

Software Engineer – Interview Exercise

Write a system to assist with controlling the flights that land at different airports. The user interface for the system will not be taken into account, so you do not need to write any complex user interface. The user input/system output can be introduced/printed on the console.

The requirements for the system are:

1. The system manages three airports with IDs: "LGW", "EMA" and "MAN".
2. An aircraft cannot land at the same airport until 60 seconds after the last aircraft landed.
3. The system will ask the user where the aircraft will land (i.e. one of the airport IDs mentioned above).
4. If the landing requirement is met, the system will print a message confirming the landing and will prompt the user again for another airport.
5. If the landing requirement is not met, the system will print a countdown with the time remaining for the next landing. When the time is up, it will then land the plane at that airport, print a message confirming the landing and will prompt the user again for another airport.

The program can be written in any programming language; **preferably** object-oriented.

We ask that you send a zip file of the program (code) to us at least 24 hours before the interview. We will then ask you to talk through your approach and code during the interview. Although a trivial, standalone example, **assume this is really part of a much larger system.**

NB: Please be aware that you may have to use alternative methods other than email attachments to avoid your solution being removed by security systems:

- Use a file compression utility such as WinZip or Z-Zip and send us a .zip file;
- Save the file to the cloud, using a popular tool such as OneDrive, WeTransfer or DropBox;
- If these don't work, we can send you a link to a Siemens tool to upload the file.