Second Project

This is your project for the Software architectures part of the Software Design Techniques course

Propose yourself the problem statement for your project. It should be a short (between half a page and 2 pages) description of the use of an enterprise application that your project should implement. An enterprise application is a large and complex software application that satisfies the needs of an organization instead of individuals, providing support for the organization's business processes.

Choose the organization's domain its mission and main functions, develop the problem statement, and then propose the requirements. Consult for this the projects P1, P2, P3, and P4 that proposed organizations in health, social security and tourism domains the last year. Organizations in other domains such as education, government, culture, etc. can be also proposed.

In the problem statement you must imagine a distributed business environment where the proposed software system has to support some innovative business use cases. For these use cases certain nonfunctional requirements should be emphasized as important.

Your proposed problem statement must be reviewed and accepted at the laboratory.

In the project, based on the problem statement you have to develop and consequently document the software system until its implementation in Java, with the following constraints:

1. Analyze the problem and develop the four architectures of the system: business architecture, Information technology architecture, information architecture and application architecture. For the application architecture propose three alternative architectures using different software architectural styles and patterns. For that the project must be complicated enough to be amenable to different styles and you will be graded for your proper selection of architectural style.

2. Choose the architecture that is the most appropriate for the Java EE technology you will use in the project, design your objects with the aid of design patterns, and finally implement the whole application. A working application with its test environment must be produced using a component-based architecture implemented in Java EE. Your application may use session beans OR web-services. Usage of JMS is a bonus.

The projects are individual.