Criteria E

Test Plan Evaluation:

Criterions	Idea	Success	Client Feedback (Appendix 1.4 [3])
1.1	Main Menu	Success. A simple, functional Main Menu was created that directs to the main functions of the program.	The client mentioned that he like the simplistic design of the Main Menu window. It was self-explanatory and simple enough to use.
1.2	Reusability of Windows and Menus	Outstanding success. sub-windows for the functions can be opened and reopened for use. Individual windows can also be reused for different parameters without lag.	The client expressed approval for the reusability of the window. He talked about how it makes the app more efficient, without having to reopen the app for multiple entries.
2.1/1.3	Window for Seating Optimization	Success. There is a simple window for the entry of parameters, and a button for the generation of the seating distribution.	The Client again commented on the simplicity of the windows: it makes navigation really easy. Nevertheless, he mentioned that if this were to be publicized, it should be more sophisticated.
2.2	Parameters and Implementation of Seating Optimization	Outstanding Success. The parameter is successfully used by the program to produce a legitimate seating distribution. The algorithm follows the structure proposed in Criteria B.	The Client explained that even though he doesn't understand the algorithm behind the process, he can see through the results that it is effective.
3.1/1.3	Window for Boarding Method	Success. There is a simple window for the entry of parameters, QS and a button for the generation of the seating distribution.	(Common to 2.1) The Client again commented on the simplicity of the windows: it makes navigation really easy. Nevertheless, he mentioned that if this were

			to be publicized, it should be more sophisticated.
3.2	Parameters and Implementation of Boarding Method Comparison	Success. The comparison is successfully conducted in the background, and an optimal one is selected.	The client commented that the simulation, by the product of it, looks realistic. There were fast and slow persons and the randomness/ realness of the simulation is emphasized.
4.1	Visualization for Seating Optimization	Success. There is a color-coded diagram of the seating distribution instead of a boring number matrix that serves as alternative.	The client mentioned that he likes how the seating situation were distinguished by a color scheme. However, he explained that if the program was to be extended to other platforms, the library for visualization will no longer work.
4.2	Visualization for Boarding Methods	Outstanding success. The results of the simulation are shown with an animation of the boarding process in the form of a video, an innovative and effective way of visualization.	The client thought that it was ingenious to visualize the boarding order by a video.
5	Error Handling	Success. The Product was able to handle misinputs	The client explained that in the case when he forgot to enter values for parameters and enter absurd values for parameters, the program rejects the inputs to prevent the crashing. It prevents having to restart the app and improves user experience that way.

Functional Improvements:

After progressive discussions with the Mr. Chang, he provided the following recommendations to the product that that are now addressed (see appendix 1.4 [2]):

Window and Algorithm	With the parameter entry windows for the algorithms, absurd values can lead to crashing of the program
	Error checking method of limiting the range of acceptable parameters was added.
Visualization	Using a plotting function in PyCharm IDE is acceptable midst development, but for the python application to function on actual devices, there need to be an alternate method to visualizing
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Chatting Function	In the original design, there was a function to the program to how the passengers could communicate through the app on a common server.
	However, the function proved to be unnecessary, thus removed from the program

Extensibility

After a final discussion with the Mr. Chang, he provided the following recommendations to the future development of the product (see appendix 1.4 [3]):

GUI
The GUI presented in the product, though functional, isn't exactly well looking.
The sophistication of the GUI is crucial to the user's experience
Platform of Function
For more accessible use of the program, the python application could be integrated to function on mobile devices
Visualization
Using a plotting library is acceptable for PC usage, but for the python application to function on mobile devices, there need to be an alternate method.

Despite these recommendation, Mr. Chang reported that he was satisfied with the basic functionality of the program, that it is well designed to be implemented in the real world.

Word Count: 77