 4/1-4/8
    - Basic Tree Map for player origins
    - Update website's HTML to be more organized
    - **Alpha Release due 4/6   <- I have completed up to here**
  - 4/8-4/15
    - Add color and annotations to visualizations
    - Find an appropriate website template
    - Create a simple user manual
  - 4/15-4/22
    - Add more detail, color, and flair to visualizations, along with annotations
    - **Beta Release due 4/20**
  - 4/22-4/29
    - Update visualizations if needed
    - (possibly) add interaction to Visualizations
  - 4/29-5/6

- ■ Begin presentation
- ■ Continue updating website and visualizations as necessary
  - ○ 5/6-5/13
    - ■ Complete and refine Presentation
    - ■ **Presentation due 5/9**
  - ○ 5/13-5/20
    - ■ Last second improvements to website, report, presentation, etc
    - ■ **Report due 5/16**
    - ■ **Final due 5/19**
- ● **Roadblocks**: I realized that my dataset does not really work as a line chart, so I improvised and made it into a Scatter Plot. Moving forward, I will either have to modify my data to demonstrate an improvement, or stick with this.
- ● **Visualizations**:

WR Time Progression

Change in Active Super Mario 64 Speedrunners, 2016-2022

Change in Active Players

Color Legend
- -173.0
- -86.5
- 0.0
- 86.5
- 173.0

| | 160 | 140 | 120 | 100 | 80 | 60 | 40 | 20 | 0 | -20 | -40 | -60 | -80 | -100 | -120 | -140 | -160 |

Date   5/17/2016   5/12/2017   12/21/2017   3/25/2019   3/21/2020   1/27/2021   3/16/2022

Country of Origin for Top 100 Super Mario 64 Speedrunners

Spain EU	Germany EU	Austria EU	Norway EU	England EU	Japan AS
Sweden EU		Faroe Islands EU		Denmark EU / France EU	
	UK EU	Finland EU	Switzerland EU	Wales EU	

USA NA	Canada NA		
		Australia AU	XX XX
		Brazil SA	Chad AF