MLB Ticket Search

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Domain

This system will facilitate search and exploration for tickets to professional baseball games at nationwide venues. As an application on mobile devices or even desktop computers, this system will provide the ability to search for tickets under a variety of criteria, namely the home team, the opponent team, the date, the value of the ticket, and the number of desired tickets. As the user speaks aloud his search criteria, the system will suggest the most popular choice but also allow the user to refine his search even further if the suggestion is not what the user is looking for. For the purposes of this project, the system will incorporate only tickets for baseball teams in the MLB American League (14 teams in total).

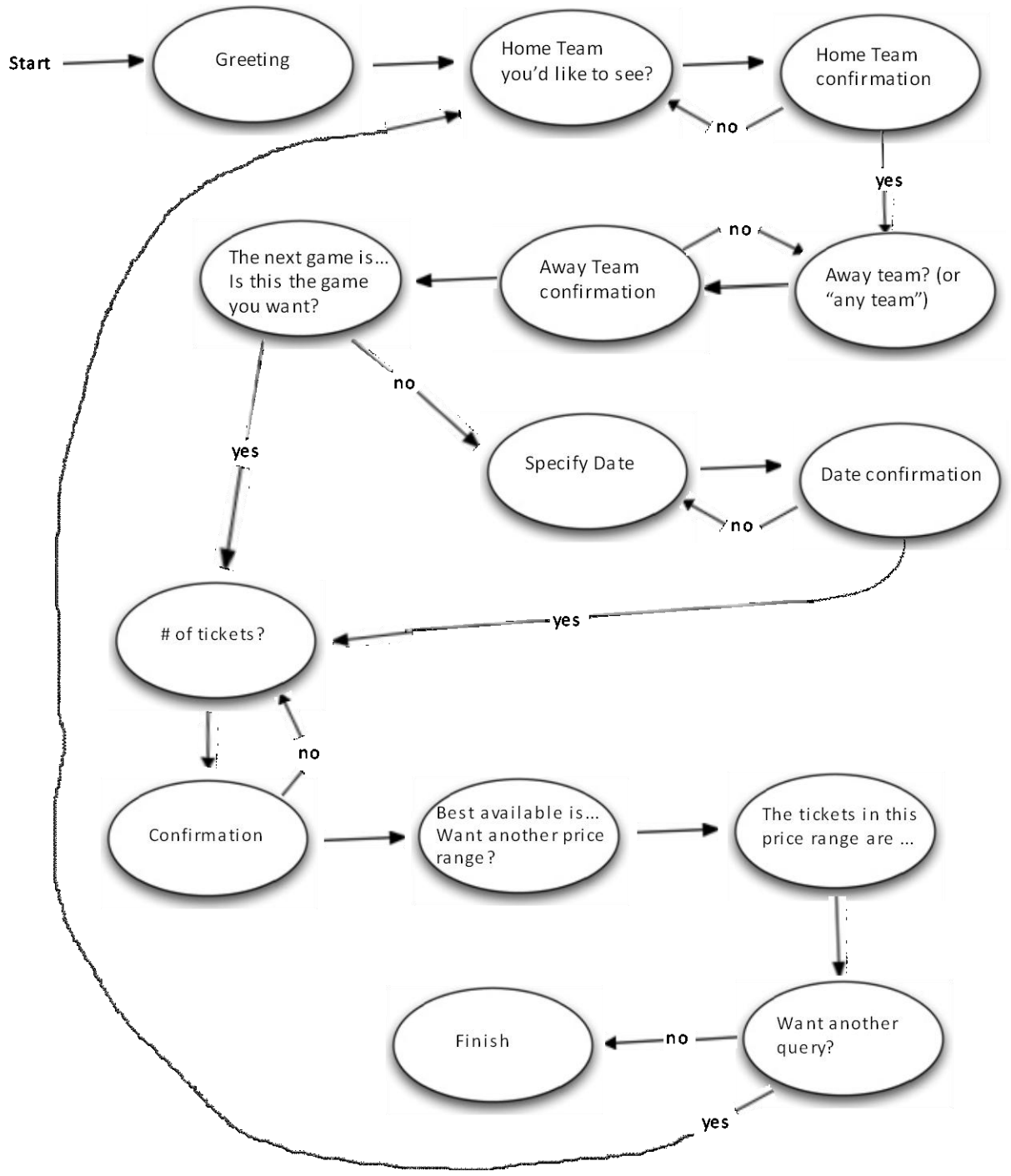
To access this data, we will have a local database containing tuples of ticket groups. Each ticket group has an event date, home team, opposing team, number of tickets available, and ticket price.

Types of Questions

The system will guide the user through the process of finding tickets by asking him specific questions, one by one. The state diagram on the following page illustrates the transitions that may occur. First, it asks the user which home team he'd like to see (corresponding to one venue). After the user specifies a team, it then asks which away team the user wants to see. The user can either specify a team or say "any team." Then, the system tells the user when the next game is for that pair of home and away teams. It then asks the user if he would like to explore tickets for that particular game or if he is interested in another date. If he wants another date, the system will ask him to recite the date. Then, the system asks how many tickets are desired for that game. After the user says a number, the system tells the user the best available (most expensive) tickets for that game, for that number of people. The user is then given the option of specifying a different price-range ticket (for example, "cheapest available" or "mid range"). After specifying this, the system speaks the available tickets in that price range.

We realized that our target users might be busy, and they might want to get quick answers from our system. Accordingly, they might like to ask a more complex question that contains more than one degree of freedom at once, so that they can get a response faster than they would if they had to be guided through the ticket exploration process one step at a time. Thus, we are planning to allow for the user to speak more complex utterances and to be able to handle these appropriately. For example, a user might ask "*What are the cheapest tickets to*

the next New York Yankees game?" or "*What are the best available tickets to the Boston Red Sox game against the Chicago White Sox on April 31*?" If the system is unable to recognize complex search criteria at one time, then it will guide the user through our step-by-step speech dialogue described earlier.



Concept Table

# of tickets	1-20				
Home Team	Boston Red Sox Minnesota Twins Texas Rangers	New York Yankees Chicago White Sox Oakland Athletics	Baltimore Orioles Detroit Tigers Los Angeles Angels	Tampa Bay Rays Cleveland Indians Seattle Mariners	Toronto Blue Jays Kansas City Royals
Visiting Team	Same list as above	any team			
Date	next game	January-December	1st-31st		
Price	best available	mid range	cheapest	next cheapest	next most expensive

Team members and roles

Jesse and John have some linguistics background (we took the course *Introduction to Linguistics*), and we all are computer science majors and eager to work hard and learn the subject matter.