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Florida Panthers Scouting Tool: A Shiny Based Application

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Abstract: The Florida Panthers' Scouting department is interested in creating a computer based approach for a scout to select which games to attend, rather than him or her doing it by hand, which is inefficient. By minimizing the travelling distance of their scouts, the Panthers would save money, and still be able to view quality games. A scout would use this application to plan a multigame schedule. A scout will select a date to begin the trip on, the duration of the trip, and the tool identifies the games to attend. Utilizing the Panthers' game assessment technology, which is based on a multitude of parameters, such as players in the game, last time the player was seen, how many times the player has been seen, and so on. We developed a tool that employs a graphical interface created using R Studio to provide to a scout a graphical view of the top six overall routes. The routes are ranked based on a cumulative assessment of selected games. We employ the following constraints in our tool: a maximum distance between the location of two games, a user-inputted off day during the trip, a team the scout must see at home, and a team the scout must see at an away location. The results are optimal for x-days and are provided in seconds.

Keywords: R Studio, Shiny, Florida Panthers