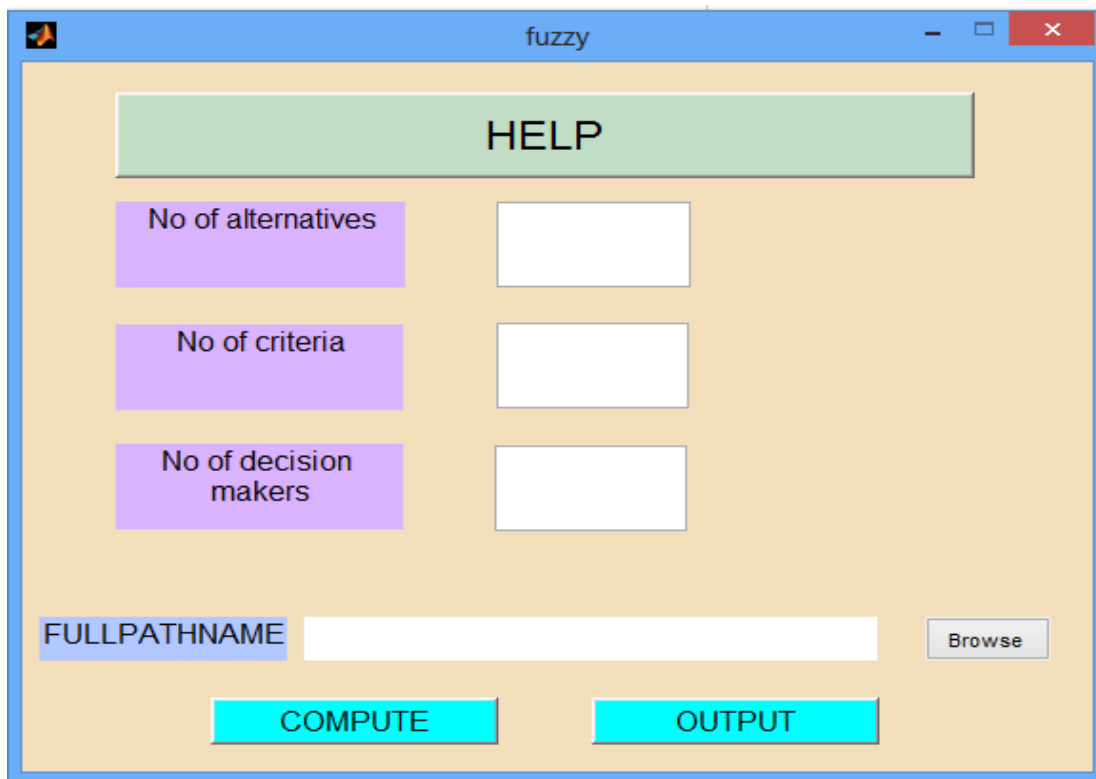


HELP FILE

ABOUT THE APPROACH

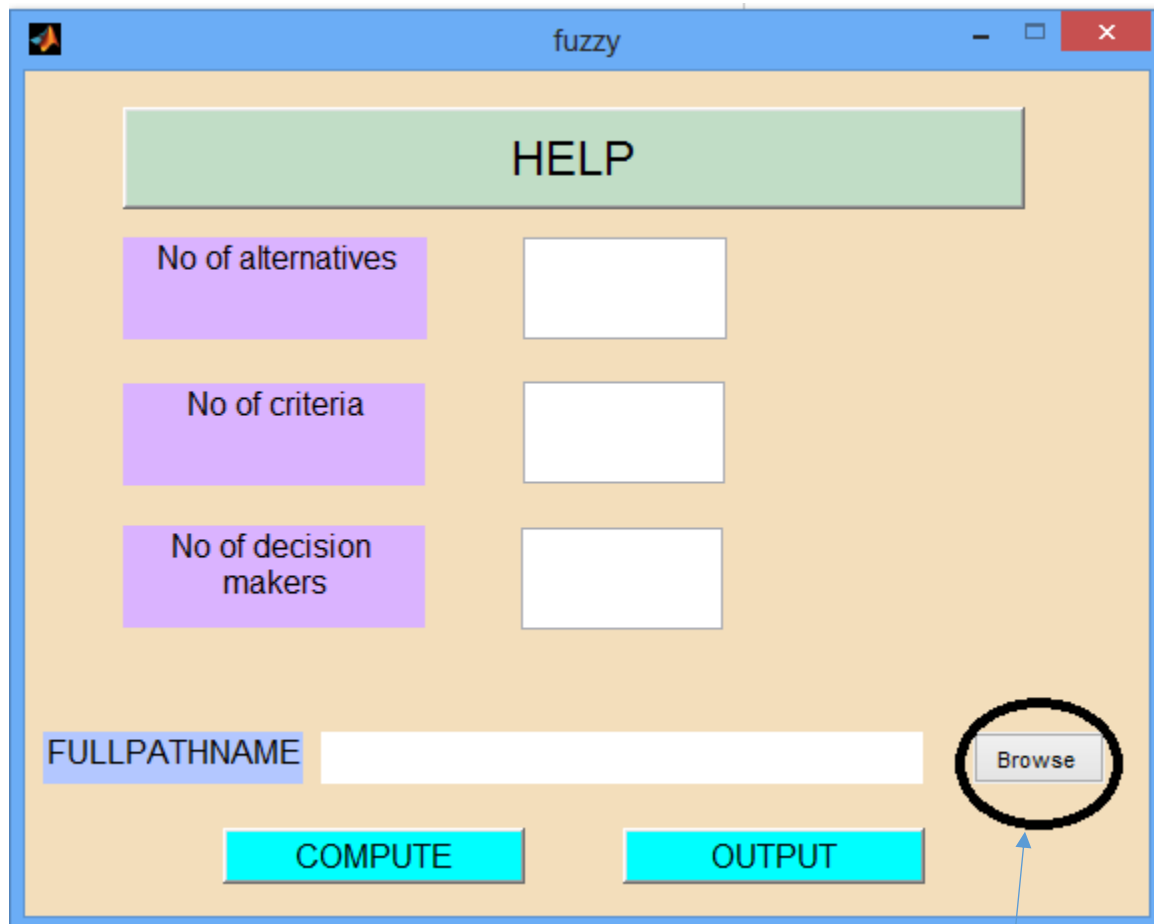
This approach for ranking fuzzy numbers ensures full consideration for all information of fuzzy numbers. Accordingly, an overall ranking index is obtained by the integration of the information from the left and the right (LR) areas between fuzzy numbers and the centroid points of fuzzy numbers. This MCDM (Multi criterion decision making) approach does not require the normalization process and thus avoids the loss of information results from transforming generalized fuzzy numbers to normal form.

THE GRAPHICAL USER INTERFACE



The screenshot shows a window titled "fuzzy" with a blue title bar. Inside the window, there is a green header bar with the text "HELP". Below this, there are three input fields, each preceded by a purple label box: "No of alternatives", "No of criteria", and "No of decision makers". At the bottom left, there is a text box labeled "FULLPATHNAME" and a "Browse" button. At the bottom center, there are two cyan buttons labeled "COMPUTE" and "OUTPUT".

First we need to select the excel file that contains data about the ratings and weights of alternatives and criteria of given problem. We can do this By clicking on the browse button and selecting the required file.



HELP

No of alternatives

No of criteria

No of decision makers

FULLPATHNAME

Browse

COMPUTE

OUTPUT

Click here to browse files

Once we have selected our file, the program reads the number of criteria, alternatives and decision makers involved in the problem and displays the appropriate results.

fuzzy

HELP

| | |
|-----------------------|---|
| No of alternatives | 3 |
| No of criteria | 9 |
| No of decision makers | 3 |

FULLPATHNAME C:\Program Files\MATLAB\R2012a\bin\table.xlsx Browse

COMPUTE OUTPUT

Click 'COMPUTE' to perform calculations

This is the input file

Click 'OUTPUT' to view results

To calculate and view the final result, press the compute button. This ensures that all calculations are complete. One can view these computations in the command window. To view the output file and the final ranks press the output button

On clicking the 'COMPUTE' button one can see results of all calculations that the MATLAB code is performing on the command window.

The MATLAB Command Window displays the results of calculations for columns 1 through 30. The results are organized into groups of five columns each, with each group containing three rows of data. The data values are as follows:

| Columns | Row 1 | Row 2 | Row 3 |
|-----------------------|--|--|--|
| Columns 1 through 5 | 0.2667, 0.4433, 0.6133, 0.7800, 0.9000 | 0.2833, 0.4667, 0.6267, 0.7950, 0.9000 | 0.2167, 0.3733, 0.5733, 0.7350, 0.8000 |
| Columns 6 through 10 | 0.2167, 0.3800, 0.5500, 0.7083, 0.9000 | 0.2311, 0.4011, 0.5622, 0.7222, 0.9000 | 0.2311, 0.4011, 0.5622, 0.7222, 0.9000 |
| Columns 11 through 15 | 0.1667, 0.3200, 0.4750, 0.6800, 0.8000 | 0.1778, 0.3378, 0.4856, 0.6933, 0.9000 | 0.1667, 0.3200, 0.4750, 0.6800, 0.9000 |
| Columns 16 through 20 | 0.1778, 0.3378, 0.4856, 0.6933, 0.8000 | 0.1778, 0.3378, 0.4856, 0.6933, 0.9000 | 0.1667, 0.3200, 0.4750, 0.6800, 0.9000 |
| Columns 21 through 25 | 0.1400, 0.2833, 0.4400, 0.6667, 0.8000 | 0.1500, 0.3000, 0.4500, 0.6800, 0.8000 | 0.1500, 0.3000, 0.4500, 0.6800, 0.9000 |
| Columns 26 through 30 | 0.1400, 0.2833, 0.4400, 0.6667, 0.8000 | 0.1500, 0.3000, 0.4500, 0.6800, 0.8000 | 0.1500, 0.3000, 0.4500, 0.6800, 0.9000 |

The final result can be found in the file 'OUTPUT.xlsx'.

The Excel spreadsheet displays the final results in the 'OUTPUT.xlsx' file. The data is organized into a table with columns A through U and rows 1 through 3. The data values are as follows:

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U |
|---|----------|----------|----------|----------|-----|---|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.416667 | 2.76 | 4.136667 | 5.843889 | 0.7 | | 0.786853 | | 3 | | | | | | | | | | | | |
| 2 | 1.543333 | 2.966667 | 4.286667 | 5.997222 | 0.7 | | 0.832088 | | 1 | | | | | | | | | | | | |
| 3 | 1.38 | 2.71 | 4.108333 | 5.812778 | 0.7 | | 0.780313 | | 2 | | | | | | | | | | | | |

A blue arrow points to the cell in column I, row 2, which contains the value 1. A box labeled 'Final Ranking' is positioned below the arrow.