

Analysis of speedrun.com



what does it take to get to the top?

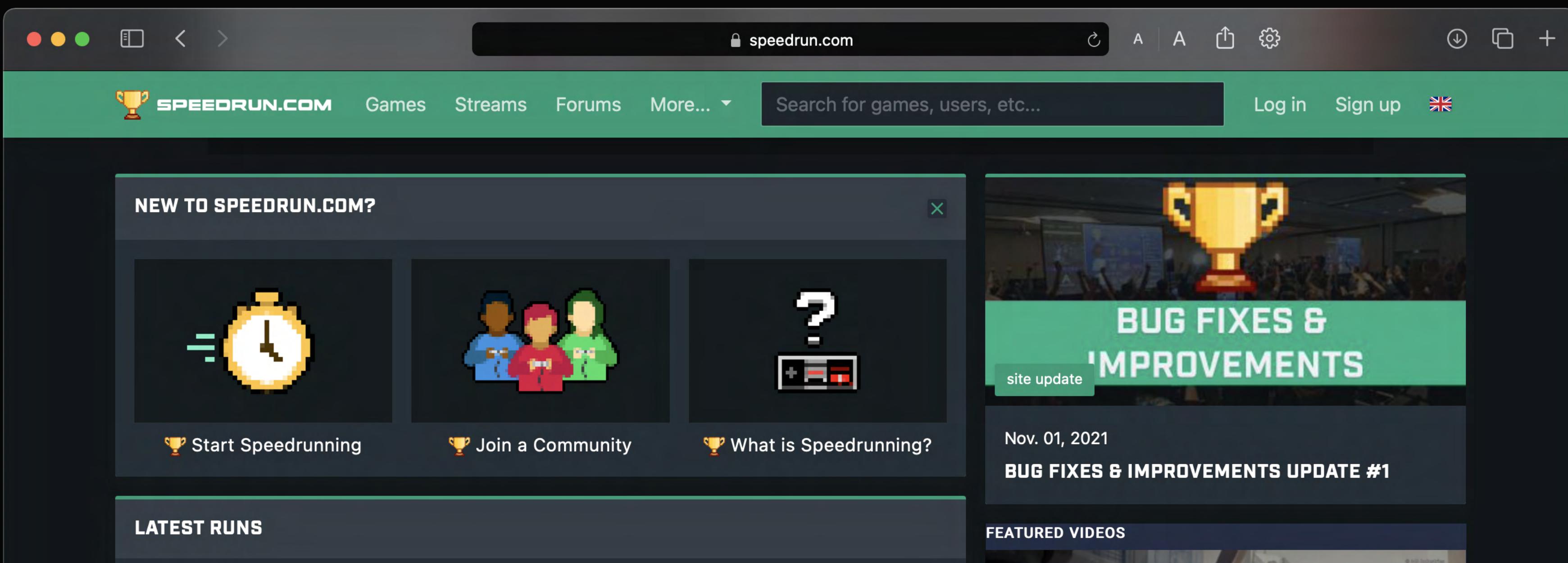
Domain

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Speedrunning is when an individual attempts to beat part or all of a video game as quickly as possible. This can include individual levels, specific objectives, or unique limitations as decided by the community or player.

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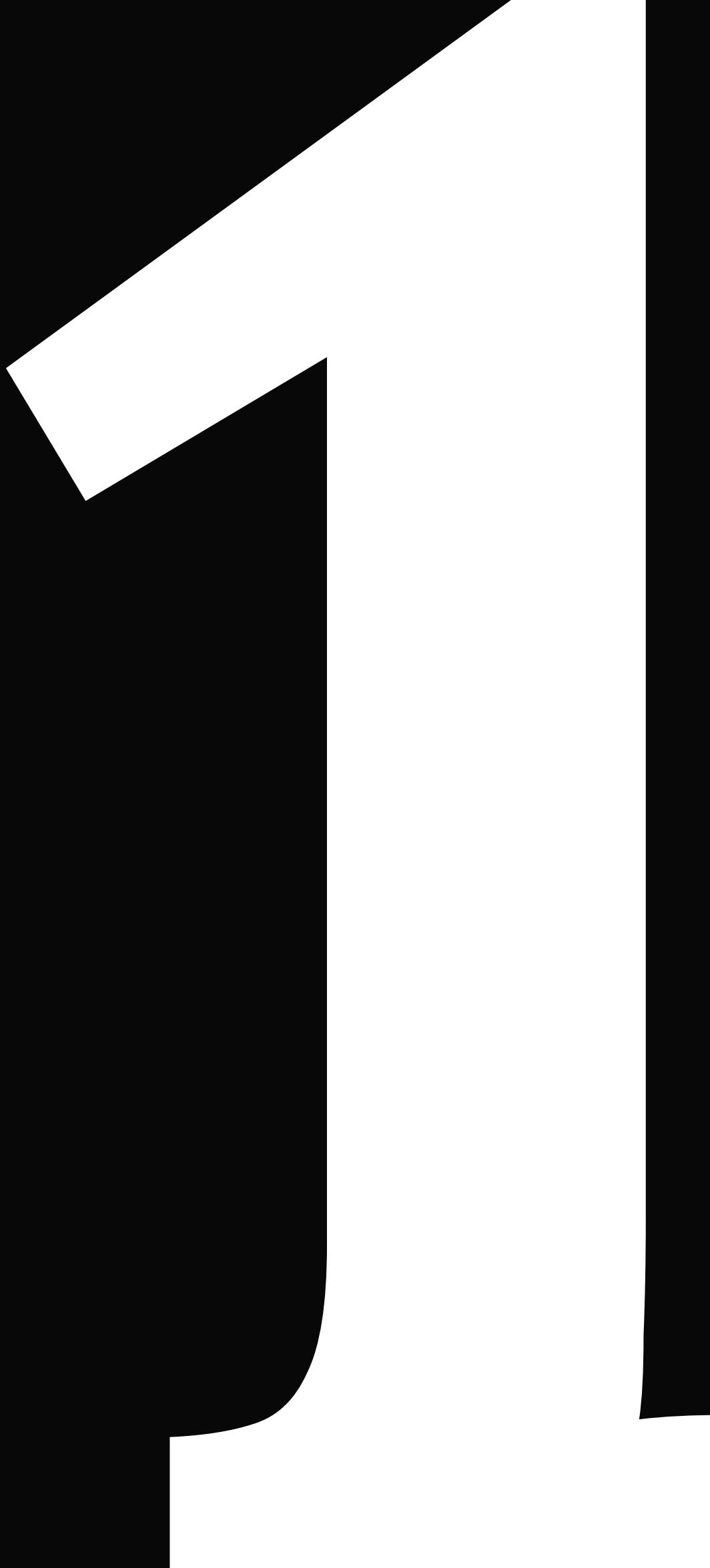
Investigative
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Who are the best of the best?

Which speedrunners are most talented?

Which countries excel in the leaderboards?

Who are rivals? Which players tend to place in the same leaderboards together?



Are speedrunners improving over time?

How many attempts on average does it take to get a world record?

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Do some players have unfair advantages?

Do games played on emulators offer speedrunners an edge?

Can certain region-specific versions of games yield faster times?

Are some examiners biased? Do some examiners examine certain successful players often?



Which countries “excel”?

Do raw numbers really mean one country exceeds another? Are disadvantaged countries misrepresented in leaderboards?

Country Name	Runs in Top 3 Positions	Players in Country	Ratio
-----	-----	-----	-----
🇺🇸 United States	687	1951	0.3521
🇯🇵 Japan	123	219	0.5616
🇬🇧 United Kingdom	121	264	0.4583
🇨🇦 Canada	97	278	0.3489
🇩🇪 Germany	82	176	0.4659
🇫🇷 France	47	127	0.3700
🇧🇷 Brazil	35	122	0.3689
🇦🇺 Australia	32	86	0.3721
🇫🇮 Finland	31	71	0.4366
🇷🇺 Russia	29	59	0.4915

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What actually makes one player better than the other?

So how can we compare them? What metrics can we use to compare players?

Player Name	Runs in Top 3 Positions	Player Name	Games with Top Record
CedrikPle	43	rusto	4
Slevanas	34	xIceblue	3
Val_JP	31	Sizzyl	3
mobius	29	jonsku1	3
Hitshee_Spingear	27	edboi	3
ALZERI28	26	OrionYTP	3
dlimes13	24	werster	3
Jasnix08	24	Jasnix08	3
rusto	24	smartalec24	3
Bluekandy	23	dlimes13	3



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5

4.7056892778993435

average number of attempts before a
player places in rank one

Emulated Success

Do emulators give players an advantage?

1.110499

average emulated to non-emulated runtime ratio

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Are some examiners biased?

How often do players win records when examining themselves?

Player Name	Self-Examined Runs	Player Name	Self-Examined Records
Slevanas	225	Slevanas	16
rusto	85	ALZERI28	7
ZEN_Ivan	80	Technickle_	7
ALZERI28	78	imglower	7
Winslinator	72	rusto	6
BMac_Attack_64	70	Slyfincleton	6
Slyfincleton	68	Pikalex04	6
Pikalex04	60	RubberDuckyAssassin	6
Sébastien-G	59	SuperSqank	5
aleckermit	50	Sébastien-G	5

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ALZERI28	7
Technickle_	7
imglower	7
rusto	6
Slyfincleton	6
Pikalex04	6
RubberDuckyAssasin	6
SuperSqank	5
Sébastien-G	5

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Sneaky Mods

Do examiners who examine their own runs have more records?

8.71%

of **non-self-examined**
record-winning runs

13.86%

of self-examined
record-winning runs

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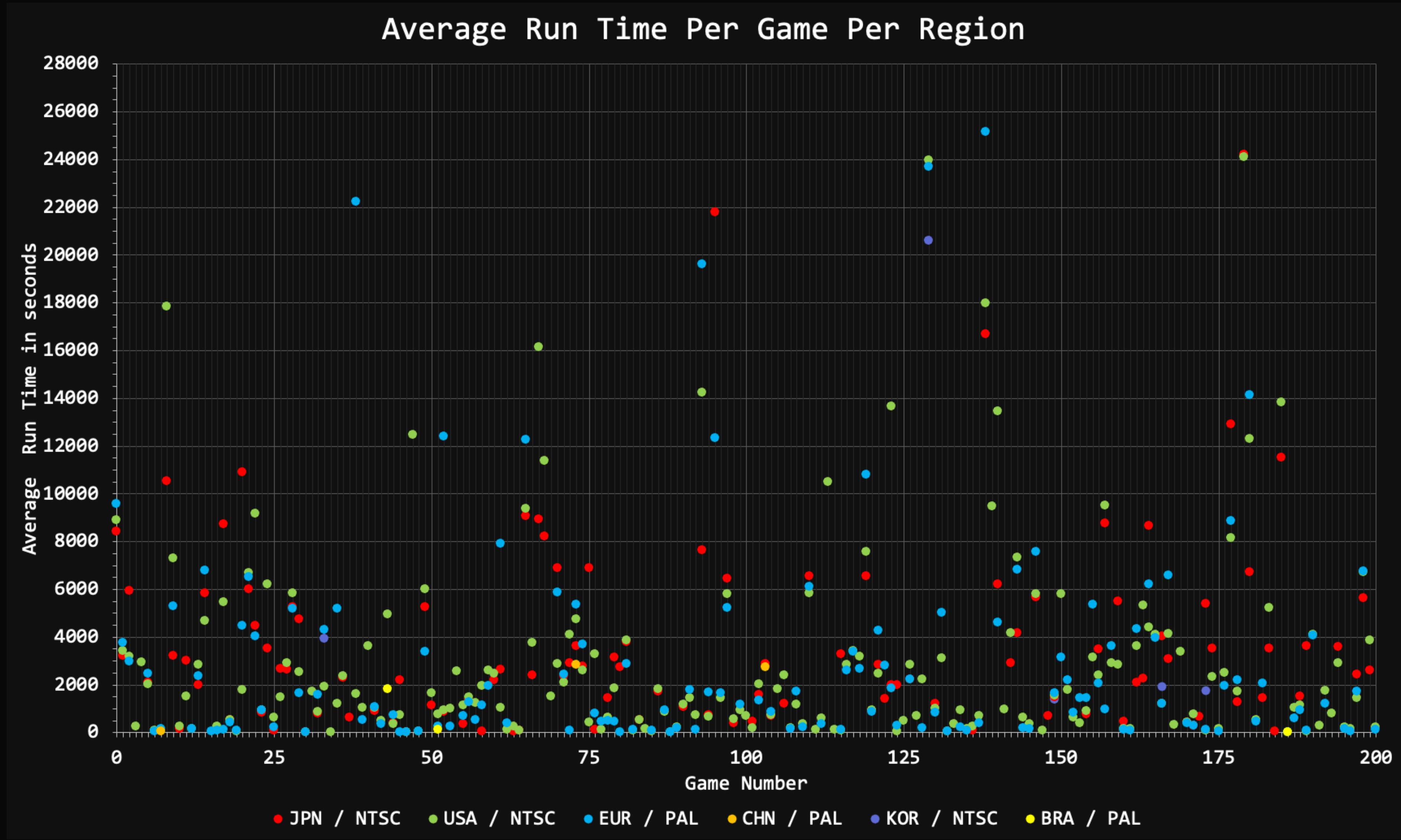
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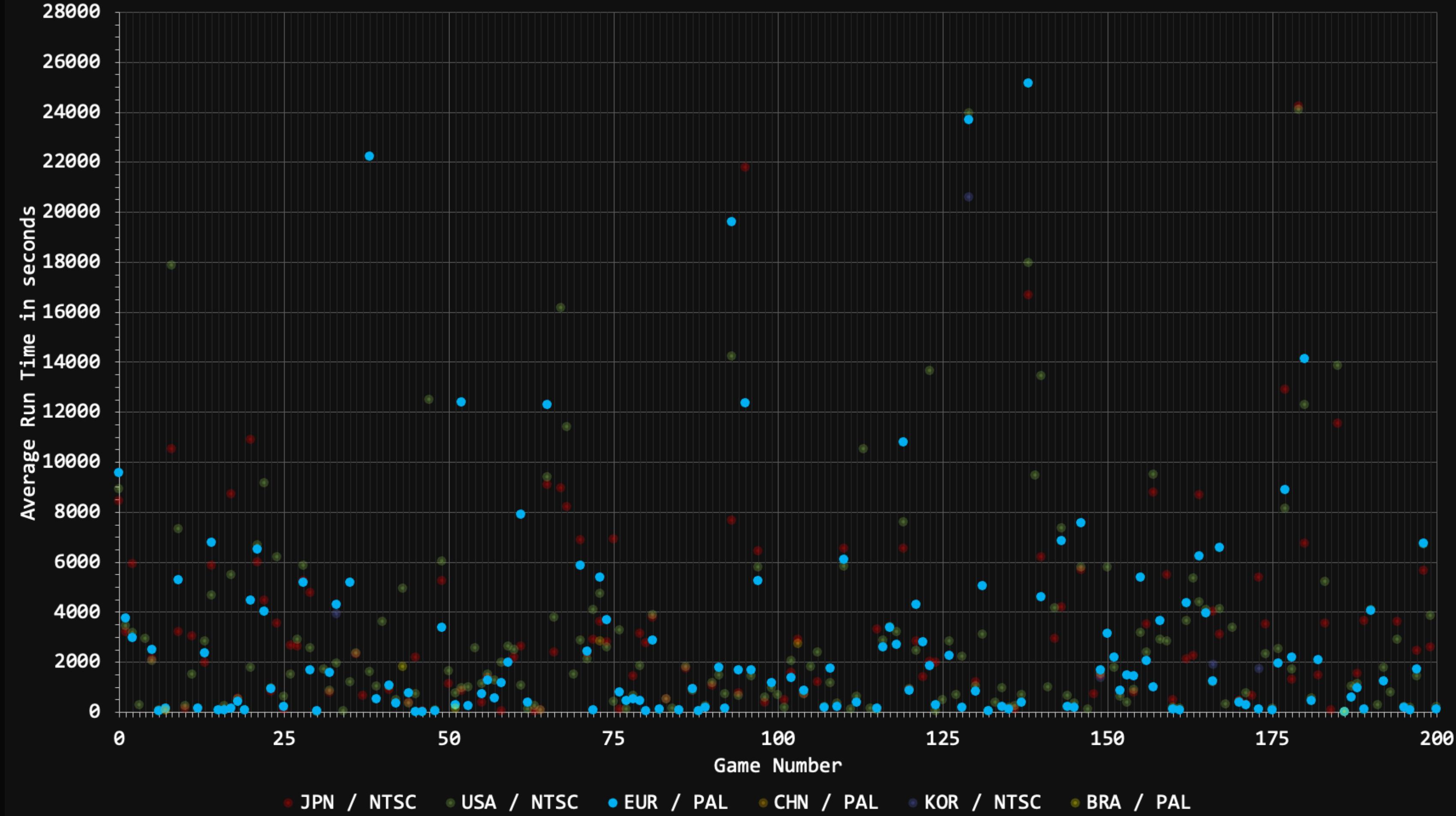
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Average Run Time Per Game Per Region



Region Name	Avg Time
BRA / PAL	1606.47
EUR / PAL	1862.43
CHN / PAL	2681.88
USA / NTSC	2983.94
KOR / NTSC	3255.95
JPN / NTSC	3387.17

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Putting it altogether

The bigger picture of speedrun.com

Leaderboards can be made more **meaningful**.

Runs are voluntary, which can **skew** results.

Certain game settings are **advantageous**.

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Our Biggest Challenge

... Web Scraping and Data Cleaning

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```
1 def get_games_with_regions(debug=False, save=False):
2     pages = 0
3
4     frames = []
5     while True:
6         offset = pages * PAGE
7         url = f"https://www.speedrun.com/api/v1/games?max={PAGE}&offset={offset}"
8
9         response = requests.get(url)
10        parsed = json.loads(response.text)
11        if "data" in parsed:
12            parsed = parsed["data"]
13        else:
14            break
15
16        for p in parsed:
17            if len(p["regions"]) == 0:
18                continue
19
```

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Lessons Learned

Simplify the schema.
Depth over breadth.

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Lessons Learned

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The Role of Constraints Necessary Strictness

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