Faculty of Engineering

CAP Department

(10672301) Entrepreneurship and Business management

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Group No.	Project name	Students name	Leader
4	Food as Medicine	Ibtihaj Adham, Abrar Hannoon, Loai Masri, Jehad Lefdawi, Rahaf Salman, Rama Hasiba	Ibtihaj Adham

Q1:

Segmentation

Behavioral	Demographic	Geographic

Benefits sought:
● **Patients:**
  ○ Easily find a nutritionist specialized in their specific disease or dietary needs.
  ○ Access detailed information about nutritionists' expertise, ratings, and reviews.
  ○ Conveniently book appointments with nutritionists based on their availability.
  ○ Receive personalized food therapy plans tailored to their health condition.
 	
● **Nutritionists:**
  ○ Advertise their expertise and services to a targeted audience.
  ○ Connect with patients who specifically require their expertise.
  ○ Efficiently manage appointments and communicate with patients.
 	
User status:
● **Ex-users:**
  ○ Individuals who have successfully managed their health conditions and graduated from the food therapy program.
	● Patients:
	  ○ **Age:** 10 - 60.
	  ○ **Gender:** female and male.
	
	● Nutritionists:
	  ○ **Age:** 25 - 55
	  ○ **Gender:** female and male.
		● **Location:**
		
		Cities of Palestine

● **Potential users:** 　○　Individuals diagnosed with specific diseases or seeking dietary guidance. ● **Regular user:** 　○　Individuals actively manage their health conditions during their food therapy program.			

Q2:

SWOT Analysis

S (Jehad+Loai)	W (Ibtihaj+Abrar)	O (Rahaf)	T (Rama)
Algorithm for personalized matching: an algorithm for matching patients with nutritionists is designed to ensure that patients are connected with qualified and experienced professionals who specialize in their specific needs. This helps to improve the quality of care and ensure that patients receive personalized and effective nutrition advice.	**Data Security Concerns** Given the sensitive nature of health information, potential weaknesses in data security could lead to concerns among users. Ensuring robust data protection measures and transparent communication about security protocols is vital.	**Conceptualization:** Increase awareness of the use of applications and online reservations, and increase people's dependence on phones	**Competition** from built-in apps on devices, like Samsung Health for Samsung devices, poses a threat, if they offer meal suggestions based on users needs and the tracked data, such as the number of steps walked per day, food types with the associated calories, weight updates, etc.
Feedback Mechanism: The app enables users to evaluate and share their experiences, providing valuable feedback for others and for continuous improvement of the service.	**Potential User Resistance to Technology:** Some users, particularly in older age groups, may resist or find it challenging to adapt to the technology-driven model of the app. Providing user-friendly education and support for technology adoption is necessary.	**Technology:** The lack of applications similar to ours, the small number of competitors, and the inaccuracy of their information. Automated data recording through integration with built-in apps, such as Samsung Health for Samsung devices, allows us to gather information like the number of steps walked per day, etc.	Not having enough data to train a match algorithm, which may result in lower accuracy, and reduce the overall performance of the algorithm.

Quality Assurance: The app ensures that all nutritionists on the platform are certified professionals with verified qualifications, ensuring the quality of the service.	Limited Market Reach Beyond Palestine: Focusing solely on Palestine may limit the app's growth potential. Expanding to other regions could significantly increase the user base and overall market presence.	There are few nutrition centers in the country due to the lack of availability of all the services that serve these centers. We are also subjected to an occupation that creates barriers, which makes it difficult to receive this treatment. The idea of our application facilitates this process.	New restrictions arise from the Ministry of Health.

Q3:

PESTEL Analysis

P (Ibtihaj)	E (Loai)	S (Abrar)	T (rahaf)	E (Jehad)	L (Rama)
Public Health Alignment: Aligning with public health priorities is vital for the app's success. Ensuring the app's features address prevalent health concerns within the target demographic enhances its relevance and acceptance, positioning it as a valuable contributor to overall well-being.	Increasing healthcare costs could drive interest in preventive healthcare measures, such as personalized nutrition, as a way to reduce costs and improve health outcomes.	Population Size and Growth Rate: Population size and growth rate, particularly in the youth demographic, contribute to increased demand for nutritionist services. The age distribution significantly influences our app's design, emphasizing inclusivity across different age groups. This approach enhances the user experience, ensuring the app is user-friendly for individuals of all ages, aligning with diverse healthcare needs.	Technological Integration of AI for personalized meal recommendations enhances the technological aspect of the app.	Public Sentiment: Public sentiment towards environmental issues could influence perceptions of the app. For example, if the app is seen as contributing to a healthier and more sustainable lifestyle, this could enhance its reputation and appeal to environmentally-conscious consumers.	Data Protection Laws: user data security, implementing robust security measures to protect user data from unauthorized access, and leaks. This may include using encryption for data storage, and secure authentication.

Government Regulation and Deregulation: Adherence to government regulations related to healthcare and privacy is essential for the app's legality and reputation. In times of political instability, maintaining compliance with regulations becomes even more crucial to navigate any changes or challenges posed by the government.	Economic downturns: can lead to a decrease in consumer spending. This is because individuals have less disposable income when the economy is doing poorly. As a result, they may cut back on non-essential spending, such as personalized nutrition advice.	Lifestyles and Attitudes Towards Health: Social trends and attitudes towards health-conscious living can positively impact the app's popularity.	Regular updates to keep up with the latest mobile technologies ensure a seamless user experience.	Health and Wellness Trends: There is a growing trend towards health and wellness, including a focus on diet and nutrition. This trend is likely to increase demand for the app.	Liability Laws: The application should have terms of use that limit liability in case of misinformation or health issues arising from the use of the app, while still maintaining responsibility for the accuracy and safety of the content provided.

Q4: Competitor Analysis

Indicator	Our Application	doxy.me	Facebook Nutrition Groups
Product feature 1 **Algorithmic Matching:**	Our app uses a sophisticated algorithm to match patients with nutritionists based on their specific diseases, requirements, and the nutritionist's expertise.	conferencing between healthcare professionals and patients. However, [doxy.me] does not emphasize algorithmic matching specifically for nutritionist-patient pairing.	Users share nutritional tips, recipes, and experiences, but there is no automated algorithm for personalized matching with nutritionists.

Product feature 2
 	
Social Media Integration
	- Nutritionists can seamlessly connect social media accounts, share personalized nutrition advice, and provide clinic updates directly to followers.
	  - AI-generated posts and recurring notifications enhance patient engagement and contribute to improved outcomes.
		Limited patient engagement beyond scheduled sessions, lacking dedicated features for social media integration.	- Allows communication through posts, comments, and group discussions.
			  - Lacks tailored features for professional clinic updates and branding.

Product feature 3 : **AI-powered Nutrition Analysis**	Utilizes advanced AI algorithms to analyze users' dietary habits, food intake patterns, and health data, providing personalized insights and recommendations.	Limited information on AI-driven nutrition analysis features.	Lacks dedicated AI-powered nutrition analysis features.
Product feature 4 : **Meal Plan Creation**	Nutritionists can create customized meal plans, considering individual needs, preferences, and dietary restrictions, simplifying the process of planning and preparing healthy meals.	No specific mention of meal plan creation features.	No specific features for nutritionists to create personalized meal plans.
Price	**Nutritionists**: The Free Plan includes basic features, while the Basic Plan at $50/month or $600/year adds personalized recommendations. The Pro Plan, priced at $100/month or $1,200/year, introduces advanced features like AI-powered analysis. The Premium Plan, at $150/month or $1,800/year, includes priority booking (priority booking allows meetings with nutritionists during evenings and holidays). **For Patients:** (Free Meeting, Consultant, Monthly Subscribe) where our app empowers nutritionists to set their own pricing, providing flexibility based on their expertise and the value they bring to patients. This ensures a fair and diverse range of options for users seeking personalized nutritional guidance.	Lacks a dedicated pricing structure for nutritional consultations, potentially causing uncertainty for users.	**For Nutritionists:** nothing (post for free). **For Patients:** Being a social platform, it doesn't offer structured pricing for nutritionist-patient interactions.
quality	Our app prioritizes quality through advanced features like AI-powered analysis and	Lacks specificity in addressing nutritional consultation needs.	Facebook Nutrition Groups, designed for social interactions, lack tailored

	personalized recommendations, enhancing the user experience and health outcomes, all while connecting you with qualified nutritionists or healthcare providers.		features for professional nutritionist-patient engagements, compromising on the quality of healthcare interactions.
Strength	Advanced features, such as AI-powered nutrition analysis and meal plan creation, are available in mid-tier plans.

Premium features like priority booking and unlimited consultations in the higher-tier plans. | Enterprise plan tailored to larger organizations with personalized support. | Individuals can quickly access it, given that most age groups have accounts on Facebook. |
| weakness | Limited integration with built-in apps or sensors on devices. | Unavailable for offline use for IOS and Android devices. | No expert matchmaking for a personalized consultation. |
| Penetration | We prioritize the highest level of data security, implementing robust measures to safeguard users' personal information. While we acknowledge the potential for external threats, our comprehensive security protocols minimize the risk of interception, hacking, and data theft. | while it provides a secure platform, the extent of data protection measures is not explicitly detailed. | Facebook Nutrition Groups, being a social media platform, may lack the same level of data protection assurance as our dedicated nutritionist matching app. |

Q5: 7Ps

7 Ps	Description	Student name
Price	**Nutritionists**: The Free Plan includes basic features, while the Basic Plan at $50/month or $600/year adds personalized recommendations. The Pro Plan, priced at $100/month or $1,200/year, introduces advanced features like AI-powered analysis. The Premium Plan, at $150/month or $1,800/year, includes priority booking.

For Patients: (Free Meeting, Consultant, Monthly Subscribe) where our app empowers nutritionists to set their own pricing, providing flexibility based on their expertise and the value they bring to patients. This ensures a fair and diverse range of options for users seeking personalized nutritional guidance. | Rahaf |
| Product | **Technology:**
    ● The app will be accessible through both a website and a mobile application, ensuring compatibility with various systems for user convenience. | Abrar |

	● Advanced algorithm: Utilizes a sophisticated matching algorithm to connect patients with nutritionists based on specific diseases, requirements, and nutritionist expertise. **Warranties:** ● Seamless booking process: Ensures a user-friendly and efficient process for booking appointments with nutritionists through the app. ● Guarantees a hassle-free experience from appointment selection to confirmation, minimizing user effort and enhancing overall satisfaction. ● Financial transactions security: Implements robust security measures to safeguard user financial information during payment transactions. **Design**: ● User-friendly interface: Design the app interface to facilitate easy navigation and enhance the user experience. ● Personalized experience: Allows users to choose nutritionists based on specific criteria, view profiles, and make informed decisions. **Quality**: ● Nutritionist credibility: Ensures that all nutritionists on the platform are certified professionals with verified qualifications. **Usefulness**: ● Personalized dietary advice: Offers users tailored recommendations to manage and prevent diseases, addressing individual health needs. ● Time and effort efficiency: Provides a convenient and time-saving alternative to traditional methods of finding and booking nutritionist appointments. **Accessories**: ● Premium features: Users in the Premium Plan enjoy priority booking and unlimited consultations.	
Promotion	**Partnerships**: Collaborating with health-related organizations, such as gyms, influencers, or nutrition experts. **Digital Marketing**: Utilizing online channels for promotional activities, including social media, email campaigns, and online advertisements. **Educational Content:** Promoting the app by providing educational content on the benefits of food therapy, nutritional expertise, and how the app addresses specific health concerns. **Discounts**: Running promotions or offering incentives for users to engage with the app's services.	Rama
Place	**Digital Accessibility:** The app is available on various platforms such as the App Store for iOS users and Google Play Store for Android users, ensuring accessibility to a wide range of users.	Jehad

	Web Version: In addition to the mobile app, a web version of the service is accessible via a browser, allowing users to access the service from a computer or any device with internet access. **User Preference:** The aim is to make the app as widely available and easy to use as possible, to reach and benefit as many users as possible. This focus on user preference and convenience is a key aspect of the app's placement strategy. **Social Media Campaigns:** Utilize platforms like Facebook, Instagram, and Twitter to reach a wide audience. Regular posts about the benefits of the app, success stories, and health tips can engage users and attract new ones.	
People	**Customers:** Patients who aim to lose or gain weight, as well as patients with particular diseases, who require specific dietary plans. **Nutritionists and Health Providers:** Owners of nutrition experts who are displayed on the app. **Marketing and social media manager:** who is responsible for managing the social media pages of the project and the social advertising. **IT employee :** He is responsible for data entry and troubleshooting in the application. **Intermediary employee:** An employee responsible for communicating with the owners of nutrition experts to obtain all information.	Ibtihaj
Process	**User Registration:** ● Users create an account with helpful tips. ● Gathering health information, including healthy goals (weight loss, muscle building, etc.), lifestyle habits (dietary habits, physical activity, etc.), chronic diseases, if any, and medical history (existing medical conditions, past surgeries or hospitalizations, etc.), through a form that each user is required to fill out. ● Receive welcome emails and platform tutorials. **View the Main Page**: ● Patients will view the main page that has sections for exploring nutritionists, customized calendar, and patient treatment history. **View Nutritionists Section**: ● Patients can easily select a nutritionist by exploring their profiles, which include essential details such as full name and availability displayed on a customized calendar. **Appointment Scheduling:** ● Choose flexible appointment times (morning, and evening or weekend as a priority booking).	Loai

	● Book appointments directly with real-time availability. ● Receive automated reminders for upcoming appointments. **Personalized Consultations:** ● Discuss individual needs, concerns, and goals. ● Receive tailored advice and strategies based on AI analysis. ● Develop an actionable plan with clear steps and tools. **Regular Follow-Ups:** ● Schedule follow-up appointments at personalized intervals. ● Monitor progress and address any challenges, this will be done with data visualization tools. ● Collaboratively adjust nutrition plans for continued success.	
Physical Environment	**Accessibility**: Application and a website that can be run in any device with offline and online modes. **Mobile and Web Optimization**: The app will be optimized for both mobile and web platforms, ensuring a seamless experience across different devices, including responsive design elements that adjust to various screen sizes and operating systems. **Patient and Nutritionists Connection:** This could be a virtual space in the app or could be a real office. The app should make it easy for users to move between these spaces by giving clear, and well-documented instructions, and providing support.	Rama

⊞ food as medicine