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| Client | Airline Company |
| User | Airline Employees |
| Functional requirements | The system must allow to:  R1. Passenger loading system.  R2. Check-in at the boarding lounge.  R3. Prioritization of the first class.  R4. Order of entry to the aircraft.  R5. Aircraft departure order. |
| Context | The airline needs to improve the process of passenger check-in and check-out, so it is necessary to develop a first version of a system to load passenger information, register their arrival at the boarding lounge, establish an order of entry and exit of the aircraft, and prioritize the entry of first-class passengers. In addition, it must be considered that the database will be simulated by means of a plain text file and that the system must be efficient to handle large amounts of data. |
| Non-functional requirements | * Develop the project using TDA. * Using a repository from day 1. * Make at least 10 commits spread equi-temporally. * For each of the 10 commits, report 3 simple quality indicators in the repository readme (bug-density, reliability, and completeness). The completion indicator is expected to be greater than 5 at the end of the product implementation. * The system must be able to handle large amounts of data efficiently and quickly. * The system must be secure and protect passenger information from unauthorized access. * The system must be scalable to handle many flights and passengers in the future. * The system must be easy to use and understandable for the airline personnel in charge of operating it. |

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| Name or identifier | R1. Passenger loading system. | | |
| Summary | The system shall allow the uploading of passenger information for a particular flight.  The uploading of passenger information shall be done through a user-generated plain text file. | | |
| Inputs | Input name | Datatype | Selection or repetition condition |
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| General activities necessary to get the results |  | | |
| Result or postcondition |  | | |
| Outputs | Output name | DataType | Selection or repetition condition |
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| Name or identifier | R2. Check-in at the boarding lounge. | | |
| Summary | The system must be able to search for a passenger's complete information once he/she arrives at the corresponding boarding lounge.  The system must register the arrival of a passenger at the boarding lounge.  The system must allow rewarding the punctuality of passengers by entering the aircraft on a first-come, first-served basis. | | |
| Inputs | Input name | Datatype | Selection or repetition condition |
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| General activities necessary to get the results |  | | |
| Result or postcondition |  | | |
| Outputs | Output name | DataType | Selection or repetition condition |
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| Name or identifier | R3. Prioritization of the first class. | | |
| Summary | The system must take into account special data such as mileage accrual, special care required, senior citizenship or other relevant data to prioritize the admission of first class passengers. | | |
| Inputs | Input name | Datatype | Selection or repetition condition |
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| General activities necessary to get the results |  | | |
| Result or postcondition |  | | |
| Outputs | Output name | DataType | Selection or repetition condition |
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| Name or identifier | R4. Order of entry to the aircraft. | | |
| Summary | The system must show the crew member in charge in which order passengers must enter the aircraft, following the established order.  The order in which passengers enter the aircraft must follow the call by sections of the aircraft, starting with those furthest from the entrance door to the one closest to it. | | |
| Inputs | Input name | Datatype | Selection or repetition condition |
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| General activities necessary to get the results |  | | |
| Result or postcondition |  | | |
| Outputs | Output name | DataType | Selection or repetition condition |
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| Name or identifier | R5. Aircraft departure order. | | |
| Summary | The system must allow to establish the order of departure from the aircraft.  The order of departure from the aircraft must be established by rows, where those who leave first are those who are in the first rows and for each row the order is established by proximity to the aisle or order of arrival as the last instance.  The flight crew person in charge of the system will be able to see in which order the passengers must exit. | | |
| Inputs | Input name | Datatype | Selection or repetition condition |
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| General activities necessary to get the results |  | | |
| Result or postcondition |  | | |
| Outputs | Output name | DataType | Selection or repetition condition |
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