WWMMD Project Log

04/06/2024

Start adding entries at top of file so most recent entries are first.

Met with Jack and Nic, Friday, April 5. Jack added github for code and docs. Nic introduced example prompts and responses from several LLMs.

03/27/2024

Bruce S

This morning I spent about 20 minutes following this tutorial:

[Matplotlib time series line plot | DataCamp](https://www.datacamp.com/tutorial/matplotlib-time-series-line-plot)

This should help writing plot routines for selected NBA data.

Team meeting is scheduled for 9:00AM PDST, 11:00AM CDST.

Team meeting notes:

Jack showed code to select play by play data by team by game id.

Nick and Jack described the process.

Bruce, Jack to send questions for the current llms.

Read chess example from Jack and take notes and questions.

3/28/2024

Bruce watched PBS NOVA A.I, Revolution documentary

Liquid Neural Networks - dynamic learning feature; much fewer neurons.

Downloaded Pi on my iphone

Pi cannot or will not predict NCAAM 2024 winner.

Bruce reviewed Play\_by\_Play data in the current database. Here is an example of descriptions for some events from a game against San Antonio…

Omoruyi Free Throw 1 of 2 (4 PTS)

SUB: Jay. Williams FOR Dieng

SUB: Mann FOR Pokusevski

Omoruyi Free Throw 2 of 2 (5 PTS)

SUB: Dieng FOR Waters III

Jay. Williams REBOUND (Off:0 Def:10)

MISS Jay. Williams Free Throw 1 of 2

MISS Jay. Williams Free Throw 2 of 2

MISS Mann 8' Driving Layup

Jay. Williams REBOUND (Off:0 Def:11)

Jal. Williams 3' Cutting Finger Roll Layup Shot (19 PTS) (Mann 6 AST)

Questions

1. Can the season and date be derived from fields in the pbp table?
2. Will we need to reference game table, get game ids and use as keys for pbp table?
3. Have you checked out the Providence Steamrollers and the St Louis Bombers?

3/27/2024

Bruce read “Manipulating Chess-GPT’s World Model” by Adam Karvonen”.

Section “Board State Interventions” reference to PGN - Portable Game Notation, made me wonder whether we could benefit from a similar code for Nba play\_by\_play data.

Here is an example of chess PGN from Wikipedia.

“Here is the PGN format of the 29th game of the [1992 match](https://en.wikipedia.org/wiki/Fischer%E2%80%93Spassky_(1992_match)) played in [Yugoslavia](https://en.wikipedia.org/wiki/Federal_Republic_of_Yugoslavia) between [Bobby Fischer](https://en.wikipedia.org/wiki/Bobby_Fischer) and [Boris Spassky](https://en.wikipedia.org/wiki/Boris_Spassky):

**[Event** "F/S Return Match"**]**

**[Site** "Belgrade, Serbia JUG"**]**

**[Date** "1992.11.04"**]**

**[Round** "29"**]**

**[White** "Fischer, Robert J."**]**

**[Black** "Spassky, Boris V."**]**

**[Result** "1/2-1/2"**]**

1. e4 e5 2. Nf3 Nc6 3. Bb5 {This opening is called the Ruy Lopez.} 3... a6

4. Ba4 Nf6 5. O-O Be7 6. Re1 b5 7. Bb3 d6 8. c3 O-O 9. h3 Nb8 10. d4 Nbd7

11. c4 c6 12. cxb5 axb5 13. Nc3 Bb7 14. Bg5 b4 15. Nb1 h6 16. Bh4 c5 17. dxe5

Nxe4 18. Bxe7 Qxe7 19. exd6 Qf6 20. Nbd2 Nxd6 21. Nc4 Nxc4 22. Bxc4 Nb6

23. Ne5 Rae8 24. Bxf7+ Rxf7 25. Nxf7 Rxe1+ 26. Qxe1 Kxf7 27. Qe3 Qg5 28. Qxg5

hxg5 29. b3 Ke6 30. a3 Kd6 31. axb4 cxb4 32. Ra5 Nd5 33. f3 Bc8 34. Kf2 Bf5

35. Ra7 g6 36. Ra6+ Kc5 37. Ke1 Nf4 38. g3 Nxh3 39. Kd2 Kb5 40. Rd6 Kc5 41. Ra6

Nf2 42. g4 Bd3 43. Re6 1/2-1/2

“

Here is some of the raw play\_by\_play data from PHX v LA game.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| game\_id | homedescription | neutraldescription | visitordescription | score |
| 29600012 |  | Start of 1st Period (14:43 PM EST) |  |  |
| 29600012 | Jump Ball O'Neal vs. Kleine: Tip to Cassell |  |  |  |
| 29600012 |  |  | MISS Cassell 15' Jump Shot |  |
| 29600012 | O'Neal REBOUND (Off:0 Def:1) |  |  |  |
| 29600012 | MISS Ceballos 26' 3PT Jump Shot |  |  |  |
| 29600012 |  |  | Cassell REBOUND (Off:0 Def:1) |  |
| 29600012 | Van Exel P.FOUL (P1.T1) |  |  |  |
| 29600012 |  |  | Cassell Bad Pass Turnover (P1.T1) |  |
| 29600012 | MISS Ceballos 1' Layup |  | Horry BLOCK (1 BLK) |  |
| 29600012 | LAKERS Rebound |  |  |  |
| 29600012 | Ceballos Lost Ball Turnover (P1.T1) |  | Horry STEAL (1 STL) |  |
| 29600012 | Van Exel STEAL (1 STL) |  | Horry Bad Pass Turnover (P1.T2) |  |
| 29600012 | O'Neal Slam Dunk (2 PTS) (Van Exel 1 AST) |  |  | 0 - 2 |
| 29600012 |  |  | MISS Kleine 11' Jump Shot |  |
| 29600012 | Ceballos REBOUND (Off:0 Def:1) |  |  |  |
| 29600012 | Ceballos Layup (2 PTS) (Jones 1 AST) |  |  | 0 - 4 |
| 29600012 |  |  | MISS Person 16' Jump Shot |  |
| 29600012 |  |  | Kleine REBOUND (Off:1 Def:0) |  |
| 29600012 |  |  | MISS Person 3PT Jump Shot |  |

I believe the information from the home and visitor descriptions could be parsed from the text assuming the items are sufficiently consistent. Would it be good to invent (or locate) a shortened code for these text descriptions?

Have you (Jack or Nick) tried: select a subset of play\_by\_play table data (similar to the selected data above); prompt Claude (any LLM) to produce the next (n) events?

Met with Jack and Nick.

Tasks - read new doc and updated Google docs from Nick and create questions and comments.

Jack will continue code updates.

Meeting times MWF 9:30A PDST

Next meeting 4/1/2024