

GP03 – Design Benefit Paper

Preface

From the start of this project, Team Echo has taken upon itself to set our customer's needs as the priority of our program design. Ms. Hill came to our development team in order to have a software product that will make gathering travel data easier for her agents and clients. She wants something that is user friendly, and will last her company from some time.

Keeping in mind that Ms. Hill plans on having her agency, Cougar Path Travel, use the Express Flights Locator Travel Software for some time, the software must be able to last for a period of time. Because of this, we wanted our software to be easy to maintain. Team Echo has implemented maintainability through our design by making our code modular, reusable, and readable.

Our team has implemented the agile software life-cycle model to our developmental process. Because this program is still on the smaller side and our code is modular, our Express Flights Travel system is also extensible. If the Cougar Path Travel desires to have more functionality added to the current system design, there is still room for such additions. Our code ethic is to have loose coupling and high cohesion and having our software be robust.

Since our client desires to use our travel software on a regular basis, we want our software to be reusable and function for our customer's daily needs. Examples of this implementation include: printing a daily report for agents, manager modifying the prices, updating customer profile information, modifying flight data, etc.

Cohesion & Coupling

Between the Agent Entity, Customer Entity, and Person Entity we exercise functional cohesion as these all relate to the providing of the entity class for the users of the system.

Between the Airport Entity and Flight Entity are used by the EFL Database to provide sequential cohesion of management of airports and flights. We exercise functional cohesion as these all relate to the providing of the entity class for the users of the system.

Between Agent Border and Manager Border we take a hit on there being some coupling. Because of this, we get a higher cohesion. These border classes will provide the interface to communicate with the respective control classes.

Team Echo – Design Benefit Paper

Between Agent Control and Manager Control there will also be some coupling between the controls. Because of this, we get a higher cohesion.

The Customer Entity and the Itinerary Entity classes function as a unit, as they practice communicational cohesiveness. The Credit Card Entity class also practices communicational cohesion as it only interacts with Customer Entity and Itinerary Entity.

The Price Watch Entity practices functional cohesion as it also only has one goal and only communicates with The Itinerary Entity.