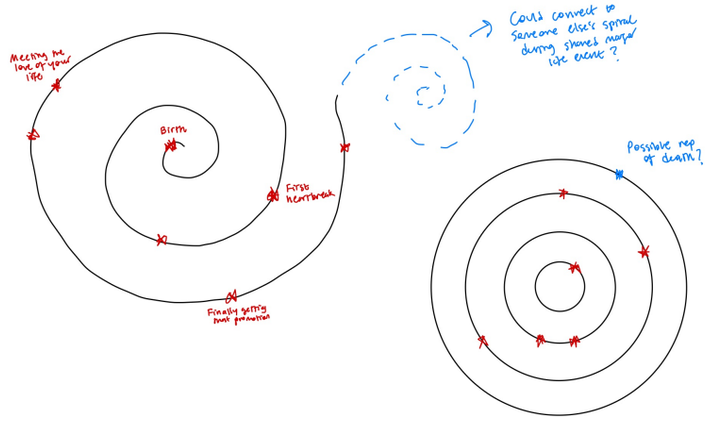
Exercise 1

Mapping Time

Part 1: Sketch

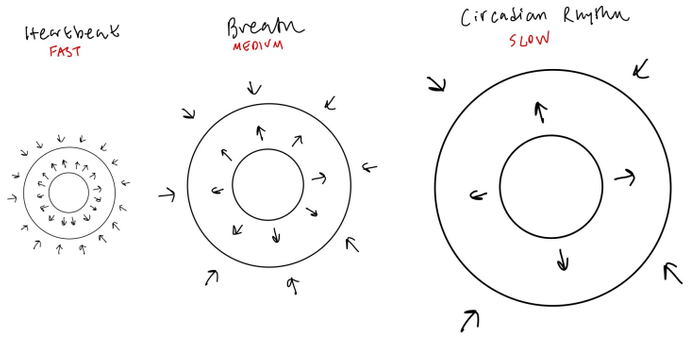
Time as a snail spiral

- The spiral line represents the flow of time moving forward as it progresses
- The **red** dots are events and milestones (e.g., birth, graduation, big life events)
- Time is cyclical but expanding, which suggests both repetition and growth/ change
- Would the outmost ring close once someone dies? Could people's snail spirals be connected after shared events? Idk



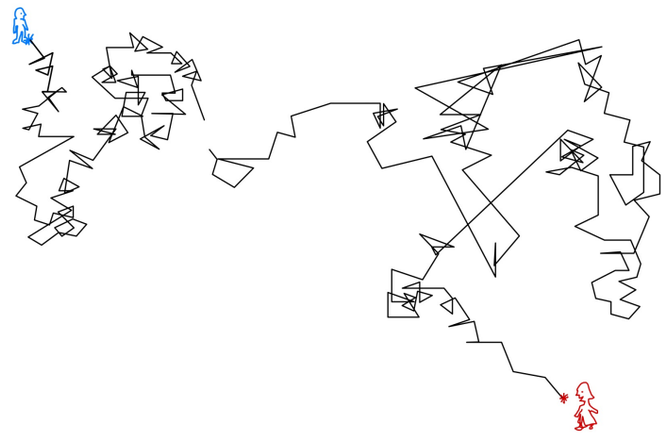
Time as a pulse

- The circles expand and contract to represent time as a living process rather than a static line
  - Heartbeat **(fast pulse)**: small circle, quick rhythm, short cycles of time
  - Breath **(medium pulse)**: medium circle, slower rhythm, bodily rhythms we're conscious of
  - Circadian rhythm **(slow pulse)**: large circle, very gradual rhythm, long-term cycles
- The different speeds overlap, showing how multiple biological clocks run simultaneously inside us
- Pulses suggest time as something felt and embodied (we live it in rhythms), not just measured on a calendar

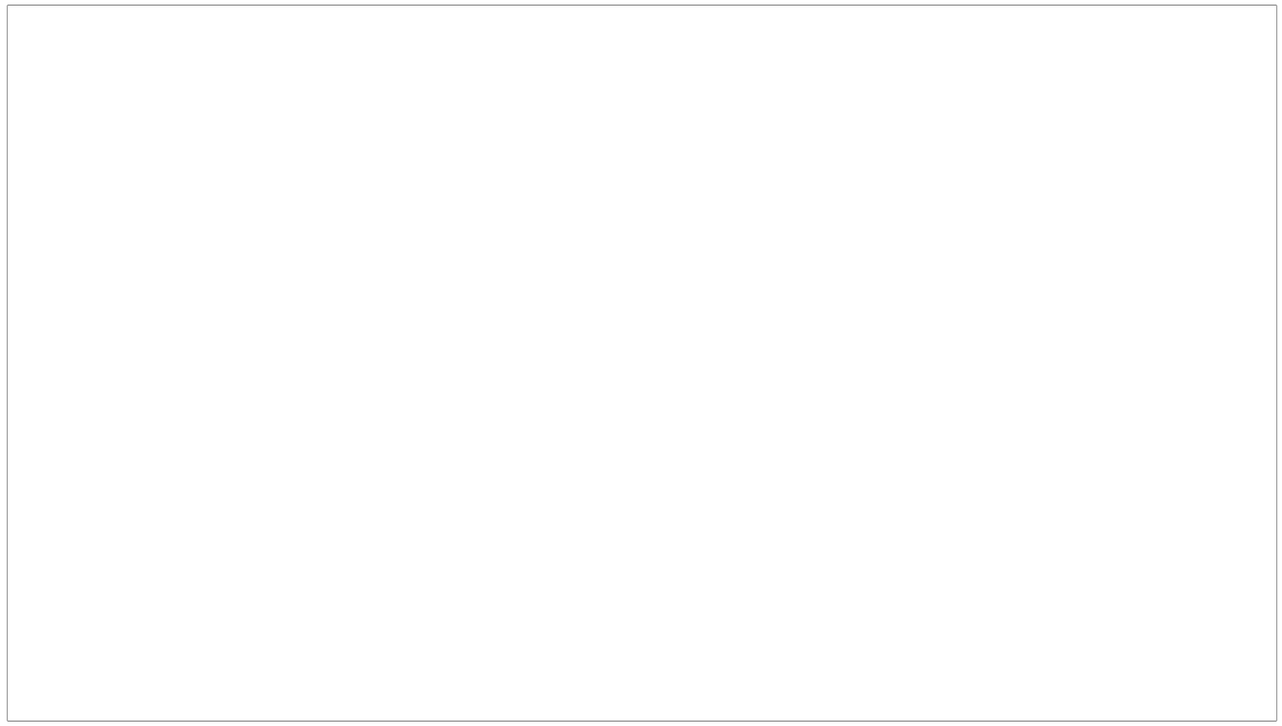


Time as a random walk

- The wandering line represents time moving forward, but with unpredictable directions
- Each “step” is equal in length (time always passes), but the path is never straight
- Suggests that life feels like navigating uncertainty, where meaning emerges only in hindsight
- Could be extended? **multiple walks** overlayed = different people’s timelines crossing or diverging??



Part 2: Prototype



Part 3: Visualisation

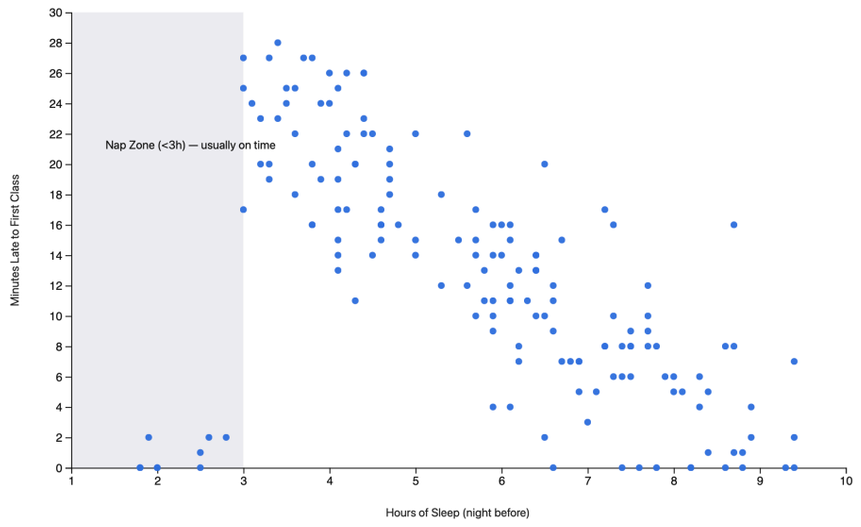
Concept

- I’ve always been chronically late to everything (I go to therapy for this)
- **Question**: Does sleep the night before affect how late I arrive to my first class?
- Visualisation: Scatterplot (with no trendline)
  - X = Hours of Sleep (night before)
  - Y = Minutes Late to First Class
  - One dot per weekday (Aug 28, 2023 to May 10, 2024), excluding weekends and major breaks
- **Hypothesis**: More sleep >> less lateness

Senior Year at Georgetown: Hours Slept vs. Minutes Late to First Class

One dot per weekday from late Aug 2023 to early May 2024 (excludes weekends, Thanksgiving, Winter Break, and Spring Break)

X: Hours of Sleep (night before)
Y: Minutes Late to First Class



Yes, mostly (less sleep >> more late)
Except a <3hr “nap zone” where I’m oddly on time?

Technical Implementation

- D3.js v7; served via VS Code Live Server
- Data: CSV from my **Oura ring** (columns: date, weekday, sleep, late); 157 weekdays
- Scales: Linear x (sleep hours), linear y (minutes late); margins for axes
- Elements: circles for points; a rect for the Nap Zone; axes +ticks; tooltip div
- Structure: index.html + styles.css + scatter.js + data.csv

Design Process

- Scatter-only, no trendline (because what would that truly tell us?)
- Shaded <3h Nap Zone for context
- Removed weekends and breaks from dataset using **GPT-5**
  - I fed Chat with the Georgetown Academic Calendar
- **Tooltips** show date, sleep, and minutes late for each dot

Shading and data cleaning was a struggle

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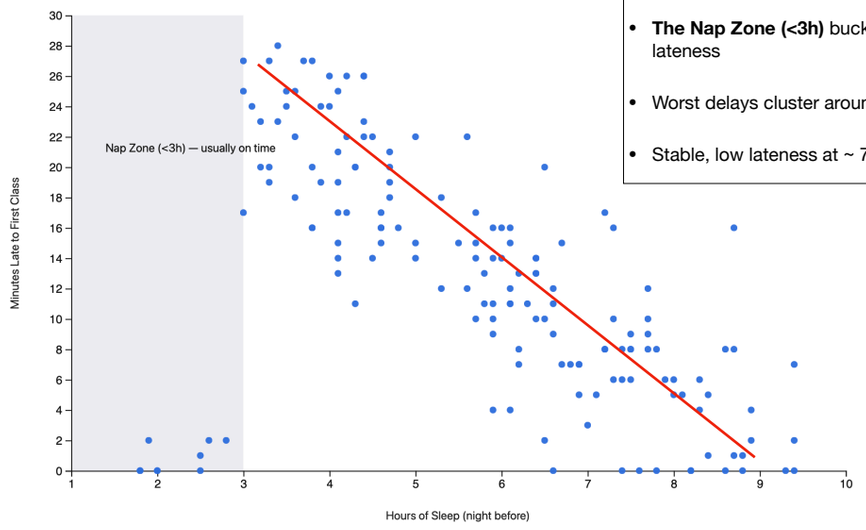

- A visible downward trend: more sleep, less lateness
- **The Nap Zone (<3h)** bucks the rule: near-zero lateness
- Worst delays cluster around ~3-6h sleep
- Stable, low lateness at ~ 7-9h

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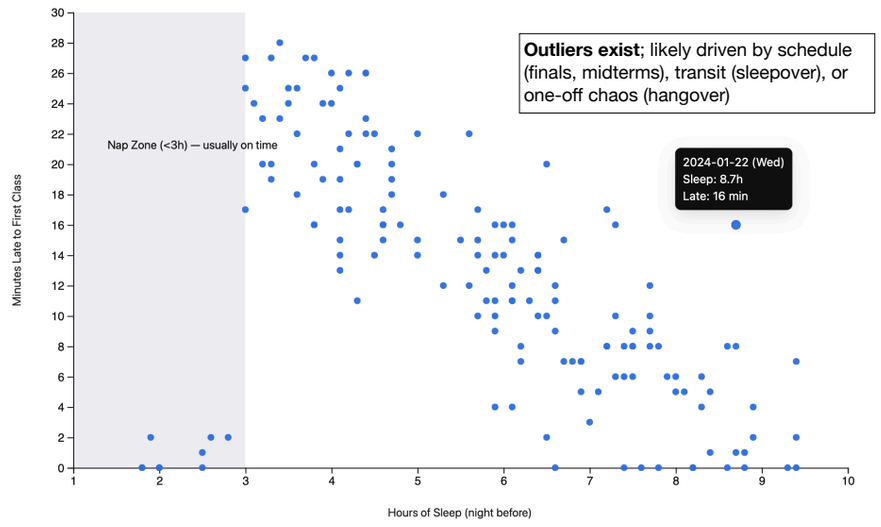

See: my birthday (2024-01-22)