

## INF3120

### Requirements Analysis Tutorial

A problem description is given below. The requirements for an interactive system for ferry bookings, to be installed in a travel agency and used by the travel agents, are to be defined. Who are the stakeholders in the system? From the description, identify initial lists of functional requirements and non-functional requirements for the system. Are there any functional or non-functional requirements that you think have not been explicitly identified in the description? Discuss how you would test the non-functional requirements you have identified as the system is developed.

A ferry company only accepts bookings from authorised travel agencies, situated in towns throughout Scotland. There is a computerised central booking system at the company's head office in Aberdeen. However, all transactions at the travel agencies are currently hand-written on special forms.

Travel agents, working in the travel agencies, use printed ferry timetables to answer customer enquiries. These timetables are updated by regular distributions from the ferry company head office, sent by courier. Customers enquire about the availability of bookings, which are checked by a travel agent telephoning Aberdeen. Customers may make a provisional booking, which is valid for three days, and they will be given a written quotation for this. A customer making a firm booking must pay a deposit at which time they receive a booking confirmation slip. Provisional and firm bookings are made by travel agents over the telephone to Aberdeen. Full payment must be made by the customer at least one week before the date of the first ferry sailing. Tickets are only issued when full payment has been made; these are printed at the head office and sent by first-class post to the travel agency.

The management of the ferry company has decided that it would be more efficient to have on-line systems in the larger travel agencies, directly connected to the central booking system. These agency systems will allow: provisional and firm bookings to be made directly; tickets to be printed at the travel agencies; and the central timetable to be accessed directly by travel agents, avoiding the need for distribution of timetable updates. The managers of several travel agencies have expressed concern that yet another booking system will cause them major problems unless it runs on hardware that they already have for airline bookings and other tour operators.

The systems in the travel agencies will have to be simple to use and robust, providing guidance at every stage of use and on-line help. High reliability of the communications between a travel agency and the head office is of vital importance to the business. Since the information transmitted from the head office for ticketing contains special booking codes, security of data transfer is an important consideration.