ONLINE SHOPPING APP USING DART PROGRAMMING LANGUAGE AND FLUTTER FRAMEWORK

Mrs.K. Vijayalakshmi, M.E., (PH.D.,) Hod/CSE
Mr.D Manishdevan, Mr.A Shakthi, Mr.A Jana, Mr.R Harish
(UG Students)
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
AVS College Of Technology

Salem-636 106,
Tamil Nadu, India.

***Abstract* --** **The online shopping system is a Flutter framework project with both admin and user layouts. This application provides user lots of meat with different products This system is application-based which is written in dart programming language, flutter framework and MYSQL. Continuously, consists of two main component user side and admin .Firstly, the user needs to login to the system by registering their details. Then they can enter into the system. They can also all Products , E-Shopping is a boon as it saves lot of time. Online shopping is a process whereby consumers directly buy goods, services etc. from a seller without an intermediary service over the Internet. Shoppers can visit app stores from the comfort of their house and shop as by sitting in front of the mobile ,Online shopping app consist of different functionalities and features such as proper categorization of the product ,To provide a variety of cuts from traditional meats and provide the biggest selection of meat including exotic meat options wherever it is possible to source them locally**

I. INTRODUCTION

THIS document is an example of the Mobile application development is the process to making software for smart phones and digital assistants, most commonly for Android and IOS. The software can be preinstalled on the device, downloaded from a mobile app store or accessed through a mobile web browser. The programming and markup languages used for this kind of software development include Java, Swift, C# and HTML5. Mobile app development is rapidly growing. From retail, telecommunications and ecommerce to insurance, healthcare and government, organizations across industries must meet user expectations for real-time, convenient ways to conduct transactions and access information. Today, mobile devices Yet mobile application development might seem daunting. Once you've selected the OS platform or platforms, you need to overcome the limitations of mobile devices and usher your app all the way past the potential hurdles of distribution. Fortunately, by following a few basic guidelines and best practices, you can streamline your application development journey. Yet mobile application development might seem daunting. Once you've selected the OS platform or platforms, you need to overcome the limitations of mobile devices and usher your app all the way past the potential hurdles of distribution. Fortunately, by following a few basic guidelines and best practices, you can streamline your application development journey. Many independent application development teams choose to build their apps for Android first. Android, and the Google Play

Store has fewer restrictions than the Apple App Store. On the other hand, mobile applications developed for iOS have far fewer devices that need support, making optimization simpler. And user retention is typically higher for iOS applications Template Depending on the intended use case and target audience for the mobile application you are developing, you might have other considerations. For example, if you're designing an app for your organization's employees, you'll need to support the platforms they use, which may mean developing cross-platform apps that work for both Android and iOS. Or if you're building a mobile application for your customers and you know the majority of them use iPhones, then developing iOS applications should be a top priority. Additional considerations when developing your mobile applications include monetization strategies and anticipated user behavior, which can be influenced by geographical and cultural factors , Let's say you need to do mobile application development for both the Android operating system and iOS. What is the best software development approach? You could develop two native applications.

Taking advantage of native APIs and Ospecific programming languages can help you build a powerful app. Most enterprise apps, especially ones that require substantial API traffic, benefit from native development. If you decide to develop native applications one at a time, you'll likely want to begin with Android—for some of the same reasons that independent app developers often focus on Android. You'll probably have better luck developing the full application as an MVP on Android and then converting and optimizing it to iOS after release ,You will still need to debug and rewrite the code for the native language and redesign the front-end user interface, because the two operating systems function very differently, making cross-platform operation impossible. So why not start completely from scratch? While you can't simply translate the code into a new programming language, much of the back end can be replicated cross-platform. Frameworks, libraries and third-party extensions often function identically in both environments, allowing you to avoid costly reworking. You can also use a prebuilt mobile cloud service, such as IBM Mobile Foundation, to manage the web back end. Another option is to go hybrid, taking a write once-run-anywhere approach. Hybrid apps use a single codebase that can function on either platform. They're typically coded in a programming language that's universally recognized,

A. SYSTEM ANALYSIS

In this phase detailed appraisal of the existing system is explained. This appraisal includes how the system works and what it does. It also includes finding out in more detail- what are the problems with the system works and what user requires from the new system or any new change in system. The output of this phase results in the detail model of the system. The model describes the system functions and data and system information flow. The phase also contains the detail set of user requirements and these requirements are used to set objectives for the new system.

B. EXISTING SYSTEM

The current system for shopping is to visit the shop manually and from the available product choose the item customer want and buying the item by payment of the price of the item. This system is not much user-friendly as one needs to go to the market physically and then select items only from the available list. So mostly it is difficult to get the product as per our desire. Description About the products is less available and are mostly verbal only. For this type of shopping, one needs to have an ample amount of free time. Also, not really good markets exist everywhere, so many times good markets become out of reach for certain people. In the proposed system customers need not go to the shops for purchasing the products. He/she can order the product he/she wishes to buy through the use of this system. The shop owner can be the admin of the system.The shop owner can appoint officials particularly to handle this, who will help the owner in managing the customers and product orders. The system also endorses a home delivery system for delivering the purchased products.

C. PROPOSED SYSTEM

To provide both of android and IOS platforms , then simplify of coding in both of android and IOS Because to write a single codebase of dart language then convert in both of android and IOS , using Flutter framework , The application aims to bridge the needs of the customer to have highest quality fresh meat delivered to their doorstep and the needs of the local farms to reach every local customer in the quickest way., We also aim to provide a variety of cuts from traditional meats and provide the biggest selection of meat including exotic meat options wherever it is possible to source them locally.

D. SYSTEM ENVIRONMENT

In general, developing a mobile application is a complex and challenging task. There are many frameworks available to develop a mobile application. Android provides a native framework based on Java language and iOS provides a native framework based on Objective-C / Swift language. However, to develop an application supporting both the Oss, we need to code in two different languages using two different frameworks. To help overcome this complexity, there exists mobile frameworks supporting both OS. These frameworks range from simple HTML based hybrid mobile application framework (which uses HTML for User Interface and JavaScript for application logic) to complex language specific framework (which do the heavy lifting of converting code to native code). Irrespective of their simplicity or complexity, these frameworks always have many disadvantages, one of the main drawback being their slow performance. In this scenario, Flutter – a simple and high performance framework based on Dart language, provides high performance by rendering the UI directly in the operating system's canvas rather than through native framework. Flutter also offers many ready to use widgets (UI) to create a modern application. These widgets are optimized for mobile environment and designing the application using widgets is as simple as designing HTML. To be specific, Flutter application is itself a widget. Flutter widgets also supports animations and gestures. The application logic is based on reactive programming. Widget may optionally have a state. To help overcome this complexity, there exists mobile frameworks supporting both OS. These frameworks range from 6 simple HTML based hybrid mobile application framework (which uses HTML for User Interface and JavaScript for application logic) to complex language specific framework (which do the heavy lifting of converting code to native code). Irrespective of their simplicity or complexity, these frameworks always have many disadvantages, , By changing the state of the widget, Flutter will automatically (reactive programming) compare the widget's state (old and new) and render the widget with only the necessary changes instead of re-rendering the whole

widget.We shall discuss the complete architecture in the coming chapters.

MySQL used for both small and large applications.MySQL is a relational database management system (RDBMS).MySQL is fast, reliable, and flexible and easy to use.MySQL supports standard SQL (Structured Query Language).MySQL is free to download and use.MySQL was developed by Michael Widenius and David Axmark in
1994.MySQL is presently developed, distributed, and
supported by Oracle Corporation.MySQL Written in C, C++.A database is a separate application that stores a collection of data. Each database has one or more distinct APIs for creating, accessing, managing, searching and replicating the data it holds.Other kinds of data stores can also be used, such as files on the file system or large hash tables in memory but data fetching and writing would not be so fast and easy with those type of systems.Nowadays, we use relational database management systems (RDBMS) to store and manage database because all the data is stored into different tables and relations are established

Dart is the open-source programming language originally developed by Google. It is meant for both server side as well as the user side. The Dart SDK comes with its compiler-the Dart VM and a utility Dart 2js which is meant for generating Javascript equivalent of a Dart Script so that it can be run on those sites also which don't support Dart. Dart is Object- oriented language and is quite similar to that of Java Programming. Dart is extensively use to create single-page websites and web-applications. Best example of dart application is Gmail. You can install Dart SDK from their official website or download the installer from this site. Dart is an open-source general-purpose programming language. It is originally developed by Google. Dart is an object-oriented language with C-style syntax. It supports programming concepts like interfaces, classes, unlike other programming languages Dart doesn't support arrays. Dart collections can be used to replicate data structures such as arrays, generics, and optional typing. The following code shows a simple Dart program – Void main() { Print(―Dart language is easy to learn‖.

Representational state Transfer (REST) is an architectural style that defines a set of constraints to be used for creating web services. REST API is a way of accessing web services in a simple and flexible way without having any processing. REST technology is generally preferred to the more robust Simple Object Access Protocol (SOAP) technology because REST uses less bandwidth, simple and flexible making it more suitable for internet usage. It's used to fetch or give some information from a web service. All communication done via REST API uses only HTTP request. REST technology is generally preferred to the more robust Simple Object Access Protocol (SOAP) technology because REST uses less bandwidth, simple and flexible making it more suitable for internet usage. 8 It's used to fetch or give some information from a web service. All communication done via REST API

uses only HTTP request In HTTP there are five methods that are commonly used in a REST-based Architecture i.e., POST, GET, PUT, PATCH, and DELETE. These correspond to create, read, update, and delete (or CRUD) operations respectively. There are other methods which are less frequently used like OPTIONS and HEAD . [1] proposed a system which is an innovative congestion control algorithm named FAQ-MAST TCP (Fast Active Queue Management Stability Transmission Control Protocol) is aimed for high-speed long-latency networks. Four major difficulties in FAQ-MAST TCP are highlighted at both packet and flow levels. The architecture and characterization of equilibrium and stability properties of FAQ-MAST TCP are discussed. Experimental results are presented comparing the first Linux prototype with TCP Reno, HSTCP, and STCP in terms of throughput, fairness, stability, and responsiveness. FAQ-MAST TCP aims to rapidly stabilize high-speed long-latency networks into steady, efficient and fair operating points, in dynamic sharing environments, and the preliminary results are produced as output of our project. The Proposed architecture is explained with the help of an existing real-time example as to explain why FAQ-MAST TCP download is chosen rather than FTP download. [2] proposed a secure hash message authentication code. A secure hash message authentication code to avoid certificate revocation list checking is proposed for vehicular ad hoc networks (VANETs). [3] discussed that the activity related status data will be communicated consistently and shared among drivers through VANETs keeping in mind the end goal to enhance driving security and solace. [4] discussed because of various appealing focal points, agreeable correspondences have been broadly viewed as one of the promising systems to enhance throughput and scope execution in remote interchanges. [5] discussed that Helpful correspondence is developing as a standout amongst the most encouraging procedures in remote systems by reason of giving spatial differing qualities pick up. The transfer hub (RN) assumes a key part in agreeable correspondences, and RN choice may generously influence the execution pick up in a system with helpful media get to control (MAC).

E.
IMPLEMENTATION

Implementation is the stage of the project when the oretical design is sturned out into a working system. Thus it can considered to be the most criticals stage in achieving a successfulness system the user, confidence that the the news system will work and be effective. The implementation stage involves careful planning , investigation of the existing system and it's constraints on implementation , designing of method to achieve change over and evalution of change over methods.

D.   SYSTEM TESTING

The purpose of testing is to discover errors. Testing is the process of trying to discover Every conceivable fault or

weakness in a work product. It provides a way to check the Functionality of components, sub assemblies, assemblies and/or a finished product It is the Process of exercising software with the intent of ensuring that the Software system meets its Requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

White , Box Testing is a testing in which in which the

software tester has knowledge of the Inner workings, structure and language of the software, or at least its purpose. It is purpose. It is Used to test areas that cannot be reached from a black box level ,

Black Box Testing is testing the software without any knowledge of the inner workings, structure or language of the module being tested. Black box tests, as most other kinds of tests, must be written from a definitive source document, such as specification or requirements document, such as specification or requirements document. It is a testing in which the software under test is treated, as a black box .you cannot ―see‖ into it. The test provides inputs and responds to outputs without considering how the software works.

F.
CONCLUSION

At the conclusion our project aims to prevent All said and done, grocery mobile apps on Flutter can assure better quality, greater performance, and on-time delivery. It is much faster and budget-friendly as well. Specifically, it can be convenient for the start-ups by meat online shopping them an application working fine on several OSS on a comparatively lower budget. In conclusion, Flutter can be the best recommendation for all those looking forward to developing a quality mobile app for meat shopping , Are you looking for the Flutter App Development Company to develop your next mobile app development project that could change the face of your industry? At Mobile Solutions, as a leading Flutter App Development Services provider, we will guide you with strategic advice on the technology that fits best to your business solution. provide a variety of cuts from traditional meats and provide the biggest selection of meat including exotic meat options wherever it is possible to source them locally.

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