**Chapter 1. INTRODUCTION**

* 1. **Introduction:**

The app “AC Expertz” is a “Feedback app” which will help AC Expertz – Air Conditioning Store” customers to give feedback easily to the owner about the current scenario after installation of the AC’s and will also keep the owner updated about the situation at the customers side.

Business Requirements for the app “AC Expertz” can be listed as below:-

User Requirements:- 1) To ease the whole installation process of AC.

2) To give the feedback to owner in more easier way.

3) To ensure that he has given the right amount to the salesman.

4) To know the AC is correctly installed or not.

5) To keep owner updated about the current scenario without actually need of talking with him.

Owner Requirements:- 1) An app which will help customers to fill the details after the installation of the AC.

2) An app will which will keep the owner updated about the current scenario at the customers side.

Functional Requirements(Business Process)

-The app should take input from customer and send the details to the owner.

Non-Functional Requirements(Validation)

-1) It should take correct data from the customer and the process should be secure.

-2) The customer should be validated.

Proposed Solution:- List of modules:-

1) Login page for admin (Only owner can login and view the data)

2) About us (Information about shop)

3) Update Information (Actual Feedback Form)

4) Services (services “AC Expertz” provides)

5) Contact us (Contact Information )

Knowing the necessity for air conditioning services, AC Expertz in Pune specialises in the repair of various types of these air cleaning units. From the very beginning, the seller swore to treat its guests to unparalleled services when it comes to their repair service.

While it envisions itself to become the most preferred center for this service, it seeks to derive and offer excellent air conditioning solutions. As it ensures customer satisfaction at every step of the way, the company takes immense pride in the fact that it has been able to win the confidence and trust of the many customers it is known to cater to.

With the kind of services it is known to make available to its customers, the dealer has now become a name that many reckon with. The dedication the dealership has shown towards the repair of these cooling units, has and continues to be remarkable. This establishment stands in a prime location on Dhayari Phata, Opp Laadli Saadi Center. By means of various modes of public transport, the vicinity is a well connected area.

Extending its services to the various corporate and business spaces in the city as well as residences is AC Expertz at Dhayari Phata.

While spreading its wings over a wider customer base, the company has mastered the skill of repairing both window air conditioners and split unit air conditioners. The staff's ability to restore damages caused to various brands of air conditioners is remarkable. Their experience is what drives them to be able to diagnose problems quickly as well as decide on a plan of action to restore the same.

Apart from this, they extend their services to those looking to have their air conditioning units installed. Open from 08:00 - 21:00, this center looks to make its services available for a major part of the day.

They say that while buying AC you should consider 5 main factors type, capacity, power consumption, inverter technology, features. There are two types of air conditioners first one is window air conditioner, second one is split air conditioner.

AC Expertz is a air conditioning store which is currently serving in all over Maharashtra. It is located at shop no.4, street no.14/4b, sinhagad darshan building, wadgaon bk haveli Pune, Maharashtra 411041. You can contact them on:- Email Address:- acexpertzpune@gmail.com ,Contact Persons Name:- Atul Kulkarni, Contact Number:- 8087032450, Work Phone Number:- 8975981419

Air conditioning is the process of removing heat and moisture from the interior of an occupied space, to improve the comfort of occupants. Air conditioning can be used in both domestic and commercial environments.

This process is most commonly used to achieve a more comfortable interior environment, typically for humans or animals; however, air conditioning is also used to cool/dehumidify rooms filled with heat-producing electronic devices, such as computer servers, power amplifiers, and even to display and store artwork.

Air conditioners often use a fan to distribute the conditioned air to an occupied space such as a building or a car to improve thermal comfort and indoor air quality.

Electric refrigerant-based AC units range from small units that can cool a small bedroom, which can be carried by a single adult, to massive units installed on the roof of office towers that can cool an entire building.

The cooling is typically achieved through a refrigeration cycle, but sometimes evaporation or free cooling is used. Air conditioning systems can also be made based on desiccants (chemicals which remove moisture from the air) and subterraneous pipes that can distribute the heated refrigerant to the ground for cooling.

In the most general sense, air conditioning can refer to any form of technology that modifies the condition of air (heating, cooling, (de-)humidification, cleaning, ventilation, or air movement). In common usage, though, "air conditioning" refers to systems which cool air. In construction, a complete system of heating, ventilation, and air conditioning is referred to as heating, ventilation, and air conditioning (HVAC – as opposed to AC).

Window Air Conditioner is the most commonly used air conditioner for single rooms. In this air conditioner all the components, namely the compressor, condenser, expansion valve or coil, evaporator and cooling coil are enclosed in a single box. This unit is fitted in a slot made in the wall of the room, or more commonly a window sill.

The split air conditioner comprises of two parts: the outdoor unit and the indoor unit. The outdoor unit, fitted outside the room, houses components like the compressor, condenser and expansion valve.

The indoor unit comprises the evaporator or cooling coil and the cooling fan. For this unit you don’t have to make any slot in the wall of the room. Further, present day split units have aesthetic appeal and do not take up as much space as a window unit. A split air conditioner can be used to cool one or two rooms.

**Window Air Conditioner Features:-**

**1. Thermostat:**

The thermostat on the unit is what allows you to control the cooling output. Middle to higher end models will feature a digital thermostat that has a readout of both the selected temperature as well as the actual temperature. While the digital readout is more convenient they have also been shown to be more accurate and maintain a more consistent temperature in the room, and have an automatic shut off feature that will automatically cycle the unit on and off to maintain the desired temperature. Basic models include a mechanical thermostat that uses a dial to select the temperature higher or lower depending on where you turn it.

**2. Adjustable Fan Speed:**

Adjusting the fan speed on the unit affects the rate at which your space cools down. Typically, you can select from two (low and high) or three (low, medium and high) fan speeds. This setting also affects the level of noise caused by the unit. If you’re using the unit in a bedroom, this feature is nice as you can select a lower, quieter, fan speed at night.

**3. Remote:**

A remote control allows you to operate the unit without having to use the controls that are typically mounted to the front of the AC. Standard remotes let you control the temperature and fan speed while some also have a temperature display on the remote control. Additionally, some units have a magnetic hold on the side so that the remote can be placed there when not in use to avoid misplacing it.

**4. Programmable Timer:**

A timer allows you to set a delayed start or stop time, which helps manage energy consumption. Timers can be set in one hour intervals and usually go up to either 12 or 24 hours. When the unit is off, setting the timer determines when it will automatically turn on. And if the unit is on, setting the timer determines the point at which it will shut off.

**5. Air Direction Control:**

Adjustable louvers let you manipulate the direction air is blown from the unit. If the unit is going to be placed in a living room, being able to adjust the vent can mean keeping the unit from blowing directly on people who may be sitting in the living area. It also lets you optimize air flow in the space if you will be utilizing a room or ceiling fan.

**6. Filter Type:**

**Standard** — The most common filter type is a basic filter and it will need to be periodically replaced to ensure proper air flow and filtration.

**Washable** — These filters can be cleaned in a kitchen or bathroom sink to avoid having to purchase a replacement. They are also quite durable and can withstand many, many washes.

**7. Energy Star Rating:**

Units that carry an Energy Star rating can operate up to 15% more efficiently than units that are not Energy Star. Depending on how often you are planning to utilize your window unit, energy efficiency may be something you want to consider.

**1.2 Objective:**

AC Expertz is an android application. As more and more people use smart phones, the need for high-quality Android applications becomes more vital than ever.This application fixes the limitation and problems of paper based processes.

Objectives can be listed as below:-

To give feedback without need of pen and paper and actual human interference

To give feedback for the products in the comfort of your own home, and you don't have to deal with other shoppers getting in your way.

The objective of developing such a computerization system is toreduce the paper work and safe of time in school management. There byincreasing the efficiency and decreasing the work load. The project provides us the information about the installation of the AC and client side updates.

Specifically the objectives can be listed as below:-

1) To ease the whole installation process of AC.

2) To give the feedback to owner in more easier way.

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4) To know the AC is correctly installed or not.

5) To keep owner updated about the current scenario without actually need of talking with him.

Online feedback gives you comfortable feedback system on your own computer or smartphone. If you are busy at the moment you can give detailed feedback later on by using it’s android application.

**1.3 Scope:**

“Mobile is the future of Software Development” – Google’s Eric Schmidt.  
Usage of mobile phones has increased in the past year. India stands second in the world, in the number of active mobile phones. Today, out of the 6 billion mobile phones in the world, close to 1 billion is being used in India. This comes to about 70% of our current population. Every month sees an increase of around 6 million subscribers. That, in fact, is a lot of numbers.

With the increase in the number and make of mobile phones, there comes a demand for better applications. And in turn, huge scope of android mobile application development in India. Now, this puts a light on why companies like Nokia, BlackBerry, Samsung, HTC, Motorola, Google and many others are going wild with their innovations – increase in the need and use of Mobile Applications.

Android is an open-source Linux-based operating system designed mainly for smart phones and tablets. It is maintained as an open source project by Google. This open source code and licensing allows the developers and device manufacturers to modify the software according to their needs. Android platform has brought about cutting-edge technologies in app development.

Owing to the popularity of Android, Mobile Apps development industries are considering Android Application Development as one of the best remunerative business opportunities. The need to hire knowledgeable mobile application developer is intense.  
India is considered as a country with several globally recognized IT hubs.