

FOOD-SCAN: FOOD MONITORING WEB APPLICATION BY SCANNING GROCERIES RECEIPTS

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Abstract: In the PDA market there is a colossal number of purposes to help people with checking permit or give thoughts to get more fit and manage a sound eating schedule. Anyway, by a wide margin the majority of these applications eat up a lot of time by introducing food independently. This paper presents the work to make and direct test one more Android application, FoodScan, zeroed in on people more than 70, remarkably those from rural circumstances or with limited specific data, to manage their food from the things that is the way up on their staple receipts, avoiding the obligation to introduce separately those food assortments, and making ideas. To achieve this last practical, express objections have been done as shown in the procedures section. We coordinated a review of current calorie control applications to learn about their weaknesses and characteristics. Different computations were attempted to help the introduction of food into the application and the most suitable for the FoodScan application was picked. Likewise, a couple of decisions were considered to make the data base of food, thinking about dietary proposition for people more than 70 years. At the point when made, a pilot evaluation was finished with a solace trial of 109 workers in country spaces of Caceres and Valladolid (Spain) and Alentejo (Portugal). They attempted FoodScan for a month after which they completed a client satisfaction outline. 93 (101/109) believed that the application was quite easy to download and present, 66 (72/109) envisioned that it was easy to use, 47 (51/109) noted clients observed the application genuinely obliging for noticing food affirmation, easy to download and easy to use.

Keywords: Health, android, food intake monitoring, elderly, automatic dietary assessment, Web scraping, optical character recognition algorithm (OCR), user evaluation.

INTRODUCTION

The guidelines to follow in any healthy diet are summarized in: (1) variety in foods; (2) reduce fat consumption; (3) increase the consumption of complex carbohydrates such as fruits and vitamins; (4) increase the consumption of fiber-rich foods; (5) reduce sugar and salt; (6) maintain the intake of vitamin D and calcium; (7) hydrate; (8) moderate alcohol consumption; (9) make 4 or 5 meals a day reducing the amounts in each one; and (10) exercise regularly. Technology is a highly effective tool for controlling diet and physical activity [1], [2]. Overweight, which affects all age groups, has increased to alarming levels as a consequence not only of excessive calorie intake but also of being more sedentary [3], [4]. The increase in the production of processed foods, the rapid urbanization and the change in lifestyles have led to a change in eating habits. More and more people are far from their ideal weight, which is a serious health problem due to related heart diseases, diabetes, stroke, etc. Eating a healthy diet helps protect us from malnutrition in all its forms, as well as the diseases mentioned above. It is necessary to change people's lifestyles, controlling the amount of food we eat and start eating healthier.

1. PURPOSE

The motivation behind this archive is to introduce an itemized In the cell phone market there is countless applications to assist with peopling screen admission or give ideas to get more fit and deal with a solid eating regimen. Be that as it may, by far most of these applications eat a ton of time by presenting food individually.

EXISTING SYSTEM

Food bundling assumes a significant part in protecting food and keeping up with the quality. Food bundling consolidates with antimicrobial exercises are presently sought after in food industry because of developing worries on food quality. As some inorganic nano materials show broad antimicrobial movement consolidation of them into food bundling display improved food quality.

These examinations have been centered around laying out strategies for readiness of antibacterial Nano covering for polymer based food bundling. Nano silver has broadly been utilized in antimicrobial movies. For this study Nano silver based polyvinyl liquor covering was ready on polypropylene food bundling material.

1. DRAWBACKS OF EXISTING SYSTEM

- **Less User Friendly:** The existing system is not user friendly because the retrieval of day-to-day activities data/records is very slow and records are not maintained efficiently and effectively.
- **Complex for generating the report:** We require more calculations and efforts to generate the report so it is generated at the end of the session. And the student does not get a chance to improve their attendance.
- **Lengthy time:** Every work is done manually so we cannot generate report in the middle of the session or as per the requirement because it is very time consuming.

2. PROPOSED SYSTEM

- Detect Food Calories , Show output to user
- Proper alert system to the user
- Notification to Mobile application
- Automatic scan as well as typing features.

FoodScan, aimed at people over 70, especially those from rural environments or with limited technical knowledge, to manage their food from the items that appear on their grocery receipts, avoiding the obligation to introduce one by one those foods, and generating recommendations. To achieve this final objective, specific objectives have been completed as indicated in the methods section. We conducted a review of current calorie control applications to learn about their weaknesses and strengths. Different algorithms were tested to expedite the introduction of food into the application and the most suitable for the FoodScan application was selected.

SYSTEM ARCHITECTURE

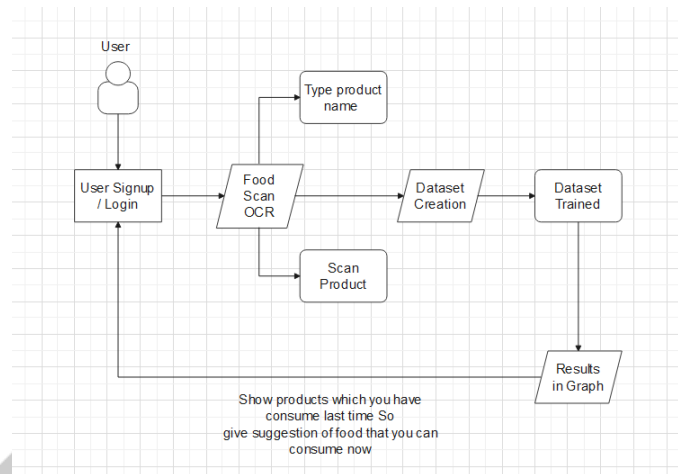


Fig -1: System Architecture Diagram

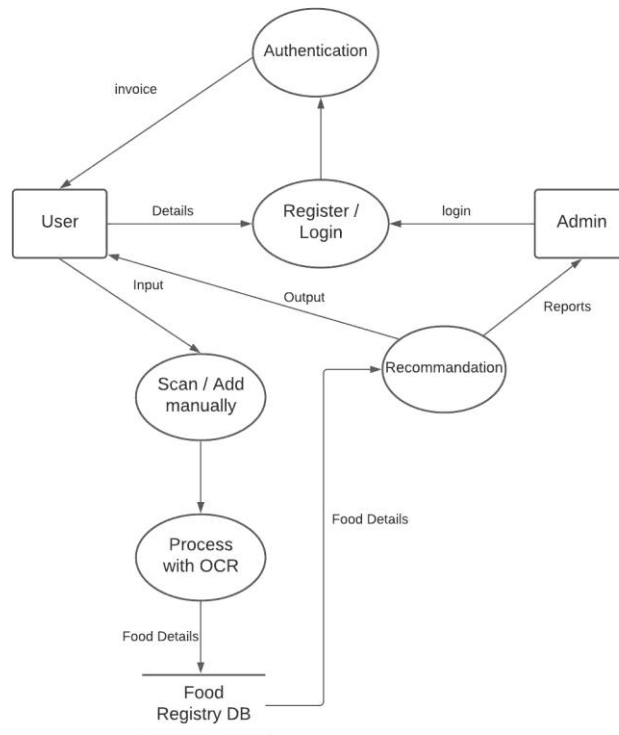
ADVANTAGES

1. Innovative.
3. Centralised Database.
4. Easy to use.
5. Efficient cost.

APPLICATION:

1. Education.
2. Research.
3. Organizations.

DATA FLOW DIAGRAM

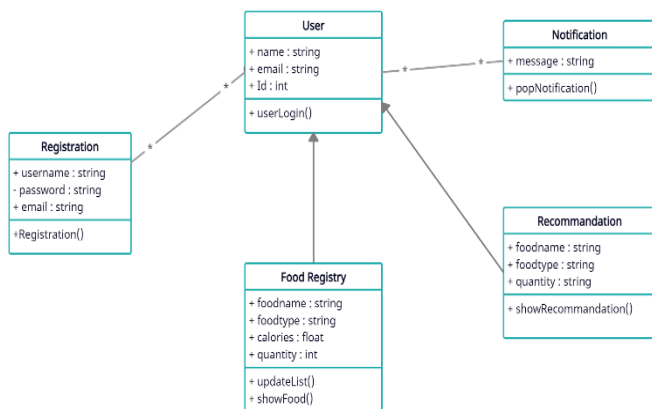


METHODOLOGY

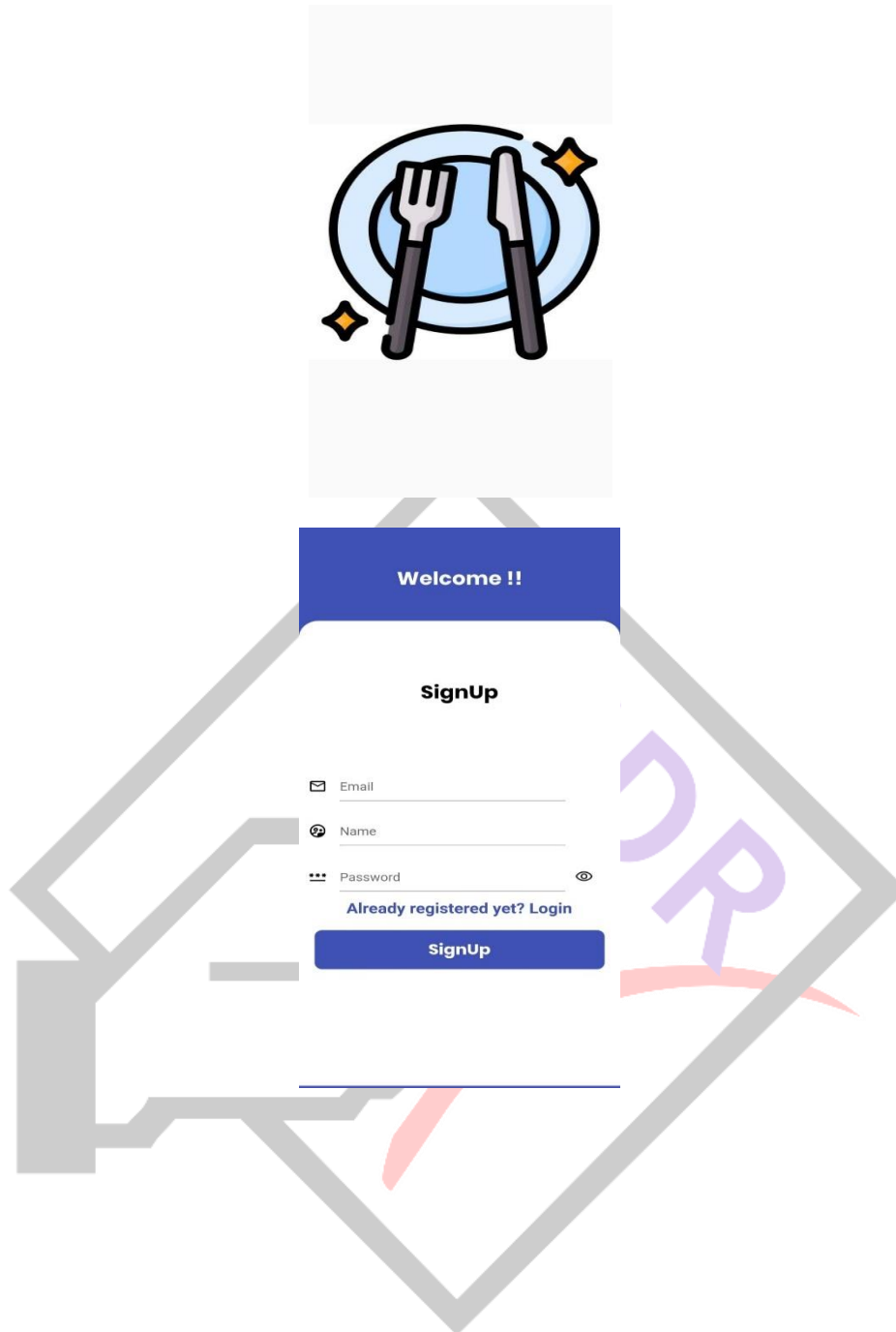
The single problem can be solved by different solutions. This considers the performance parameters for each approach. Thus considers the efficiency issues:

1. Problem Solving Methods are concerned with efficient realization of functionality. This is an important characteristics of Problem Solving Methods and should be deal with it explicitly.
2. Problem Solving Methods achieve this efficiency by making assumptions about resources provided by their context (such as domain knowledge) and by assumptions about the precise definition of the task. It is important to make these assumptions explicit as it give the reason about Problem Solving Methods
3. The process of constructing Problem Solving Methods is assumption-based. During this process assumptions are added that facilitate efficient operationalization of the desired functionality

CLASS DIGRAM



Results:



Welcome !!

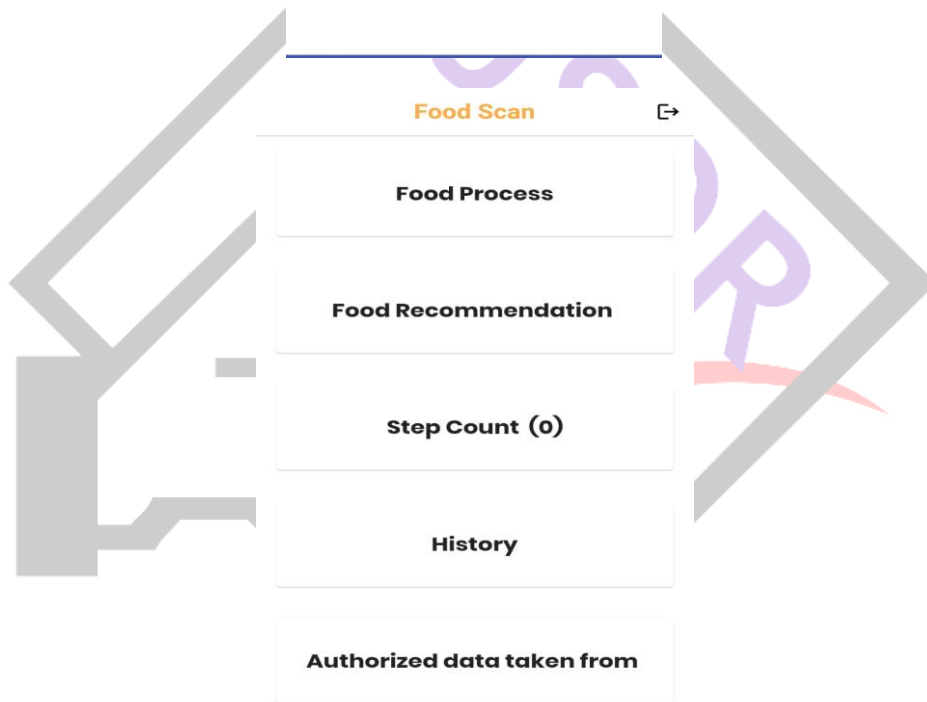
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5. CONCLUSION

The old who are not used to new advances might find it challenging to utilize portable applications to control their eating regimen. The burden of a significant number of these applications is that they demand a ton of investment to present the food devoured over the course of the day. According to the client's perspective, it isn't functional and, over the long haul, the greater part of them will leave this control. Our application is valuable and effectively reasonable and stays away from the commitment to present individually those food varieties. The examination of the bought food is presented through a reference diagram with various varieties, so it is basic and instinctive. The older, or individuals in their consideration, have some control over how they are eating for sure food inadequacies they might have. It tends to be utilized by a wide range of public, no matter what their specialized information. Despite the fact that it is equipped towards serving individuals beyond 70 years old, we trust that it will like wise be utilized by anybody in their day to day routines and that they will be faithful in the long haul. Exclusively by embracing solid propensities we can work on our personal satisfaction. FoodScan is an application that we have recently evolved and will keep on further developing on account of the commitments of clients.

We will routinely screen the 109 individuals who finished the review on the normal utilization of FoodScan to control their eating routine...

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