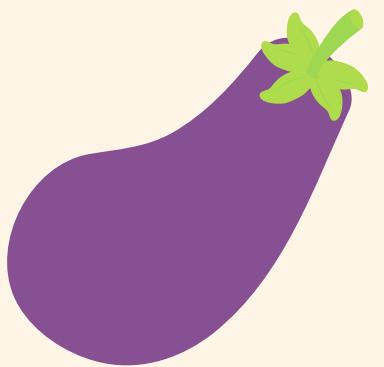


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# UPLB Makam

A Smart Mobile Cookbook and Ingredient Management Mobile Application



# Agenda

- Background of the Study
- Statement of the Problem
- Objectives of the Study
- Methodology
- App Demonstration
- Results and Discussion
- Conclusion



# Background of the Study



**Food is essential for energy and nutrition, and cooking enhances its safety and taste. Rising living costs and busy schedules, especially post-pandemic, have pushed UPLB students to cook more at home despite the challenges.**



# Statement of the Problem





Daily tasks leave many individuals with **limited time for meal preparation**. This **added burden** often leads to frequent **repetition of unhealthy meals**.



# Objectives of the Study





To provide a **budget-friendly meal**  
recipe cookbook application;





To assist students in creating a **balanced meal plan** encompassing a variety of food from the three **basic food groups** (go, grow, and glow), with minimal to no meal repetition;





To provide **inventory management** features for ingredients; and



To provide **grocery list generation** features.



# Methodology



# Development Tools

- Operating System: Windows 11 64-bit
- Processor: 11th Gen Intel® Core™ i5-11400H with clock rate 2.70GHz
- Memory: 16GB RAM L1 cache 480KB



# Software Development Tools and Technologies



**Visual Studio Code**

**React Native**

**Firebase**

**Cloud Firestore**

**Expo Go**

# Main Features

**Smart Cookbook &  
Recipe Filtering**



**Ingredient  
Management**



**Meal Planning**



# Main Features

**Meal History  
Tracking**



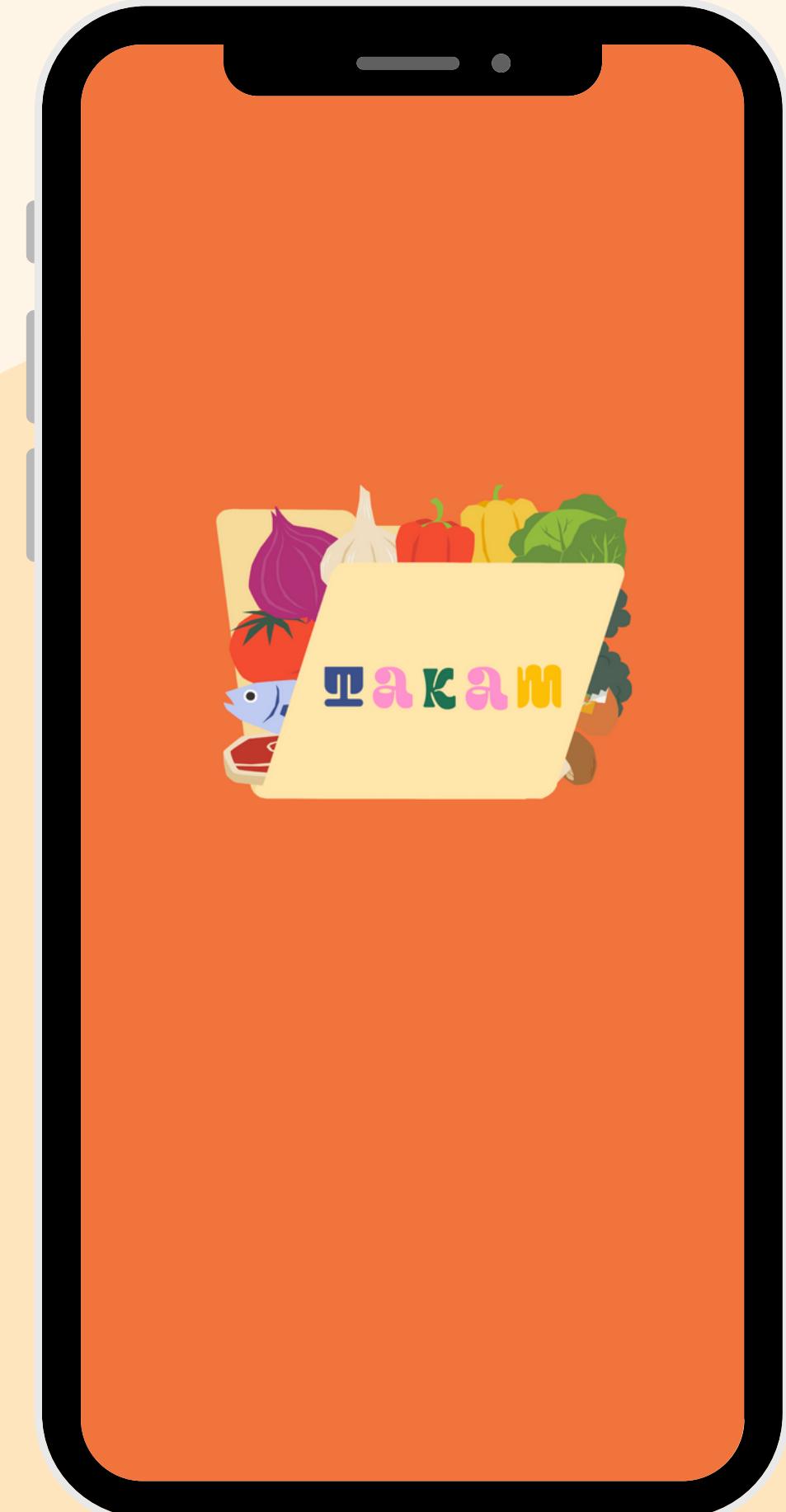
**Grocery List  
Generation**



**Notifications**



# App Demonstration



# Meal Plans

## GO

Energy providers like rice and pasta.



## GROW

Protein sources such as meat, fish, and egg.



## GLOW

Fruits and vegetables for vitamins and minerals.



# Results & Discussion

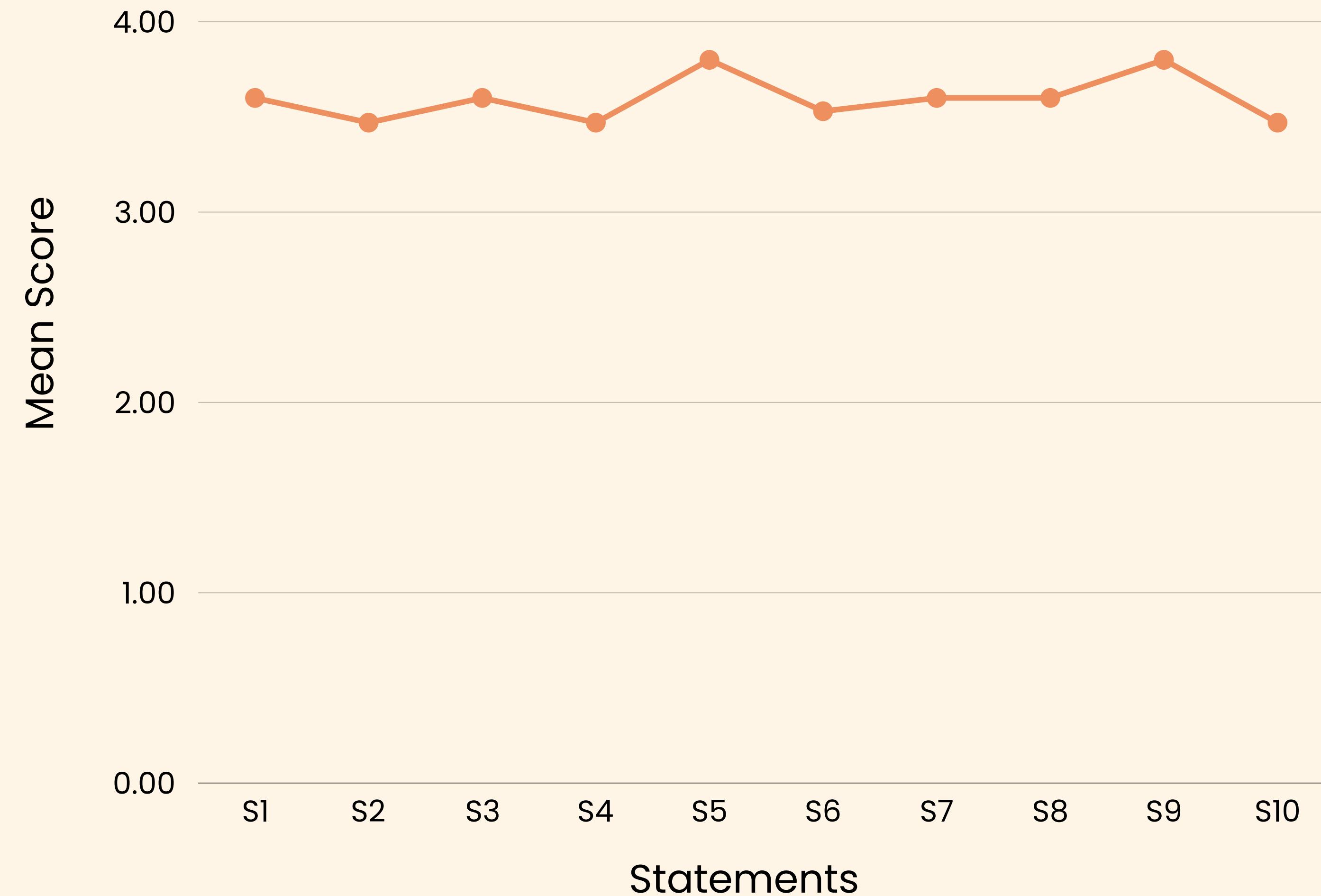


# Testing

The **System Usability Scale (sus)** was utilized to evaluate the usability of the UPLB TAKAM application among **15 UPLB students**. The average SUS score obtained was **89.46**, indicating favorable usability.



	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Individual Scores
R1	5	1	5	1	5	2	5	2	5	1	95
R2	5	1	4	2	5	1	5	2	5	1	92.5
R3	4	1	5	1	5	2	5	1	5	1	95
R4	5	1	5	2	5	2	4	2	5	2	87.5
R5	5	1	5	1	5	1	5	1	5	2	97.5
R6	5	2	5	2	4	1	5	1	5	2	90
R7	5	1	5	1	5	1	5	1	5	1	100
R8	5	2	4	1	4	2	5	1	4	2	85
R9	5	1	5	1	5	1	5	1	5	1	100
R10	4	1	5	1	4	1	4	1	4	2	87.5
R11	4	2	4	2	5	1	4	2	5	2	82.5
R12	4	3	4	2	5	2	4	1	4	2	77.5
R13	4	2	4	3	5	2	3	2	5	2	75
R14	4	2	4	1	5	2	5	1	5	1	90
R15	5	2	5	2	5	1	5	2	5	1	92.5
Mean Score	3.6	3.47	3.6	3.47	3.8	3.53	3.6	3.6	3.8	3.47	<b>89.46</b>



# Results

The **highest scores** were given to statements **S5** (I found the various functions in this system were well integrated) **and S9** (I felt very confident using the system), both receiving a translated score of **3.8**, indicating that users found the UPLB TAKAM application to be cohesively designed and easy to use.



# Results



On the other hand, the **lowest scores** were given to statements **S2** (I found the system unnecessarily complex), **S4** (I think that I would need the support of a technical person to be able to use this system), **and S10** (I needed to learn a lot of things before I could get going with the system), receiving a translated score of **3.47**, indicating that users found the UPLB TAKAM application to be very user-friendly and intuitive.

# Conclusion



# Conclusion

In conclusion, the UPLB TAKAM mobile application effectively addresses the need for **convenient** and **efficient** meal planning, cooking, and ingredient management. It offers **budget-friendly** and **healthy recipes** and helps manage kitchen inventory. Both the **recipe filtering** and the **meal planning feature**, not only saves time but also ensures variety, reduce repetition, and tailor meal suggestions based on past preferences. **User feedback** and **usability testing** have verified the app's **effectiveness** and **usability**, confirming its value as a tool for simplifying kitchen management tasks.

# THANK YOU



# Question & Answer

