

Criterion E: Evaluation

Meeting the Criteria for Success:

1. Application is capable of receiving numerical input from the user. - This is met
2. Application is capable of displaying a solution in the answer boxes. - This is met
3. Application can perform addition and multiplication on two 3x3 matrices - This is met, both functions work properly.
4. Application can find the determinant and inverse of a single 3x3 matrix. - This is met, both functions work properly.
5. The application can diagonalize a 3x3 matrix and print the eigenvalues and eigenvectors. - This was not met, such a goal was incredibly ambitious to begin with.
6. The application can work with matrices of varying sizes. - This was not met, and was not possible due to the nature of the type of text boxes I used, without creating an additional window for each other size of matrix.

Recommendations for future Improvements:

Several small improvements could be made, such as making the program not crash if letters or nothing is entered into a textbox that a calculation would be performed on, and to clear the answer from the previous part whenever a new calculation is run, because as it stands, the determinant will remain when other operations are run and when the matrix is changed. The main problem with this calculator is that it only works with 3x3 matrices. While this is likely the majority of what is used in school classes, it is not compatible with all needed matrices. The text boxes are also small and could be enlarged such that the user can see all of the text in each. Also if I could find an efficient method which to save the text in a box to an array that doing each box individually it would make the code significantly more attractive. Also moving several of the methods to other classes would be a major improvement in the readability of the code, though I had trouble implementing this with the GUI builder that I used.