Jacksons Car Rentals

Phase 1

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INTRODUCTION

For this project I am taking the role of project manager, developer of the system, and system analyst. This phase will consist of information needed in order to develop the system that I have chosen (online car rental system). I have done a substantial amount of research on car rental systems and have listed my references on my reference page. I have obtained enough information on this particular type of system to be able to provide the information needed to create the desired system. I have had experience, and understand how the desired system would be very beneficial to the business.

TASK INVOLVED

The main task is to create online car rental system for booking and renting vehicles for Jacksons Vehicle Rentals. In this initial phase I am working on the complete documentation required for the system, at the end of this process should be the design to codify the website, database and all the functionalities of the web system. This website should help human resources management and customer service staff to efficiently manage online reservations, taking advantage of the network to reach more people and potential customers, in this way wants to change the paper work that is done in the company and that it becomes complicated when many requests are handled only in paper through the phone lines, for this reason through the proposed system it is wanted to improve the efficiency in this complex process. An average company usually has between 1 and 1000 vehicles that will be available 24 hours a day through the system. For this reason, we want to be sure the information registered on the website on each vehicle is updated consistently.

After a process of collecting information from several companies dedicated to renting cars I was able to detail the needs for this type of business. This helps us to identify the business rules and key points to take into account when preparing the documentation for this project.

As for the hardware and software requirements required both are available in the market, we want to have system availability online 24 hours a day 7 days a week. We also want the platform is based on the cloud and oriented to SaaS services which will allow easy access from any device and maintenance to the system.

The main objective of the web application is to automate the management of reserves and rents of cars. The system is being carefully proposed to ensure maximum efficiency of the system in the client's companies when it comes to serving each customers request.

SCOPE

We have several reasons for the approach of a system to manage the reserves of vehicles that will be rented:

- The proposed web system should make it easier for customers and employees to search for and reserve available cars according to the needs of each user.

- The system should allow employees to check the condition and mechanical condition of the vehicle before and after being rented.

- The system will help the administrative and management staff to control the most requested car stocks, to guarantee the necessary stock and the history of requests of each user, so that they can know what the customers' needs are and offer them the best options to rent a car.

- The system will generate adequate reports for customers when making a reservation or rent a car, also generate reports with management indicators for management and managerial staff to evaluate the number of applications processed and the profitability of the business.

- The system will be friendly and easy to use for beginner users and new employees. The service in the SaaS Cloud will allow remote access to the database with the appropriate permissions for each type of user.

OBJECTIVES

- Provide an automated and fully functional Web Car Rental System in the form of Cloud Service with remote access and from any online device.

- To provide a complete and reliable organizational system with the least possibility of errors and the highest availability to online users.

- Provide the client with real, current and complete information with the different options to rent a car.

- We want the customer to be able to easily access the system at any time from any mobile device.

- We must create a unique user with a specific role with the appropriate access permissions to each module of the system.

PROBLEM BACKGROUND

Currently, the reserves and rentals of vehicles is done through paperwork, which can allow for many errors. Another disadvantage is that you do not have the proper records and history of the condition and conditions of the cars that will be rented.

All car review and maintenance processes are currently carried out manually on paper. For this reason, we want to implement new business rules based on the new online management system for car rentals and reserves, this will allow to improve the processes within the company and to have a more efficient business. Because all processes and records are carried on paper, I have been able to verify these problems:

The access and maintenance of manual records is not consistent, since some errors can appear while writing manually on paper with non-standard formats. At present it is not easy to maintain a record of availability of cars and a large number of customers are in demand every day for a car in good condition and that fits their needs. Customers are also not able to view what cars are available to rent.

The management of the availability of cars is not in order, i.e. there is no classification of vehicles available by Brand, Model, Year, etc., and therefore it is difficult to maintain that information.

- Proper records of the vehicles are not available to customers.

- Records are not up to date.

- Specific details about available cars are not available to customers.

- Customers are not able to view what cars are available for rent.

- Payment methods are difficult.

- No backup

- Cost is more expensive for manual records.

- Requires more staff members.

Through this new system it is expected that the cost of labor and the time lost by employees in manual processes will be reduced. This new system proposed is efficient over time, and full of precision, through this the employees can avoid human errors and efficiently manage the attention and satisfaction to customers.

PROPOSED SOLUTION

The objective of this project is to develop a system that can manage and manage the activities involved in a car rental business, manage all the necessary information of the cars available through a web service in the SaaS Cloud to reach any device from each user.

This online system will help the intentionally customer staff to do their job in a simple way without any problems, gaining more productivity time by not wasting time in manual and paper processes.

PROPOSED SOLUTIONS AND DESCRIPTION TABLE

PROPOSED SOLUTION	DESCRIPTION
Automated Management System for Renting and Managing the Business	The current processes in the company are made on paper and manually, automating processes improve management, reduce working time, can meet more requests and customers, keep a better report of each car and increase profits.
Accessibility at anytime from anywhere and device	Through a web service in the cloud we can meet requests from users to rent and reserve vehicles at anytime from anywhere. Allowing the system to be accessible at any time achieving customer satisfaction.
Records and reports for clients and management personnel and managers	The system will contain real data and updated information of each car that the users can rent, this allows what the user sees in the web system will be what is taken to what is delivered the car in person. Management and administrative staff can also have reports and records of business management with management indicators and make decisions to improve the quality of service.
Centralized and available data at all times with SaaS cloud service and a High Availability solution	The relational database maintains customer records, autos, rental history, pending reservations and payments. If any employee updates a particular field, it will update the data no matter where it is

	within the web system. This will add to the reliability and access of the data, we will not have redundancy; the data will have integrity and will be on a secure server with the appropriate data security policies.

BASELINE PROJECT PLAN REPORT

1.0 Introduction
    A. Project Overview: This E-commerce project aims to implement a web system for management in a car rental company, encompasses user access from anywhere and the administration of data by employees and administrative staff.

    B. Recommendations: In the process of planning we find several business rules that can be improved through the new system to make more efficient the management of information, and provide a better service to customers who are looking to rent a car, the use of a service Centralized through the cloud available to all users.

2.0 System Description
    A. Alternatives: The system can be configured to have a high availability and to access at any time from any device, can also be updated and modified easily and efficiently by having a centralized SaaS service.
    B. System Description: The system allows as input the registration of users or customers, employees and authorized personnel to modify data. The main process allows registering and to make reservations to rent a vehicle, to make payments online, in real time these transactions are monitored from the company and the requests of the users are taken care of. Reports of rented cars, availability and business profits are generated as output.

3.0 Feasibility assessment
    A. Economic Analysis: The economic benefit is justified because the time of attention to the users will be reduced through the uses of the system, this will generate more profits and less personnel costs for the company, for which the costs of the systems are low in comparison with the Profits that will be generated.
    B. Technical Analysis: It is necessary to provide an analysis of the different platforms available for the SaaS web service and database, with an analysis of advantages and disadvantages as well as costs and quality of service.
    C. Operational Analysis: it is necessary to establish the operational problems that are solved with the new system, among other things will simplify operation processes and the steps to rent a car will be easier for the customers.
    D. Legal Analysis: It is necessary to establish legal agreements to guarantee the confidentiality of personal data and payment, protection of information and protection to the client.
    E. Political Analysis: It is necessary to evaluate the employees' point of view towards the use of new technologies and the acceptance that this system will receive in the work environment.
    F. Time Line: In this step should be established the tasks to perform, critical tasks of

the implementation of the system and the time and resources assigned to each phase.

4.0 Management Issues
  A. Team Configuration: Work teams, dedicated to the design of the website, the group in charge of data management and database as well as a training group to prepare the company's personnel should be established.
  B. Communication Plan: Channels and communication elements will be created between the users and the customer service staff, a customer service channel must be available at the 24-hour web service to guarantee coverage for any inconvenience.
  C. Project Procedures: The different phases of this project, approach, design, implementation, start-up of the system to the company and training to the employees must be completed within the agreed term.

PROJECT SCOPE STATEMENT

Project Title: Web system for car rental management
Date:

Project Justification:
This web system will greatly benefit users and employees, all current processes are done by phone and paper, the system will allow less time to meet more reservations to rent cars and increase the profits of the company.

Product Characteristics and requirements:
- Online car reservation service
- Online payments
- Administration of the updated information of the cars
- Reports of gains and availability of vehicles
- Access from any mobile device

Summary of Project Deliverables: Description of the organization, business rules of the company, updated processes to be performed by the new system, cost structure of the new platform, data security policy and plan, test plan, staff training plan, manual of user and technician.

Product related deliverables:
- Web system with SaaS service
- Database with all the information of car
- Employee Training Plan

In Scope:
- Automation of the current processes in the company
- Collection of information for database
- Updates to the new system after the training plan

Out of Scope:
- Hardware update
- History of vehicle repairs and mechanic workshop detail

Project Success Criteria:
The success of the project depends on the fulfillment of the main objectives, on the satisfaction of the client and on improving the process within the company, in complying with the development and implementation of the system in a timely manner, we can train the employees quickly and meet the goals set, I am Guarantee the improvement in the quality of service and in the growth and scalability of the company to be present in the web world.

References

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