1. Introduction

The Auto City Service Center is one of the more famous service centers in Payagala. They have so many services for vehicles, like oil changes, car repairs, body wax, auto detailing, car waxing, body wash, and vacuuming. This place is the best in the Payagala area because of its quality service. So they have a competitive market. This service center has over a thousand customer bases in the Kalutara, Aluthgama, and Mathugama areas. The "Auto City Service Center" has twelve employees, and nowadays, the service center is expanding rapidly.

This project for this service center is the process by which customers can directly set an appointment through the website and the required services can be requested. The service center can also manage their work easily with this system. This proposal to construct this fantastic system is

1.1. Background

This project starts with a problem with the current system before proposing a manual implementation method. We intend to offer the most effective answer to this client's problem. By providing what is required to solve the problem, you can offer features and services that users demand. The starting point for this strategy is the organizational background problem. To execute, it makes use of pre-existing functionalities. The new system is proposed after identifying the organization's current procedures. It pinpoints the flaws in the current system as well as the company's current disadvantages. A range of development procedures and tactics are used to construct approaches and the proposed system.

I have experience with software development and will provide you with an overview of software development for the proposed system, as well as time management and waste-reduction projects. design, diagrams, charts as well as technology and software, were used in the creation of this project. Following that, the system development organization created Gantt

chart work schedules and work calendars with scheduled tasks and timetables, as well as reference materials.

1.2. Problem Statement

The Auto City Service Center is one of the more famous service centers in Payagala. There, friendly service and quality service make them number one. Normally, they have a lot of services for vehicles. As a result, there is a sizable customer base for their services. Today, everything is getting easier with technology. Sri Lanka experienced some technological advancement with the COVID-19 pandemic. Most businesses have grown up with technology. When using technology, they are getting more benefits than a normal system.

Nowadays, people try to find technical support to get easy and quick service to get their day-to-day work done. The Auto City Service Center has a big crowd waiting to get their service, so normally there is some traffic to get vehicle service. The customer needs to wait until the other vehicle is finished, per the order. making it time-consuming for customers. So we will use this project to give some solutions for customers as well as staff. We suggest some systems to avoid this time-consuming exercise. To solve this problem, we propose some online appointment systems. According to their appointment, they can get their service without eating their time. They can make their appointment from home easily. It will help customers as well as the company. It is a viable business technique that is both efficient and business-friendly and can result in increased revenues.

1.3. Objectives

This project's main objective is to develop a quick and easy service system for the customers. This system will help customers get auto service from the service center without wasting time. This system is expected to reduce customer stay time. This will enable consumers to make appointments from home. One of the goals is to make the market more competitive and acquire a competitive edge by focusing on customers' easy and quick service. This system will be user-friendly and simple. It can be used by anyone, from anywhere.

- Create a system to get the required business data.
- This provides rapid and easy service to the customer.
- This reduces the customer's stay time.
- Providing high-quality service to customers.
- evolution of the proposed system.
- Ensure that all transaction records are kept.

1.4. Project Scope

This proposal is for an online appointment system for the Auto City Service Center. This project covers all the services provided by this company. and it also provides some features for staff as well. This system can manage the appointment system of this service center.

When automated, the following function can be used to classify the scope of this method:

Save time: the customer can get an appointment from home. So, they do not need to waste time visiting places to get appointments and they can reduce the stay time to get vehicle services.

1.5. Motivation of Project

The online service center is the best system to give quality service to customers, because normally customers go to the service center to wait until they finish other work. Using this system, customers do not need to stay here; they can reserve time using this system. So it can be a reason to get more customers. Customers don't like to waste time, so they always try to get quick service. For this reason, service center business will increase. They can get more customers and win the competitive market.

1.6. System Development method and Methodology

The Waterfall Approach was the first SDLC Model to be widely utilized in Software Engineering to ensure project success. The entire software development process is separated into several phases in "The Waterfall" technique. Typically, the output of one phase serves as the input for the following phase in this Waterfall approach.

In this scenario, the waterfall model was chosen as the system development method. It is made up of a number of actions. This is the most common and well-known model life cycle, often known as the linear-sequential model life cycle. It's quite simple to understand and utilize.

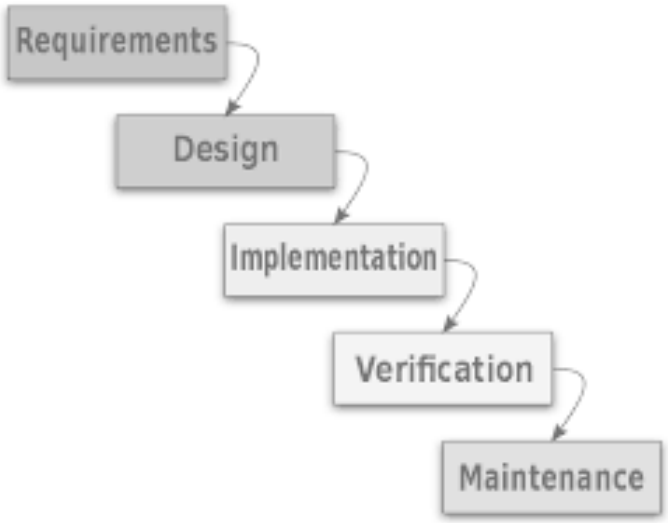
Advantage of Waterfall Model

Waterfall development has the advantage of allowing for departmentalization and control. A schedule can be created with deadlines for each step of development, and a product can be guided through the various phases of the development process one by one.

From concept to design, execution, testing, installation, and troubleshooting, development leads to operation and maintenance. Each stage of development must be completed in a specific order.

The following are some of the primary benefits of the Waterfall Model:

- Simple and straightforward to comprehend and use
- Because of the model's rigidity, it's simple to manage. There are specified deliverables and a review mechanism for each phase.
- One phase at a time is processed and completed.
- For smaller projects with well-defined needs, this method works effectively.
- Stages that are well defined.
- Milestones that are well understood.
- Tasks are simple to organize.
- Both the process and the outcomes are thoroughly recorded.



- **Requirements**

  We are examining some details from the service center. We talk with some customers and staff members and get some information to analyze. Initially, the software team gathers all of the client's needs. Because it is difficult to adjust things afterward, they must be exceedingly comprehensive and have a clear vision of the finished product. Then we gather client requirements and create some documents to analyze the data. The function, purpose, and distinctive specifications are all part of the requirements.

- **Design**

  In this step of system design, the architect builds the program's structure. After determining the hardware and software specifications,

- **Implementation**

  Following the completion of the blueprints, the developers can begin constructing the program in little parts known as units. There are separate functions and they will develop by each part of the function.

- **Verification**

  This stage checks the system's functionality. During this time, all of the units are brought together to form a system that would eventually become the finished product. The crew tests the system to ensure that all of the components are working properly. We are responsible for all of the tests, including unit and system testing. Any issues are addressed as soon as they are discovered.

- **Maintenance**

  If the client wants it, the developers may make small changes after the product has gone live. Any issues that occur, as well as those ignored in prior rounds, are addressed. The client will receive more regular assistance and maintenance as time goes on.

1. Feasibility Study

1.1. Feasibility Of the Project

- Technical Feasibility

  I am familiar with the requisite programming language abilities as well as the technical skills required to work on this project. To create and operate this system, we have all of the essential hardware and software. It's crucial to determine whether the system can be implemented with existing technologies. To use this system, the customer will need to obtain some technical information. They do, however, have the financial means to obtain it.

- Behavioral Feasibility

  This system can be accessed at any time and from any location using an electronic device. system will be capable of providing devices with a user-friendly interface (like laptops, desktops, and mobile phones).

- Economic Feasibility

  The technology was chosen with the lowest possible cost in mind. As part of this process, the proposed system's costs and benefits are compared. This is a critical factor to consider while designing a project. As your customers' businesses grow, this approach will provide the best profit. This new system will help to gain more customers for the service center.

- Operational Feasibility

  The suggested system is built entirely on a Graphical User Interface and is extremely user-friendly.

2.2. Requirement Analysis

Identifying the actual needs of the users from functional and non-functional viewpoints are covered in this phase. A requirement analysis will show the operation of the current system. In this phase, a complete investigation of the client organization and identifying the project objectives, goals, and deliverables are focused on to initialize the project. We are just going to get the requirements from the Auto City Service Center. Then we got some special requirements from them.

- To give facility to appointments before coming to service.
- provide details of the services given by the Auto Care Service Center.
- Keep appointment and service records.
- gives the facility to change the date after booking.

3. Design, Testing and Development

3.1. Design

This appointment system provides some facilities to customers. It is capable of providing appointment service to customers. Customers will be able to access the main website where they can select any service from the service list. Then they can get time to get their service. It is very helpful for customers to get service without wasting time. This system has a user-friendly and simple webpage for users. It will be used in low color to make it easier on the eyes. This streamlines and speeds up the process, as well as makes the system more manageable.

7.2. Testing

Testing is the most important thing for a system because it will decide how it works. It is self-evident that any system should be thoroughly tested prior to implementation. The functioning of an integrated hardware and software system in order to confirm that it satisfies the system's specific needs. The application is being used in real-time. We use unit testing and system testing to get evaluated after being integrated into the overall system. Finally, the system will be sent to the customer for testing. After that, they will do user acceptance testing.

7.3. Development

This system is made for customers. They can book their time from anywhere in the world. So we will need to build a web app. There are more features to add and additional user interfaces to create. This system was designed and developed using PHP, HTML, CSS, JavaScript, and Bootstrap. The SQL Server was used to create a database for storing data.