

Negotiating Agent Report

Team-1

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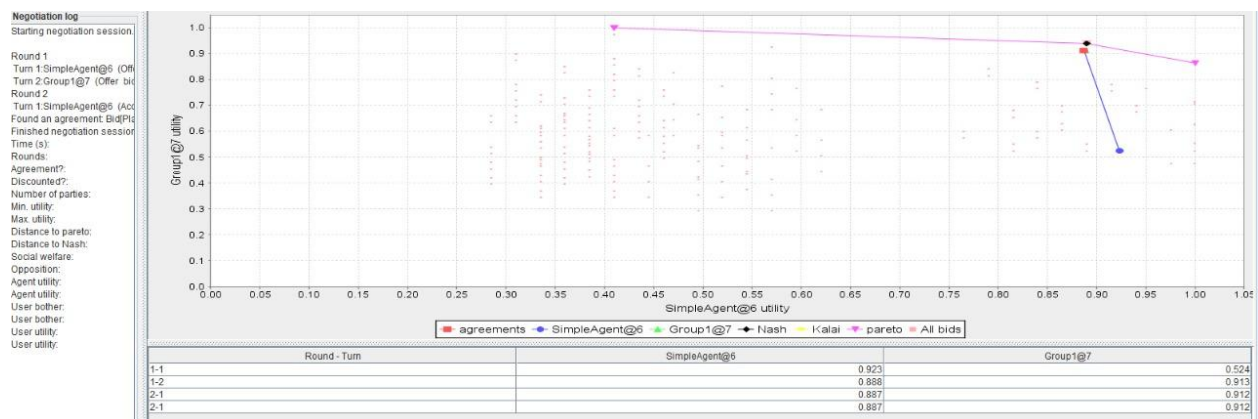
Gaddam Vinay Chandra Reddy

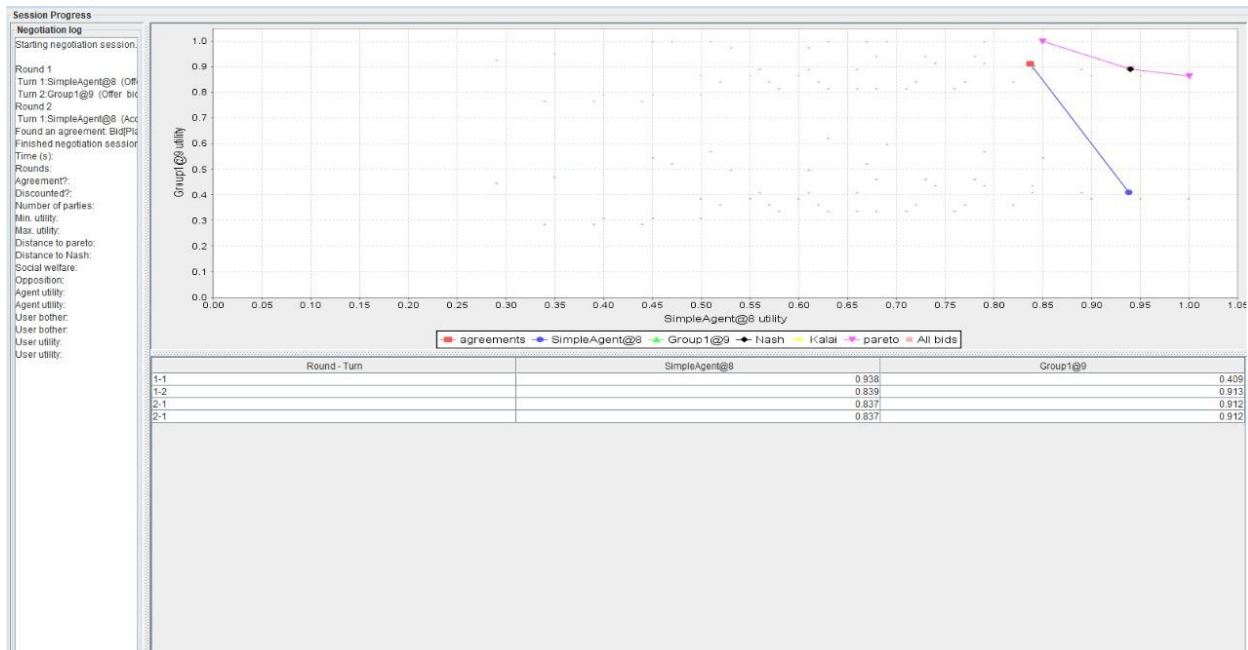
- 2020101010

Our D2 Agent:

Our agent works based on the strategy that the agent will only accept the bid if the utility of the offered bit is greater than or equal to 0.9 and if the offered bid has utility less than 0.9 it will reject the bid and offer the random bid with utility greater than 0.9.

Results for D2:





Improved Agent (D3):

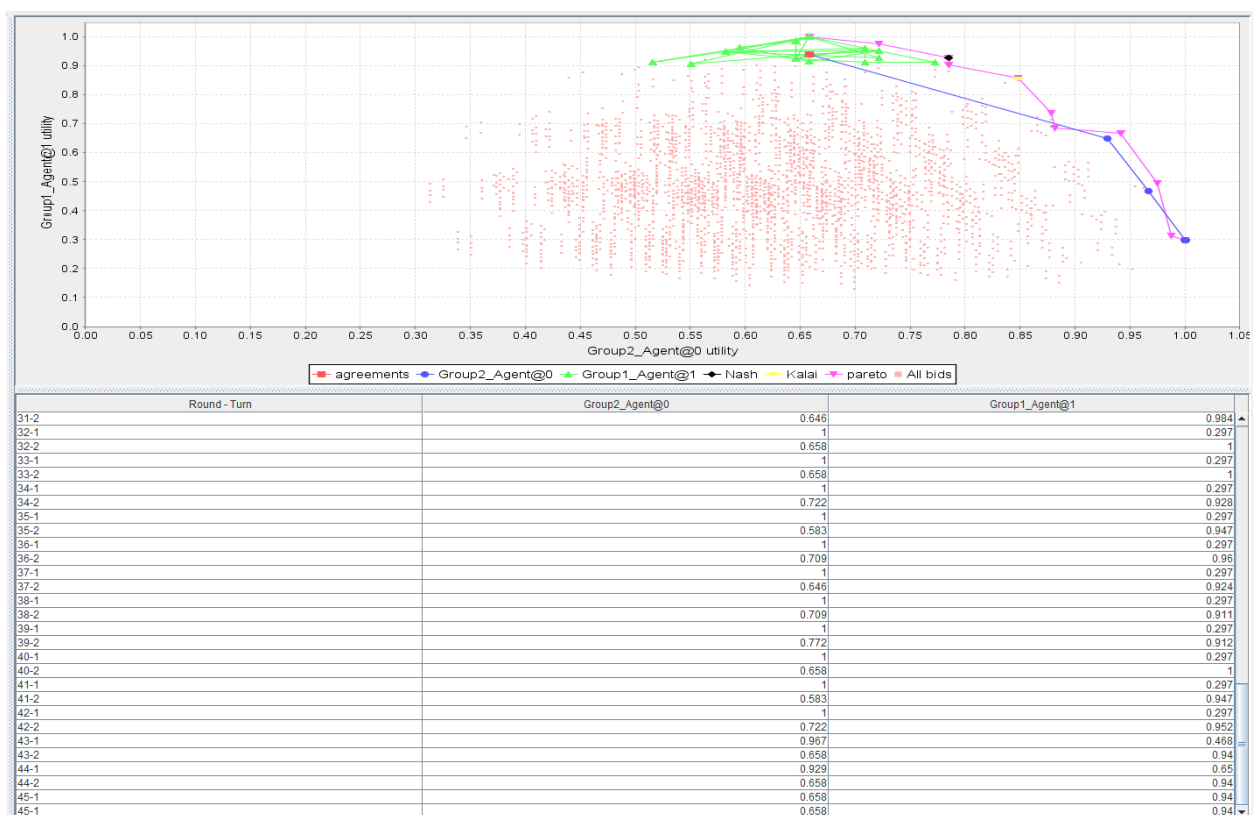
Previously our agent just blindly argues to have utility 0.9. But It is not the correct way to negotiate. Now our agent will consider utility which will be dependent on time.its a time based strategy As time increases the minimum utility the agent looks for will be decreased as a function of time.

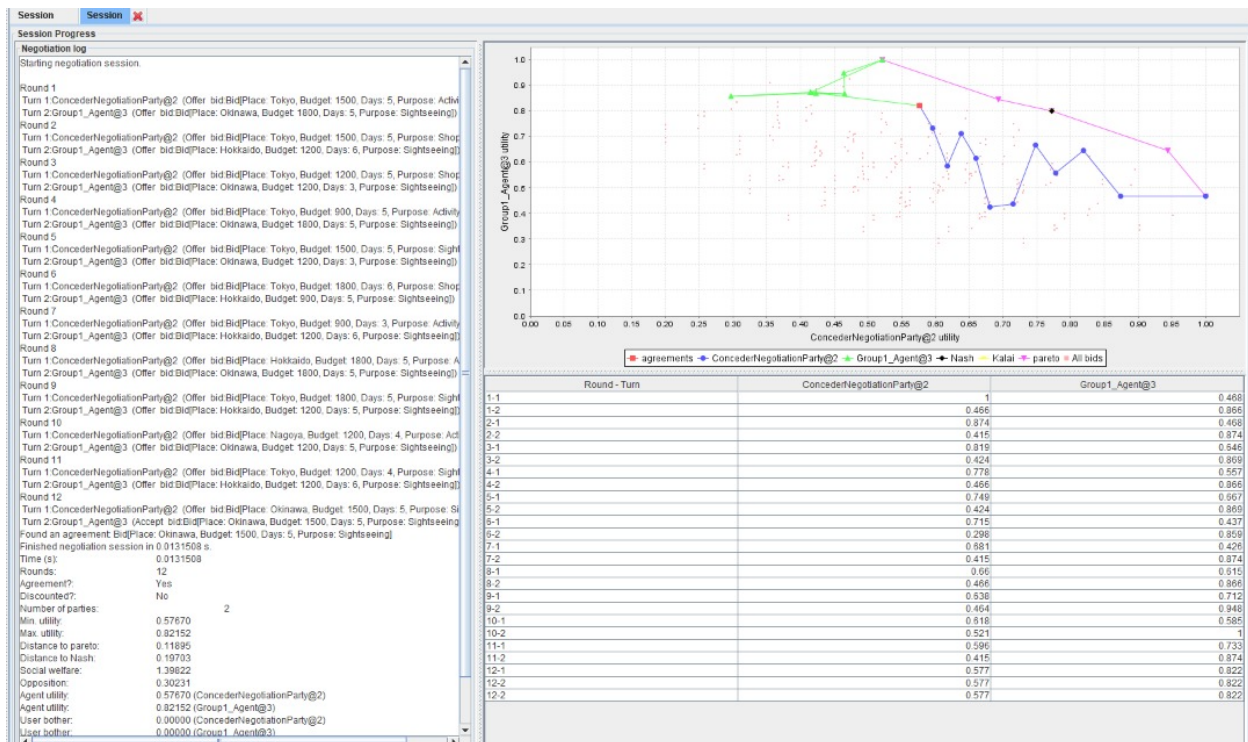
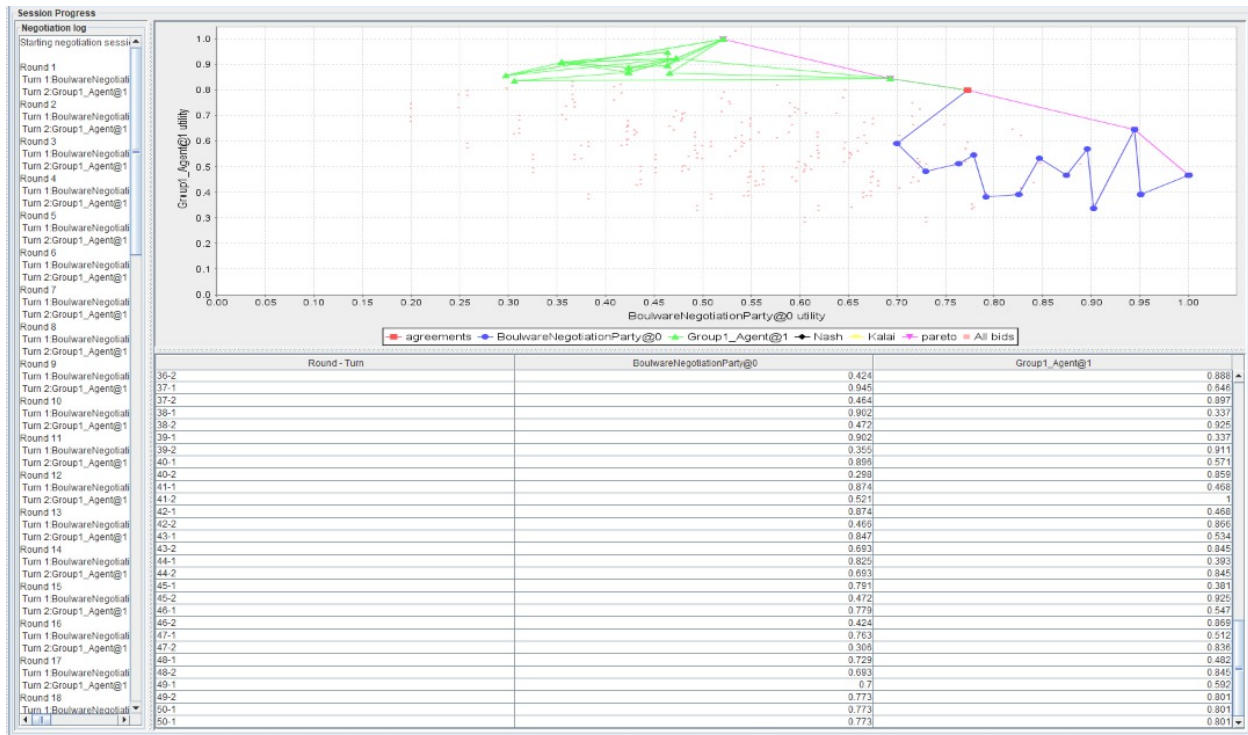
Below are the results when we run our improved agents with some agents.

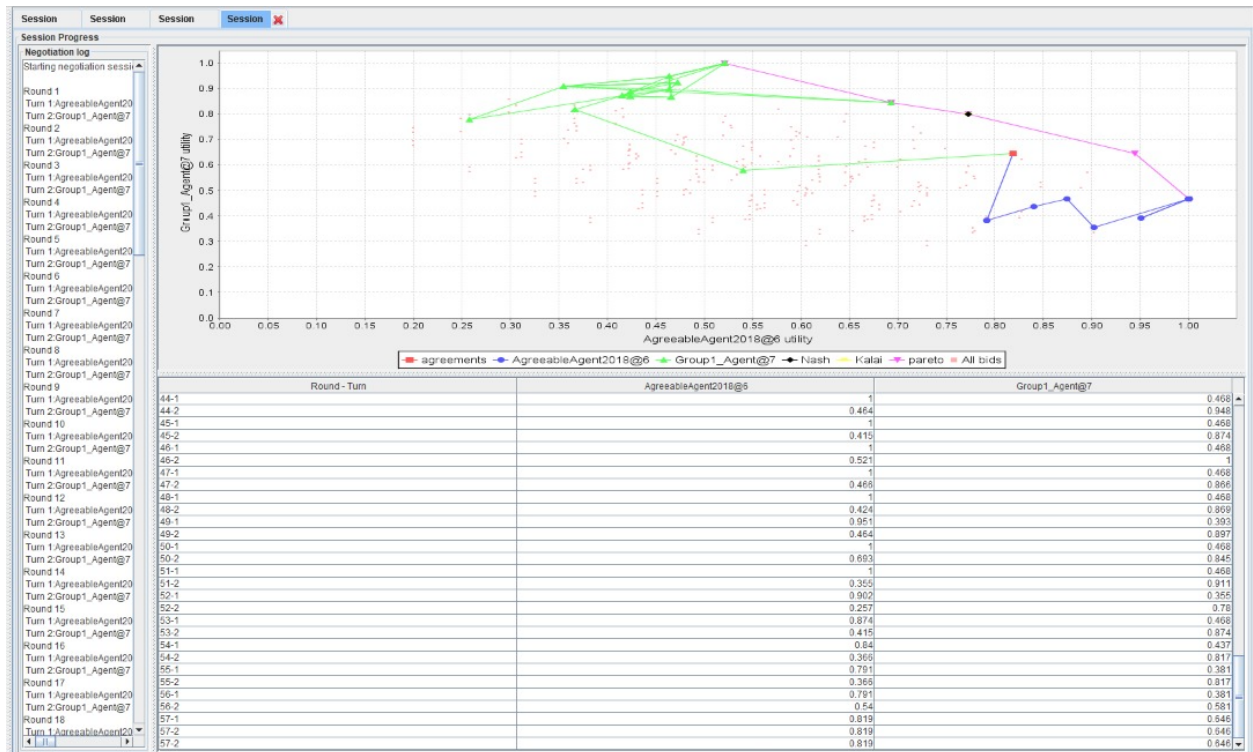
Final Agent (D4):

In this D4 or agent will calculate the utility of the opponent during the negotiation process using the frequency of the issues values in the given bids . It observes the frequency of the opponents bids and tries to calculate the utility of the opponents and changes our strategy based on the utility of the opponents. It tries to bring nash equilibrium using the utility of the opponent estimated using the frequency model it's also a time based agent and the min utility decreases with the time

Results in Negotiation and Tournament:







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