



Software Design

Progress Report No. 5

Requirement Analysis

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I. Objectives

In this section, the goals in this laboratory are:

- To illustrate the process of determining the requirements for a system
- To enumerate both the requirement definition and requirement specification

II. Methods

Requirement elicitation is one of the critical parts of the process. We must use various techniques to determine what the users need and what the customers really want.

Two Kinds of Requirements:

1. Requirement definition – a documentation that is written in terms that the customer can understand.
2. Requirement specification – a documentation that the definition are written in technical terms appropriate to the development of the entire system

Background

Over the semester you will be developing a “System”. This will be a suite of applications of real options methods to a professional issue of your own choosing. The object of developing this “System” is to provide you with a worked-out application of real options analysis in an area of your interest. The expectation is that, by creating this system, you will achieve an in-depth understanding of how real system analysis could be useful to you professionally.

This “System” might also provide you with a good start on some research project or thesis or be a helpful complement to the work you were doing – that would be an added benefit. In general, you are encouraged to develop this “System” around some research or course project that you might be involved with.

Laboratory Activity

1. Describe your System Application
2. Describe the engineering system that you would like to analyze this semester.
3. Choose something that interests you and that you wish to explore, as you will spend substantial time on it;
4. Choose any ways to gather requirements (survey, questionnaires, Use Case diagram, and the like)

You should place yourself in the position of someone participating in the design of this system. For example, you might want to put yourself in the role of a system designer.

**Be sure to describe the following:

1. What is the system? What does it include, and what does it exclude?
2. What are its principal design levers or variables? What can we manipulate to improve its performance? What kind of model do we have to analyze the effect of these variables?
3. What are the benefits of this system? What models do we have of how the design affects these variables?

III. Results

1. The system that our client want is a booking system for their private resort with simple design ,mode of payment using cash/Gcash and a calendar that shows the availability of the resort and on when the costumer can schedule their desire time and date to put a schedule on when they plan to rent the resort.
2. The principal design levers or variables of the resort booking system include the **user** interface design, booking form constraints, calendar availability display, payment and deposit rules, automated communication features, and content placement such as promotional videos and customer reviews.
3. The benefits of the resort booking system include improved operational efficiency, reduced manual workload, faster customer response time, and better booking accuracy. By automating availability checks, booking validation, and confirmation emails, the system minimizes human error and eliminates the need for constant manual monitoring through phone calls or social media messages.

IV. Conclusion

The suggested system is a web-based reservation system designed for a private resort with an emphasis on user convenience, efficiency, and simplicity. Customers can make reservations using Cash/GCash as the primary payment method, select their preferred date and time, and view resort availability through an integrated calendar. To guarantee precise and safe reservations, important design components include a simple user interface, booking restrictions, automated confirmation emails, and deposit validation. These features aid in avoiding overbooking, scheduling conflicts, and human error. The system lessens reliance on phone calls, social media inquiries, and Excel-based record management by automating the booking process. All things considered, the system boosts operational effectiveness, increases booking accuracy, and offers resort management and visitors a dependable and seamless reservation experience.

References

[1] PALACIO FELIZ