

INFSCI 2130 Decision Analysis and Decision Support Systems

Midterm Project Report

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Topic: Best NBA Team Manager

Data sets:

We have collected statistics of 6 teams and 20 players from NBA official website (stats.NBA.com), 4 players for each position.

Teams:

Eastern: Atlanta Eagle, Miami Heat, New York Nicks

Western: Golden State Warriors, Phoenix Suns, Los Angeles Lakers

Project schedule:

1. Collecting statistics (finished)
2. Requirement analysis (finished)

Use cases:

- a. Manager Login: Managers are required to log in with user name and password in order to use this system.
- b. Browsing: Managers can browse all the information and statistics about all teams and players available in our database.
- c. Searching: Managers can search the list of all free agents and filter the search results based on some criterions such as ages, positions, etc. Based on the manager's preferences, our models should be able to recommend the best candidate concerning both economic profits and team performance.
On the other hand, manager can specify a certain player that he is interested in and the system should be able to predict the values this player will bring to the team.
- d. Making decisions: Managers gets the results of prediction and decide whether to sign this player.

3. Building decision models
Model construction: Genie
API: JSMILE
4. Web implementation
Tools: J2EE Eclipse
JSP, MySQL, JAVASERVLET

Problems to solve

When constructing the decision model, should we use the actual statistics in history to test the accuracy of the model we built to make sure that its predictions are reliable?