Team W - Algorithms for Sports Eliminations

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- Builds on naïve calculations made by sports pundits.
- Real world application of Graph Theory.

Example

team	wins	to play	schedule			
i	w_i	g_i	Atl	Phi	NY	Mon
Atlanta	83	8	–	1	6	1
Philadelphia	79	4	1	–	0	3
New York	78	7	6	0	–	1
Montreal	76	5	1	3	1	–

Image courtesy of Kevin D. Wayne, Princeton University

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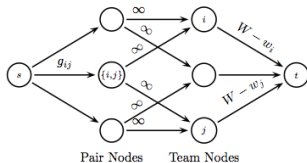- All flow leaving the source has to arrive at the sink.

Algorithm - Graph

Image courtesy of Kevin D. Wayne, Princeton University

Algorithm - Extensions

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Algorithm - Extensions

- Leauge Elimination by Binary Search Computation
- Certificate of Elimination
- First non-trivially eliminated team

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- Have considered future plans to parse a web page.
- Our current source is not suitable for real-time updating.
- As a team we are unsure if we would like to implement this feature or concentrate our energies on other features for example, making a web-based UI.

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- ► User is likely an advanced follower of the sport looking for very specific information.
- ► Simple design based on presenting this key information immediately.
- ► More detailed information available on user request.
- ► Challenge is to integrate the two tasks such that the UI is both functionally and aesthetically pleasing.

User Interface - Key Tasks

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- Display certification of elimination for teams eliminated.

User Interface - Prototype

Web Application

Web Application

- An extension of the project.
- Contains a subset of most important functionality of desktop application.
- Numerous extensions of web application part of future work.

Web Application Screenshot

Team W

Navigation

- Show Latest Division Stats
- Update Divisions

Division Standings

Previous Day Next Day

Click division name to see standings.

American Central

American East

American West

Team	Points	Games Played	Elimination Status
Oakland Athletics	94	162	Not Eliminated
Texas Rangers	93	162	Eliminated
Los Angeles Angels	89	162	Eliminated
Seattle Mariners	75	162	Eliminated

National Central

National East

National West

Project Conclusion

- Successfully implemented all must have functionality.
- Informative user evaluation.
- Plenty of scope for future work.

We would now like to invite questions from the panel.
Thank you for listening.