Project Synopsis On

"ON-DEMAND HOME SERVICES WEBSITE"

Submitted as a part of course curriculum for

Bachelor of Technology in Computer Science



Submitted by-

Manvendra Kumar (2000290120092) Mayank Gupta (2000290120094) Naman Nagaria (2000290120098)

Under the Supervision of

Mr. Sreesh Gaur Assistant Professor Department of Computer Science

KIET Group of Institutions, Ghaziabad Department of Computer Science Dr. A.P.J. Abdul Kalam Technical University 2022-2023

KIET GROUP OF INSTITUTIONS MINI PROJECT **2024 BATCH, SESSION 2022-23** APPROVAL OF TITLE BY GUIDE MR. SREESH GAUR **Guide Name:** PCS24-41 Project ID: FULL STACK DEVELOPMENT Domain: ON-DEMAND HOME SERVICES WEBSITE Title: 10. Nov. 22 Date: Student Names with Signature Mayank Gupta Mayak Mta Mannan Magaria Raman Vagara

Guide Sign:

TABLE OF CONTENTS

	Page No.				
TABLE OF CONTENT	1				
DECLARATION					
TITLE PAGE	3				
ACKNOWLEDGEMENT	4				
ABSTRACT					
CHAPTER 1 INTRODUCTION					
1.1 Introduction	6				
1.2 Problem Statement	7				
1.3. Objective	8				
1.4. Scope	9				
CHAPTER 2 LITERATURE REVIEW					
CHAPTER 3 PROPOSED METHODOLOGY					
3.1 Methodology	20				
3.2 Flow Diagram	21				
CHAPTER 4 TECHNOLOGY USED	22				
4.1 Technology To be used					
4.2 Hardware and Software Requirement					
CHAPTER 5 CONCLUSION					
REFERENCES					

DECLARATION

We hereby declare that this submission is our work and that, to the best of our knowledge
and belief, it contains no material previously published or written by another person nor
material which to a substantial extent has been accepted for the award of any other degree
or diploma of the university or other institute of higher learning, except where due
acknowledgement has been made in the text.
Name:
Date:

CERTIFICATE

This is to certify that Project Synopsis entitled ON-DEMAND HOME SERVICES WEBSITE which is submitted by Manvendra Kumar, Mayank Gupta, Naman Nagaria in partial fulfilment of the requirement for the award of degree B. Tech. in Department of Computer Science of Dr A.P.J. Abdul Kalam Technical University, Lucknow is a record of the candidates own work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date: Supervisor Signature

Mr. Sreesh Gaur

(Assistant professor)

ACKNOWLEDGEMENT

It gives us a great sense of pleasure to present the synopsis of the B.Tech Mini Project undertaken during B.Tech. Third Year. We owe a special debt of gratitude to Mr. Sreesh Gaur, Assistant Professor, Department of Computer Science, KIET Group of Institutions, Delhi- NCR, Ghaziabad, for his constant support and guidance throughout the course of our work. His sincerity, thoroughness and perseverance have been a constant source of inspiration for us. It is only his cognizant efforts that our endeavours have seen the light of the day.

We also take the opportunity to acknowledge the contribution of Dr.Ajay Kumar Shrivastava, Head of the Department of Computer Science, KIET Group of Institutions, Delhi- NCR, Ghaziabad, for his full support and assistance during the development of the project. We also do not like to miss the opportunity to acknowledge the contribution of all the faculty members of the department for their kind assistance and cooperation during the development of our project.

Last but not the least, we acknowledge our friends for their contribution to the completion of the project.

Name:			
Date:			

ABSTRACT

In present time, people are overwhelmed with work culture, as everyone is busy scheduled. So giving a thought to aspect of life is to design and develop a system that provides many services at your doorstep in just one click. A portal provides variety of services like repairing, medical services, cleaning, cooking, painting, electricians, laundry and many more services. Keeping that in sense our proposed system is basically a marketplace for household services. The primary objective of the online system for household services is about delivering the home services at the door step just by one click. This application can be prolonged by merely adding up the required services and additional payment systems.

CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION

In present time, people are overwhelmed with work culture, as everyone is busy scheduled. So giving a thought to aspect of life is to design and develop a system that provides many services at your doorstep in just one click. A portal provides variety of services like repairing, medical services, cleaning, cooking, painting, electricians, laundry and many more services. Keeping that in sense our proposed system is basically a marketplace for household services.

1.2 PROBLEM STATEMENT

There is an overwhelming demand for home based on-demand services and this is the situation where people feels exhausted to find the right provider to fulfill their needs. This is the all-in-one portal or website to find different on-demand home services like electrician, repairing, medical services, cleaning, tutors, home cooks, any specialists etc. This website provides professionals a way to grow their business and earn some extra money.

1.3 OBJECTIVES

- i. The primary objective of the online system for household services is about delivering the home services at the door step just by one click.
- ii. Online system for household services can be used by any authorized user intending to seek for household services through an ingenious web based system or a mobile application.
- iii. To provide an authenticated and authorized login module for the users such as service seekers, service providers and the admin, by providing appropriate credentials at the time of registration.

1.4 SCOPE

- i. The overall system can be designed so that its capacity can be increased in response to the further requirements for which the application provides an appropriate service overseas.
- ii. This application can be prolonged by merely adding up the required services and additional payment systems.

CHAPTER 2 LITERATURE REVIEW

ROLE OF RESPONSIVE DESIGN IN WEB DEVELOPMENT

Author: Fernando Almeida, J.Monteiro

In this research paper, we have read about responsive design in web design. It is creating web pages that look good on each devices. It allows web page to dynamically adjust for different screen sizes and viewports.

Responsive web design enables the rendering of Web pages in a fast and optimized way, Automatically resize hide, shrink, or enlarge to adjust with screen sizes giving a better user experience on all devices such as mobile devices, tablet and desktop. It intends to explore the main advantages and disadvantages of Responsive Web design. It adopted a quantitative approach based on a questionnaire filled by a number of professionals in the industry working on responsive web design that allowed us to identify the reasons that lead software developers to the adoption of the responsive design and find out the limitations of responsive web design. The responsive web design results in good user experience and many more advantages.

A REVIEW AND ANALYSIS OF TECHNOLOGIES FOR DEVELOPING WEB APPLICATIONS

Author: Asha mandana, Solomon Antony

This Paper review technologies important for design and development of web applications. It discuss about the technologies that are used at the Front-end or client-side and Back-end or Server side in Web Applications development. It compares different web application development frameworks. It discusses life cycle model and framework of web application development.

This research tells about which framework is recommended for different criterion.

It tells if the project has short budget, LAMP platform is recommended, if security of application is most important, then LAMP or J2EE platform are recommended, if the project has to be in more compatible mode, then LAMP platform is recommended, if the project is large, then ASP.NET platform is highly recommended, if clients want configuration flexibility, then ASP.NET is the platform, if client wants high performance project, then use ASP.NET platform and if the project has more time and high budget, then J2EE is recommended to use.

It gives good knowledge to the developers as well as clients in choosing a web application platform.

A RECOMMENDATION SYSTEM AND THEIR PERFORMANCE METRICS USING ML ALGORITHMS

Author: Gattu Vijaya kumar

This paper use five classifiers are Support-Vector Machines, Logistic Regression Multinomial Naive Bayes, Multilayer Perceptron and KNearest Neighbors. These will predict nearest categories from the News Category Data, among these categories we will recommend the most common sentence to a user and we analyze the performance metrics. It was observed that from the comparison of all the algorithms SupportVector Machine gives 75.13% accuracy.

RESEARCH ON HTML 5 IN WEB DEVELOPMENT

Author: Ch Rajesh, 2 K S V Krishna Srikanth

HTML5 is everywhere these days. HTML5 is the new and elegant standard for HTML that provides web users and developers enhanced functionality. The older versions of HTML, HTML 4.01, which came in 1999, and the web development have changed notably since then. HTML 4, XHTML, CSS and the HTML DOM Level 2 are now replaced with HTML5. It was brought to deliver rich content without the need for additional plug-ins and proprietary technologies. The new power of HTML5 supplies the user with everything from animation to graphics, music to movies, and can also be used to build complicated web applications and also supports cross-platform. HTML5 standard initiates the development of real-time collaborations in web browsers, which leads to less work for web developers. The web is a resource that is widely and steadily usable across many platforms. Some vendors have developed their own proprietary technologies that provide more functionality than web standards. W3C is developing HTML5 with the cooperation of Web Hypertext Application Technology Working Group (WHATWG). New standard for HTML allows us to build rich and interactive web pages. It can play audio and video and supports animations from the browser without the need for proprietary technologies. HTML5 supports cross-platform, designed to display webpages on a PC, a Tablet, a Smartphone, or a Smart TV.

SECURITY PATTERNS FOR WEB APPLICATION DEVELOPMENT

Author: Takao Okubo, Hidehiko Tanaka

There is a huge disconnect between security professionals and systems developers. Security patterns are intended to capture security expertise in the form of worked solutions to recurring problems. While the emphasis is on security, these patterns capture the strengths and weaknesses of different approaches. They are meant to be constructive and educational as well as educational.

The Problem describes the conditions that motivate the usage of the pattern. This section outlines the context in which the pattern is applicable. When multiple patterns address the same basic problem, the Problem section for each pattern provides the more detailed context that would make that pattern specifically appropriate. The problem statement does not contain a lengthy discussion of secondary effects. For example, the Problem section for the Password Authentication pattern does not include the need to protect against password-guessing attacks. The Password Authentication pattern addresses the problem of authenticating users. Susceptibility of this approach to password-guessing attacks is a secondary effect of using passwords.

The Solution describes at a high level how the pattern solves the problem described in the problem statement. This section explains how the pattern is applicable to the problem and the rationale for applying the solution. Optionally, the Solution section will include a diagram to describe the solution structure visually. A solution will also be explained in terms of particular components and their interactions, if appropriate. Significant scenarios comprising the solution are presented in detail in this section.

COMPARATIVE STUDY OF RECOMMENDER SYSTEM APPROACHES AND MOVIE RECOMMENDATION USING COLLABORATIVE FILTERING

Author: Taushif Anwar, Uma Vijayasundaram

Recommender systems are information filtering tools and whose main aim is to provide personalized recommendation. This paper gives an overview of several types of recommendation approaches based on user preferences, ratings, domain knowledge, users demographic data, users context and also lists the advantages and disadvantages of each RS approach. It proposed the movie recommendation based on collaborative filtering and singular value decomposition plus-plus (SVD++). This approach also overcomes cold-start, data sparsity problems and provides them relevant items and services.

WEBSITE DEVELOPMENT TECHNOLOGIES: A REVIEW

Author: Pratiksha D Dutonde, Shivani S Mamidwar, Monali Sunil Korvate, SumanglaBafna, Prof. Dhiraj D Shirbhate

This research Paper tells us about the web development technologies, frameworks used in front-end and back-end or client-side and server-side. Knowing the fundamental classes of net technologies is important if you propose to figure in net development. JavaScript could be a lightweight, cross-platform, and taken scripting language. Node.js is an event-driven, non-blocking (asynchronous) I/O and it's not an artificial language.

Back-end development cares with web site design, scripting, and communication with databases. Back-end code permits the communication\r between browsers and data from databases. Databases are necessary as a result of the permit websites and applications to handle user knowledge. There are two main sorts of databases: SQL and NoSQL. Once a business case has been developed and approved, it's time to begin building. A level-3 heading must be indented, in Italic and numbered with an Arabic numeral followed by a right\r parenthesis. The final check of system practicality is when the web site is ready to deploy. The developer should make sure that the positioning is responsive i.e., it seems. properly on devices of all sizes not a part of the web site ought to behave abnormally no matter the scale of the screen. HTML, CSS, and JavaScript square measure the languages used for face development.

APPLICATION DEVELOPMENT USING FLUTTER

Author: Aakanksha Tashildar, Nisha Shah, Rushabh Gala, Trishul Giri, PranaliChavhan

Mobile applications are having a progressively more significant role in our day to day lives. Ever since November 2016, there is more network traffic made by mobile devices (48.19%) compared to desktops or laptops (47%). To dispense it to most of the users, a mobile application needs to familiarize itself with two independent platforms which are Android and iOS. These two platforms share immense dissimilarities which often necessitate different skill sets for development.

Flutter is a cross-platform framework that targets developing high-performance mobile applications. Flutter was publicly released in 2016 by Google. Besides running on Android and iOS flutter applications also run on Fuschia. Flutter is chosen as Google's application-level framework for its next-generation operating system. Flutter uses a high-performance rendering engine to render each view component using its own. This provides a chance to build applications that are as high performance as native applications can be. In view of architecture, the engine's C or C++ code involves compilation with Android's NDK and LLVM for iOS respectively, and during the compilation process, the Dart code is compiled into native code.

Points to the success of a mobile-driven reward system are helping retailers and small to medium-shop owners to attract new customers, retain existing ones, and motivate increased purchases among current consumers.

EXPLORING END USER'S PERCEPTION OF FLUTTER MOBILE APPS

Author: Ola Dahl

In this research paper, we When developing mobile applications, developers need to make a decision: either develop multiple native applications for different operating systems or develop one app that is cross-platform compatible. Many technologies for creating cross-platform applications have emerged over the years, and new technologies are released every year. One such technology is Flutter, which is a mobile application SDK (Software Development Kit). Flutter promises the ability to build native applications on iOS and Android that achieve native performance.

DESIGN AND ANALYSIS OF COLLABORATIVE FILTERING BASED RECOMMENDATION SYSTEM

Author: Sonali Suryawanshi and Manish Narnaware

This paper introduces a new cooperative filtering recommendation algorithm based on dimensionality reduction called Singular Value Decomposition (SVD) used to cluster related users and reduce dimensionality. These method and concept are continuously being used and referred in order to attain an increased and enhanced accuracy over the present Netflix system. In the paper, solving data sparsity and high dimensionality, summarize the approaches and techniques of the traditional CF-based recommender systems, and discuss the major challenges and the advantages of the CFbased RS. The main approach with SVD that it works for good recommendation to users and handle with the problem that user faces like sparsity, scalability, and Dimensionality reduction.

CHAPTER 3 PROPOSED METHODOLOGY

3.1 METHODOLOGY

The proposed system includes Admin, Professional, and Customer.

- Admin has the rights to access and modify the website.
- Customers who wants to avails our services should precede with
 - i. Registration Module
 - ii. Login Module
 - iii. Services Module
 - iv. Payment Module
 - v. Review and Feedback Module
- Professional who provides a service will go with
 - i. Registration and login process
 - ii. Upload file
 - iii. Confirm service
 - iv. Return policy

3.2 FLOW-DIAGRAM

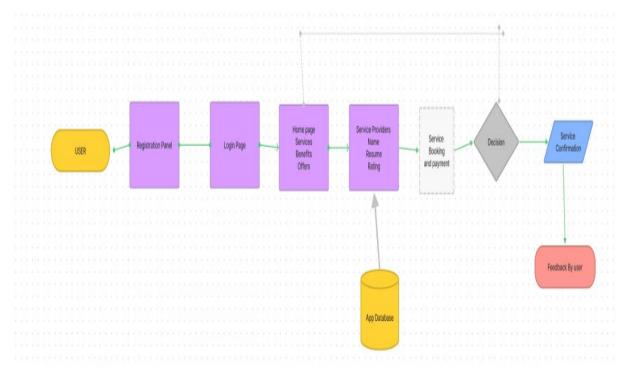


Figure 1

CHAPTER 4 TECHNOLOGIES USED

4.1 TECHNOLOGY TO BE USED

- 1. Front-End
 - i. HTML
 - ii. CSS
 - iii. Bootstrap
 - iv. JavaScript
 - v. ReactJS
- 2. Back-End
 - i. NodeJS
 - ii. Database
- 3. Cloud Server Hosting
- 4. Tools
 - i. GitHub
 - ii. Visual Studio Code
 - iii. Browser Dev Tools
- 5. Machine Learning Algorithms for
 - i. Recommendation system
 - ii. Chatbot
 - iii. Rating System

4.2 SYSTEM REQUIREMENTS

Software requirements for Server Side

- i. Operating system
- ii. Application Software
- iii. Software tools like Wordpress
- iv. Datebase management system like oracle, MySQL
- v. Payment Gateway

Hardware Requirements for Server Side

i. A hosting service based on cloud

Software Requirements for Client Side

- i. Operating system like windows
- ii. Application Software like browser

Hardware Requirements for Client side

- i. Any Processor
- ii. Disk Space for installation
- iii. RAM 256MB

CHAPTER 5 CONCLUSION

To reduce burden in finding solutions for home services, the proposed system provides many services like cleaning, repairing, electrical, medical services by providing service specialists at your doorstep in just single click.

With well qualified and background demonstrated professionals we make all your home cleaning, repairing, furniture maintenance, electrical works, medical services, house painting, vehicle service and many other services to be done in a click anytime from anywhere as easy as available.

REFERENCES

- 1. Fernando Almeida, J.Monteiro. Role of responsive Web design, Article in Webology, December 2017
- 2. Solomon Antony. A review and analysis of technologies for developing web applications, Conference Paper, March 2012
- 3. Gattu Vijaya kumar. A Recommendation System and Their Performance Metrics using ML algorithms, February 2020
- 4. Ch Rajesh, 2 K S V Krishna Srikanth . Research on HTML 5 in Web Development
- 5. Takao Okubo, Hidehiko Tanaka, Security Patterns for Web Applications

 Development
- 6. Taushif Anwar, Uma Vijayasundaram, Comparative study of recommender system approaches and movie recommendation using collaborative filtering, Article in International Journal of Systems Assurance Engineering and Management · April 2021
- 7. Pratiksha D Dutonde, Shivani S Mamidwar, Monali Sunil Korvate, SumanglaBafna, Prof. Dhiraj D Shirbhate, Website Development Technologies: A review
- 8. Aakanksha Tashildar, Nisha Shah, Rushabh Gala, Trishul Giri, Pranali Chavhan , Applicaation Development Using Flutter
- 9. Ola Dahl, Exploring End User's Perception Of Flutter Mobile Apps
- 10. Sonali Suryavanshi, Manish Narnaware, Design and analysis of collaborative filtering based recommendation system, International Journal of Engineering Applied Sciences and Technology, 2020