**TSUUP APPLICATION: SIMPLIFYING ACCESS TO EGUSI SOUP RECIPES**

By

**AFOLAYAN OLUWATIMILEHIN ISRAEL**

**SID: 080-452**

FACULTY OF SCIENCE AND TECHNOLOGY

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**Supervisor**

Edison Kagona

Faculty of Science and Technology, Cavendish University Uganda

[Edisonmat15@gmail.com](mailto:Edisonmat15@gmail.com), +256(0)700814680

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**CHAPTER ONE**

# **Introduction**

This chapter discusses the background to the study, problem statement, objectives, scope and significance of the Tsuup application.

# **Background**

The Nigerian community is growing in different parts of the world, from Europe to the Americas, Asia, and Australia, and as their population grows in the diaspora, they long for their spicy soups from Nigeria, from the hearty Egusi and Ogbono recipes to the spicy Pepper Soup, Afang, and many more recipes. For several years now, Nigerian recipes have been finding their way through the bellies of aircraft to different international destinations (Eze, 2022).

Globally, Soup is a universal dish that can be enjoyed in any season, any time of the day, and any place in the world. It is a versatile and nourishing meal that can be made with various ingredients, flavors, and textures (Fauzanbisyir, 2023). Nigerian cuisine is renowned for its rich and diverse flavors, with soups playing a central role in the country's culinary tradition, and their soups are beloved for their depth of flavor and cultural significance. With Egusi being the most popular soup in Nigeria, it is a well-known Yoruba dish made from ground melon seeds. It is commonly enjoyed in countries such as Nigeria, Ghana, and Cameroon and it has managed to gain popularity not just in Nigeria but in Africa and other continents like Europe, Asia, and the United States.

Egusi is indigenous to West and Central Africa. It thrives in dry, tropical, and subtropical climates with light, sandy soils that drain water well. It is cultivated in home gardens and small farms throughout West Africa not only for personal consumption but as a valuable cash crop due to its economic and nutritional benefits. This gourd can be found in a variety of settings including cultivated lands, disturbed sites, landfills, shores, and areas around sewage plants. Egusi was introduced to Mediterranean Africa, the Middle East, and West Asia before 1000 BC, reached China around 900 AD, and Japan in the 1500s. Brought to Brazil by Africans in the 1700s and later introduced to the United States after colonization, it is now found in most states as well as Puerto Rico and the Virgin Islands. Egusi's ease of cultivation, pest resistance, soil-improving qualities, and ability to grow in barren areas have made it a viable food source globally, particularly in regions with less-than-ideal farming conditions. While readily available in West African markets, Egusi seeds can also be found in farmer’s markets and West African grocery stores in countries like Germany, England, and the United States (Specialty Produce, n.d.).

Egusi gained its popularity to many countries all over the world because of its rich flavor and thick, hearty consistency. Egusi seeds are very high in oil. They’re 50% oil, 78% of which is unsaturated fatty acids, which are the healthier type of fat! The oil produced from these seeds is rich and flavorful. They’re also 35% protein. Egusi seeds are rich in vitamin A, which is crucial for forming and maintaining healthy bones. In addition, Egusi seeds are high in vitamins B1 and B2, which are both important for growth and the production of red blood cells. There’s a high concentration of vitamin C, too, which helps the body absorb iron and maintain healthy tissue. Finally, Egusi seeds are also high in Niacin, which helps maintain healthy skin (Egunsi Soup, 2021).

However, for many, the process of preparing these soups can be daunting due to the complexity of recipes and the difficulty in sourcing authentic ingredients.

## **Problem Statement**

The culinary tradition of Nigerian soups is rich and diverse, offering a wide array of flavors and nutritional benefits. However, some challenges hinder many individuals, both within Nigeria and Outside Nigeria, especially those from Generation Z and young adults, they face a decline in cooking skills, intensified by the complexity of Nigerian soup recipes and difficulty in providing authentic and healthy ingredients. This trend threatens Nigerian culinary heritage and promotes poor diet habits within and outside Nigeria.

This is where Tsuup Application comes in, Tsuup aims to address this by providing an easy-to-use app with simplified Egusi recipes, ingredient sourcing solutions, and educational resources to help users cook and enjoy Egusi.

## **Objectives**

### **Main Objectives**

The main objective of the Tsuup project is to promote and preserve Nigerian culinary heritage by making traditional soup recipes accessible and manageable for users both within Nigeria and outside Nigeria, also targeting Generation Z and young adults who may lack cooking skills or access to authentic ingredients.

### **Specific Objectives**

* 1. To study existing recipe applications and identify the requirements for a comprehensive Egusi recipe and ordering mobile application.
  2. To design a user-friendly mobile application that provides detailed Egusi recipes, step-by-step preparation guides, and an integrated ordering system for users to purchase Egusi ingredients.
  3. To implement, test, and validate the designed Tsuup application, ensuring it meets user needs and provides a seamless experience for both recipe guidance and ingredient ordering.

## **Scope**

The Tsuup application is developed to provide users with a comprehensive solution for accessing Egusi recipes and ordering ingredients. This application targets individuals interested in preparing Egusi dishes and those seeking a convenient way to obtain the necessary ingredients. The scope of this research covers the design and implementation of the Tsuup mobile application, with functionalities restricted to the following:

1. **Recipe Information:** Providing detailed ingredients for preparing Egusi Soup.
2. **Preparation Steps**: Providing step-by-step preparation guides for the Egusi recipe.
3. **Ordering System:** Enabling users to order Egusi recipe directly through the application, it redirects you to a website where users can order from.

## **Significance**

Tsuup project holds significant academic and practical relevance by preserving and promoting Nigerian culinary heritage through accessible, authentic recipes. It bridges traditional cooking techniques with modern convenience, enriching culinary knowledge globally. This technological advancement enhances culinary education and accessibility, fostering socio-economic development by supporting local food ecosystems and cultural awareness. Tsuup's focus on soups and its integrated features for recipe sharing and ingredient sourcing contribute uniquely to culinary education and cultural preservation, addressing a niche yet essential aspect of global culinary diversity. Its continued relevance lies in its ability to meet evolving culinary interests while offering a platform for both learning and community engagement in culinary traditions.

**CHAPTER TWO**

## **LITERATURE REVIEW**

## **Introduction**

The literature review explores existing research and projects related to Nigerian cuisine, focusing on soups, to identify contributions, weaknesses, and gaps that inform the development of Tsuup. This section aims to support the project’s objectives, Cultural Significance of Nigerian Cuisine, Challenges in cooking Nigerian Soup, Technological Innovations in Culinary Applications, Contributions and Gaps.

## **Cultural Significance of Nigerian Cuisine**

Previous studies (Smith, 2018) emphasize the cultural importance of Nigerian soups in regional and global contexts, highlighting their role in culinary traditions and identity formation.

## **Challenges in Cooking Traditional Nigerian Soups**

Research (Adams, 2019) identifies challenges such as complex recipes and difficulty sourcing authentic ingredients, underscoring the need for educational resources and practical solutions, as proposed by Tsuup.

## **Technological Innovations in Culinary Applications**

Literature (Lee and Kim, 2022) (Roberts, 2017)discusses advancements in mobile applications for culinary education and recipe sharing, providing insights into effective features and user engagement strategies applicable to Tsuup.

## **Contributions and Gaps**

Existing literature underscores the cultural and socio-economic significance of preserving Nigerian culinary traditions, yet gaps remain in accessible, user-centric platforms specifically focused on traditional Nigerian soups. Tsuup aims to fill this gap by integrating comprehensive recipes, ingredient sourcing solutions, and community engagement features tailored to contemporary culinary enthusiasts.

**CHAPTER THREE**

## **METHODOLOGY**

## **Research and Project Design**

The methodology for the Tsuup project is structured to achieve the objectives through a systematic approach that integrates research, design, implementation, and testing phases.

## **Approach**

### **Research and Content Development**

1. Conduct extensive research on traditional Nigerian soup recipes, sourcing information from culinary experts, cookbooks, and cultural resources.
2. Collaborate with chefs and culinary historians to authenticate recipes and ensure cultural accuracy.
3. Curate a diverse collection of recipes representing various regions and flavors of Nigerian soups.

### **Technological Development**

1. Employ agile software development practices to iteratively design and develop the Tsuup application.
2. Utilize user-centric design principles to create an intuitive and visually appealing interface.
3. Implement backend systems for recipe management, user profiles, and ingredient sourcing functionalities.

### **Data Collection and Integration**

1. Gather data on ingredient availability and sourcing options for Nigerian soups, integrating with local and global suppliers.
2. Implement an online ordering system within Tsuup to facilitate ingredient procurement for users worldwide.

### **User Engagement and Education**

1. Develop interactive tutorials and cooking tips within the app to educate users on Nigerian cooking techniques and cultural significance.
2. Incorporate community features such as user-generated content sharing, reviews, and ratings to foster engagement and enhance the user experience.

### **Testing and Validation**

1. Conduct rigorous testing phases to ensure the functionality, usability, and performance of Tsuup across different devices and platforms.
2. Validate the accuracy of recipes, ingredient lists, and nutritional information through user feedback and expert validation.

## **Implementation Plan**

**Phase 1: Research and Content Development**

* 1. Duration: 1 month
  2. Tasks: Compile recipes, validate ingredients, establish culinary partnerships.

**Phase 2: Technological Development**

* + - * 1. Duration: Ongoing
        2. Tasks: Develop backend systems, integrate online ordering.

**Phase 3: User Engagement and Education**

Duration: Ongoing

Tasks: Create tutorial, launch community features, gather user feedback.

**Phase 4: Testing and Launch**

* + - * 1. Duration: Ongoing
        2. Tasks: Conduct beta testing, refine features, prepare for public release.

## **Data Analysis and Synthesis**

Analyze user interaction data to improve app usability and content relevance.

Synthesize feedback to refine recipes, enhance user engagement strategies, and optimize ingredient sourcing capabilities.

## **Logical Flow and Validation**

The methodology ensures a logical flow from initial research and content development through to technological implementation, user engagement, and testing phases. Validation occurs iteratively throughout each stage to ensure alignment with project objectives and user expectations.

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## **Appendices**

## Budget

1. **Development Costs**: Includes expenses for software development tools, licensing fees for Android Studio, and any additional software or plugins required for app development.
2. **Testing and Quality Assurance**: Costs associated with testing the app on various devices, debugging tools, and quality assurance processes.
3. **Marketing and Promotion**: Budget for promotional activities, advertising campaigns, and user acquisition strategies.
4. **Miscellaneous**: Contingency funds for unforeseen expenses during the development and launch phases.

## Time Frame

1. **Research and Content Compilation**: 1 months
2. **Technological Development (Android Studio)**: Ongoing
3. **Testing and Quality Assurance**: Ongoing
4. **Launch and Marketing**: Ongoing

## Explanatory Note

1. **Approval Letters**: Any letters or approvals obtained from stakeholders or authorities regarding the project.
2. **Diagram:** diagrams relevant to the app's functionality.
3. **Other Documents**: Any additional documents supporting the development and implementation of Tsuup.

## Instruments to be used

1. **Android Studio**: Primary development tool for creating the Tsuup app using Java programming language.
2. **Database Management Systems**: Tools for managing recipe databases and user profiles within the app.
3. **Questionnaire:** From my School Supervisor
4. **Interview Schedule:** Meeting my school supervisor on Wed, 22 May, 2024.