### **CSCE 475H Multiagent Systems**

### **Game Day 2: Voting Day**

Assigned: February 23, 2016 Game Day: March 1, 2016

#### Introduction

Welcome to Soh's Agency for Songs Preference Aggregation (SASPA). Note that this agency is simply collecting information on songs, in an efficient and effective manner. In a way, voters (or agents) are non-strategic – as each voter should reveal their preferences truthfully as nothing is to be gained either way.

This document is supplementary to Game Day 2: Voting Day assignment.

#### **Procedure**

Each team will be given/provided the same list of songs on Game Day in an Excel file. Then for each round, each team is required to provide their voting and e-mail their Excel file back to the Game Day monitor(s).

Then the Game Day monitor(s) will aggregate the votes and send the aggregated Excel file back to all teams.

Then, for Round 1, 2, 3, 5, and 6, each team will e-mail the winner to the Game Day monitor(s).

Because there are six rounds, please FOLLOW the following file naming convention. Several teams failed to do so in Game Day 1 causing confusions for the Game Day monitor(s). So, this time around, teams with incorrect naming convention will be penalized (-5 points).

OR

So, for Round 1, if my team name is Foobar, then, my filename will be:

For the "winner" e-mail, a simple note would do. Please do indicate your Team Name and the selected winner clearly in your e-mail. Also please make sure to indicate your Team Name in the subject line of the email.

**Important**: Teams must remember to keep their voting consistent through the rounds, that is, teams are not allowed to change their preference order (or vote for a less preferred candidate) during the rounds.

The timestamp of your e-mail (sent) will serve as the time stamp that we use to judge your "timeliness".

Please come prepared and know all the six voting definitions well. We will not answer any questions about the voting definitions and you should not ask questions about any either.

Further, you are allowed to submit the winning candidate (song) for a round only once. Any wrong answer will result in a penalty of 2 points from your final grade for the Game Day.

Here is the link to the Game Day site:

http://cse.unl.edu/~hari/gameday/voting/game/.

**Note**: The list of songs for you to vote on will be provided on Game Day.

# Round 1: Plurality Voting

- Please copy and paste your vote and song titles into this space.
- Selected winner(s) after aggregating all votes:
  \_\_\_\_\_\_\_\_

# Round 2: Cumulative Voting

- Please copy and paste your vote and song titles into this space.

# Round 3: Approval Voting

- Please copy and paste your vote and song titles into this space.

Round	4:	<b>Bord</b>	a Vo	oting
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Submit your preference ordering using n-1 points for the highest ranked candidate, n-2 points for the second highest candidate, and so forth, and finally 0 point for the last candidate.

- Please copy and paste your vote and song titles into this space.
- Selected winner(s) after aggregating all votes:
- The preference ordering after aggregating all votes (please copy and paste the ordering into this space)

Question 1. Using the above aggregated preference ordering, revisit Round 4 results, is the Condorcet condition satisfied? (Justify your answer.)

Question 2. Given the Borda voting results, is there a spoiler item such that its remove from the list would cause significant changes to the preference ordering? (Justify your answer.)

<b>Round 5: Plura</b>	lity with	Eliminati	on
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Round	Eliminated song(s)	Teams that had to revote	Songs that received the re-votes
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2			
3			
4			
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31			

<sup>\*</sup> Since each team is allowed to re-vote only if their candidate is eliminated, it is possible that you will end up having the same vote for some or even all rounds. If two or more songs are rated the worst, then they are all eliminated. And those who had voted for them (to be winners) are to revote.

•	Selected winner(	s	) after aggregating all votes:	
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#### **Round 6: Pairwise Elimination**

Below is the pairwise elimination order (schedule or agenda) for the Game Day. Please fill out this table. Note: The Pairwise Elimination schedule will be provided on Game Day).

Candidate	Round 1	Round 2	Round 3	Round 4	Round 5
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	-				
	1				
	-				
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For this round, no new votes will be solicited since the preference ordering of all teams will have been given to each team in Round 4.

<ul> <li>Please fill in the winner for each round all the way to the</li> </ul>	TINA	11.
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•	Selected	winner(s	after aggregating all votes:	
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Question 3. Did the above pairwise elimination order cause an item that Pareto-dominates another candidate to finish behind the dominated candidate? (Justify your answer.)
Question 4. Provide another pairwise elimination order that would cause an item that Pareto-dominates another candidate to finish behind the dominated candidate?

**Lessons Learned** 

Notes: