My Cookery Master

A Project Work Synopsis

Submitted in the partial fulfilment for the award of the degree of

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IN
MOBILE COMPUTING

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Abstract

My Cookery Master is an application that helps us to provide recipes of dishes. It provides shopping for required veggie. In this application there is a chat feature so that viewers can directly connect to chefs and get their doubts solved. It has intelligent dish recommendation based on timing of the day. It also has a creator's panel where a person can post blog/photo of self-made things.

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Timeline

- 1. 27th September 2022: Getting started.
- 2. 1st October 2022: Basic Widgets modelling.
- 3. 3rd October 2022: Designing Splash Screen and certain pages.
- 4. 5th October 2022: Applying Scroll View.
- 5. 8th October 2022: Making Interactive Widgets for users.
- **6. 10th October 2022:** Routing and Navigating the app with Navigator 2.0.
- 7. 12th October 2022: Applying Deep links and web URL's.
- **8. 14th October 2022:** Using Shared Preferences to Store data.
- 9. 18th October 2022: Serialization with JSON.
- 10. 20th October 2022: Providing a network.
- 11. 25th October 2022: Using Chopper Library in app.
- 12. 28th October 2022: Building a better state management architecture.
- 13. 1st November 2022: Saving data with SQLite.
- **14. 3rd November 2022:** Adding platform specific app assets.
- **15. 5th November 2022:** Adding Fire store functionality.
- **16. 7th November 2022:** Adding chat functionality in the app.

1. INTRODUCTION

1.1. Problem Definition: This app focuses on the problems of the new generation that is cooking and eating healthy food. Most of working-class people are going the easy and unhealthy way that is fast food, because, they don't know how to make good home cooked food.

1.2. Project Overview/Specifications:

- This app is cross platform app which helps people to learn cooking.
- This app contains written as well as video tutorials of recipes.
- This app provides chatting interface for clearing doubts and getting additional guidance.
- This app is ads free and clutter free which makes it easy to use.

1.3. Software Specifications:

1) Windows / Mac OS

- 2 GB RAM minimum, 4 GB RAM recommended.
- 400 MB hard disk space plus at least 1 GB for Android SDK, emulator system images, and caches.
- Java Development Kit (JDK) 8.
- Java Runtime Environment (JRE) 8.
- Flutter SDK and DART SDK. (Latest Version)
- Optional for accelerated emulator: Intel processor with support for Intel VTx, Intel EM64T (Intel 64), and Execute Disable (XD) Bit functionality.

2) Linux

- 2 GB RAM minimum, 4 GB RAM recommended.
- 400 MB hard disk space plus at least 1 GB for Android SDK, emulator system images, and caches.
- Oracle Java Development Kit (JDK) 8.
- GNU C Library (glibc) 2.11 or later.

2. LITERATURE REVIEW

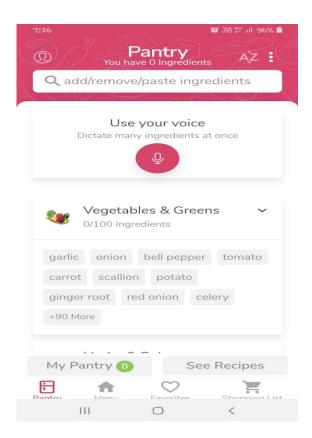
- **2.1. Existing System:** When the existing systems were studied, it was found having some problems, existing systems were was very time consuming and were not very efficient. In Existing Systems Apps are Cluttered and feature less UI which isless user interactive. The drawback of existing system has resulted to the development of new system. Studied systems are:
 - 1. Yummly: Here as we can see in above images that app has a very loud design which cannot please all also some features are reserved for pro members which requires subscription. If we see from a user perspective, then free users have limited functionality also their experience is further hindered with ads and unnecessary subscription pop ups.
 - 2. Pantry: As we can see in the images it has grid menu layout which creates clutter on the screen as is difficult to operate. The feature inspiration taken from this app are shopping list and things to avoid are cluttered design and unexplained and pale recipes.
 - **3.** Kitchen stories: Observations noted here where app had loud and flashy design, complex and unordered menu design no offline content and also shopping list had manual entries.
 - **4.** Paprika: App had only 40% functions when free. No recommendation for meals also nested menus made navigation difficult. Unnecessary emails for suggestions when creating account. Variety of Indian food was very limited and popular dishes weren't present.
 - **5.** Cookpad: App had basic features missing such as active sessions of user no account details were present and user can only edit name and email. Only Indian food was listed. No categorisation was done based on meal type or origin.

Limitations of existing system:

- 1. There is no private chatting option had been available.
- **2.** The performance of existing systems is very low.
- **3.** The systems do not maintain the list of active users.
- **4.** Not very user friendly as not all things are specified.

The drawbacks of Existing system were shown by following images:

- 1. Fig. 1 shows that the app contains Inventory.
- 2. Fig. 2 shows that the app contains Shopping List.
- **3. Fig. 3** shows that the app contains Pantry.
- **4. Fig. 4** shows that the app shows Recipe Page.



Shopping List
You have 0 items in the list

Q Add Something

Your shopping list is empty

Pantry Manu Favorites Shopping List

Fig. 1

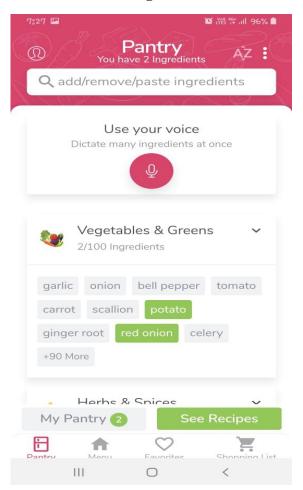


Fig. 2

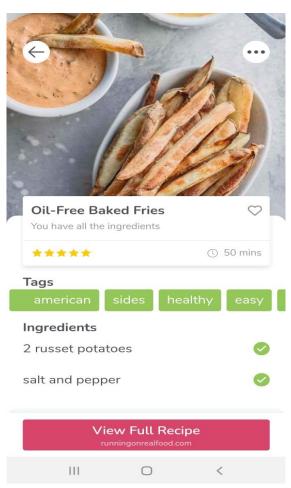


Fig. 3

Fig. 4

- **2.2. Proposed System:** With the proposed system we were able to bring functional and mature designs:
 - **1.** The system to developed here is a chat facility.
 - **2.** It is a centralized system.
 - **3.** There is two-way communication between different clients.
 - **4.** It allows user to find another logged user.

Below images shown some features of proposed system:

- 1. Fig. 5,6,7 its gives option to customize the app.
- 2. Fig. 8 shows grocery reminder for app.

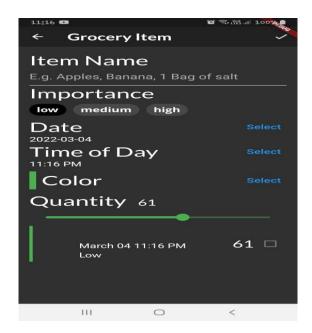


Fig. 5

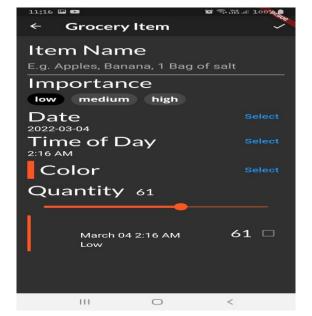


Fig. 7



Fig. 6



Fig. 8

3. PROBLEM FORMULATION

During software development, the main problem with existing app is:

- 1. No existing system gives interactive learning on cooking.
- 2. Most app available are just cook books or video Library that too un maintained.
- 3. Current apps have adware.
- **4.** There is no app which has collaborative chat feature.
- **5.** No app contains video + text recipes.

4. RESEARCH OBJECTIVES

The proposed work is aimed to carry out work leading to the development of an approach for cross platform app for learning cooking through written and videos method assisted with chat interface. The proposed aim will be achieved by dividing the work into following objectives:

- 1. Current system was tested
- 2. Flaws of current system were detected
- **3.** Wishlist of requested features was made.
- **4.** New app with ironed flaws and new features was created and tested.

5. METHODOLOGY

The following methodology will be followed to achieve the objectives defined for proposed research work:

- 1. New features will be implemented to enhance user experience.
- 2. It focuses on providing users with basic idea of cooking ingredients.
- **3.** App using following tools was created:
 - Flutter toolkit
 - Base language dart.
 - Cloud database: firebase
 - Few flutter widgets.

6. RESULTS AND DISCUSSION

The app focuses on providing users with the basic idea of cooking ingredients. While also providing various users to communicate with each other and discuss about recipes. It also provides a list to maintain grocery items for the user.

The app frontend is implemented using various widgets of flutter and for the backend it uses Firestore & Firebase.

7. CONCLUSION AND FUTURE SCOPE

As one can observe that the app is very much ready for daily usage incorporates and families. few features that can be added to make it more productive are:

- **1.** App for admin panel can be made.
- 2. Dedicated support app for faster query response can be made.

REFERENCES

- 1. https://flutter.dev/
- 2. https://dart.dev/
- 3. https://firebase.google.com/
- **4.** https://www.cookinglight.com/cooking-101/12-cooking-skills-every-young-adult-should-learn
- **5.** https://retrohousewifegoesgreen.com/basic-cooking-skills/
- **6.** https://www.reportlinker.com/insight/americans-cooking-habits.html
- 7. Android Developer guide, from http://developer.android.com/ accessed in March 2015
- 8. Android Tutorial, from http://www.tutorialspoint.com/android/ accessed in March 2015
- 9. Android Activity Lifecycle Diagram, from http://www.javatpoint.com/images/androidimages/Android-Activity-Lifecycle.png accessed in April 2015
- 10. Android Service Lifecycle Diagram, from http://www.tutorialspoint.com/android/images/android_service_lifecycle.jpg accessed in April 2015
- 11. Android Tutorial, from http://www.vogella.com/tutorials/AndroidBroadcastReceiver/article.html accessed in March 2015
- 12. Marko Gargenta Learning Android, O'Reilly Media, Inc, March 2011.
 http://aiti.mit.edu/media/programs/indonesia-summer-2013/materials/gargenta_-_2011_-learning_android.pdf accessed in March 2015
- 13. Android Developers Blog, from http://android-developers.blogspot.com/ accessed in March 2015
- **14.** Food 2 Fork, from http://food2fork.com/ accessed in March 2015
- **15.** Merriam-Webster. Database | Definition of Database by Merriam-Webster. Retrieved May 4, 2018 from https://www.merriam-webster.com/dictionary/database
- **16.** Firebase. Firebase Products. Retrieved May 4, 2018 from https://firebase.google.com/products/
- **17.** Katherine Chou, Xavier Ducrohet, Tor Norbye. 2013. Android Developers Blog: Android Studio: An IDE built for Android. Retrieved May 5, 2018 from https://androiddevelopers.googleblog.com/2013/05/android-studio-ide-built-for-android.html.
- **18.** Android Developers. Android Studio Features | Android Developers. Retrieved May 5, 2018 from https://developer.android.com/studio/features/
- **19.** Jon Byous. 1999. JAVA TECHNOLOGY: THE EARLY YEARS. Internet Archive, Retrieved May 6, 2018 from
 - https://web.archive.org/web/20050420081440/http://java.sun.com/features/1998/05/birth day.html

- **20.** Gilad Bracha, Alex Buckley, James Gosling, Bill Joy, Guy Steele. 2015. The Java Language Specifications Java SE 8 Edition. Oracle America Inc., Redwood City, CA
- 21. Tim Bray, Eve Maler, Jean Paoli, C.M. Sperberg-McQueen, Francois Yargeau. 2008. Extensible Markup Language (XML) 1.0 (Fifth Edition). Retrieved May 6, 2018 from https://www.w3.org/TR/REC-xml/
- **22.** Technopedia. What is NoSQL? | Definition from Technopedia. Retrieved May 7, 2019 from https://www.techopedia.com/definition/27689/nosql-database.
- **23.** Technopedia. What is Concurrency? | Definition from Technopedia. Retrieved May 11, 2018 from https://www.techopedia.com/definition/25146/concurrency-programming.
- 24. Navathe. Elmasri, "Fundamentals of Database Systems", Pearson Education, Inc. California, 2000.
- 25. TATLI, Ipek,"Food Recommendation System Project Report.", (2009).
- **26.** Richard Fairley, "Software Engineering Concept", Publisher: Tata McGraw-Hill Education, 2001.
- 27. Roger S Pressman, "Software Engineering: A Practitioner's Approach" (first edition),1982.
- 28. Roger S Pressman, "Software Engineering: A beginner's guide" (1988).
- 29. De Almeida, Jorge Miguel Tavares Soares." Personalized Food Recommendations." (2015).
- **30.** Lee Cheng, Teh and Yusof, Umi and Khalid, mohd nor akmal." Content-Based Filtering Algorithm for Mobile Recipe Application" 2014 8th Malaysian Software Engineering Conference, MySEC 2014.