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7. NIN App 2.0 should allow a user to register their family members details, Name, DoB, Age, Gender, Height, Weight, Physical Status, Occupation, Physical work intensity, etc. based on which, health parameters may be calculated for them using Health Tools.

8. Bug Reporting facility integration in the NIN App 2.0, which might include few necessary details (with due consent from the User) viz. Bug Severity, Impact on User, Error codes, Error Logs, Error Types, Root cause, Log Report, App version, bug package name, instance, device model, Android OS version, Network details, Error screenshot, App usage analytics reports, stack traces, tracking and resolution provided workflow and Bugs/Errors database to be shared with ICMR-NIN.
9. Log events facility for NIN App 2.0 to be provided, this will assist in stack tracing the root cause of the bugs/errors/app crash issues.

Suggestions from Rajunaik, 24th Oct 2024 for Nutrify India Now 2.0 App development

1. NIN App should have various brand mobile phone device dimension compatibility
2. Compatibility with the various Tabs display dimensions
3. Multiple Theme Change Option
4. Voice Assistant, to search, to add diet, to add recipe & ingredients, etc.
5. Accessibility Features on the NIN App for Disabled Persons.
6. Multi Languages NIN App, Menu Bar Names, Content, etc. English, Hindi, Telugu, Malayalam, Kannad, Tamil, Marathi, Rajasthani, Punjabi, Bengali, Kashmiri, Assamese, etc.
7. When pressed Back button, retain/preserve earlier position in the previous screen.
8. NIN Books Purchase from the NIN App, through Net Banking/ Credit Card / UPI Payment / Wallet Payment / etc.
9. Adolescent, Pregnant Women, Lactating Women, Health Care and Nutrition Components.
10. IEC Materials to be made available on the NIN App

11. Search Button to search various components from the NIN App.
12. Disclaimer content placement before using
13. About Us content placement
14. NIN App 2.0 Rating link to be provided in the App which may be linked to Play Store and App Store.
15. Feedback Form Availability
16. Copy Right to ICMR-NIN, Hyderabad
17. Contact Email Id of NIN, official to be mentioned.
18. On Screen Chat Support, AI Robot.
19. Earlier NIN APP hosted on App Store and Play Store to be Updated and should be Replaced with New Version.
20. Any kind of broken link, bug report submission through the NIN App with bug tracker id and resolution provided. Same may be reflected on the Dashboard.
21. Version controlling of the App
22. As per RDA guidelines for men, women, child, adolescent, pregnant, old age, high intensive training person, sedentary person, athletic person, sports person, etc, based on food intake, displaying the Target percentage reached for micro and macro nutrients.
23. NIN App may have legible text font setting (increase or decrease) , such that old age people can set the font size.
24. Displaying the Categorised ready to add diet plans Icons/ Cards for, viz. Veg, Non Veg, Mediterranean diet, high fat diet, salad, desserts, sweets, Starters, Fast Foods, etc.

Suggestions from Rajunaik, for Nutrify India Now 2.0 App development 1st Nov 2023

1. AI based tools to extract the Nutrients information from all types of packaged food product images (including Barcode as a unique reference for the product) available online from the various commercial food ordering Apps that Sells and delivers the Online Food Orders Viz. Amazon, Flipkart, Jio Mart, Snapdeal, Tata Neu, Big basket, bbdaily, Amazon Now, Amazon Fresh, Zepto, Dunzo, Blinkit, Swiggy, Zomato, Country delight, Eat Sure, Uber Eats, Licious, KFC, Pizza Hut, Domino's pizza, Burger King, Subway, Fresh to home, Oven story pizza, McDonald's, Milkbasket, SPAR, Barbeque Nation, Eat Club, Dine Out, etc. This is an recurring task to keep the database updated, however, frequency of recurrence may be suggested by the Team.
2. Apps from which Nutrients info may be retrieved based on images available - KisanKonnnect Farm Fresh Produce, Otipy Fresh Vegetable and fruits, SID's Farm, DeepRooted Fruits and Vegetables, Two Brothers Organic Farms,
3. Tools to capture the Nutrients from packaged food list that is fixed to served in various regular Flights, Trains, and transportation services. The same details may be picked from the NIN App ready reference shortcuts for food items users have consumed while traveling.
4. NIN App 2.0 should be quality test CERTIFIED from STQC for its safe to use assurance and free from any Vulnerability, Bugs, Virus, Malware, Unauthorised access to sensitive data, app protection, HACK Safe, etc.
5. User data should be encrypted and saved in the database for data privacy of the users.
6. NIN App communication over the Internet or to the server should be encrypted. (User data transfer over the Internet should encrypted)
7. NIN App 2.0 should be tested for its stability, reliability, robustness, performance, and usability.
8. Proper APP testing framework may be used for testing the NIN App 2.0

9. App Testing Framework OUTPUT / RESULTS may be shared to understand the NIN App 2.0's stability, reliability, robustness, performance, and secure for Millions of Users.
10. Volume Test: Can App handle huge volume of data simultaneously
11. Load Test:
12. Secure Test: Vulnerability, Bugs, Virusus, Malware, Unauthorised access to sensitive data, app protection, HACK Safe
13. Stress Test: Common data shared among users bottlenecks of data testing.
14. Concurrency Test: Can millions of users parallely use the App efficiently.
15. Usability Test: High Intuitiveness
16. Regression testing: does system work as before when new feature added.
17. Interruption testing, while using NIN App 2.0: Calls, SMS, Low battery, Phone Shut down, OS update, Network signal lost or when books purchase is under process, etc.
18. Speed test
19. Memory leak test: Whether the used memory in the device has been released when app is closed
20. NIN App 2.0 should be tested to work on various Networks 2G, 3G, 4G, and 5G (BSNL, MTNL, AIRTEL, Reliance JIO, Vodafone Idea.)
21. NIN App 2.0 should be test to work on restricted RAM and ROM memory on mobile device, Viz. 1GB, 2GB, 4GB, 6GB, 8GB, 16GB, 32GB etc.
22. NIN App 2.0 may be tested for Familiar UI's of mobile device.
23. At the time registration / password change / profile update, enable Captcha to avoid Robotic script user creation .
24. User should be able to update personal email id or mobile number for their profile with verification code validation in both the old and new email id or mobile number

25. App developer may provide access or share the complete development process visualisation to monitor.
26. NIN App 2.0 User Acceptance Testing date and beta version release date expected may be shared.
27. NIN App 2.0 should be certified with secured and safe certificate to perform financial transaction for ordering books.
28. Recovery feature: Inbuilt backup and recovery feature that can save or recover user data in the event of data loss.
29. Precautions to be taken while App crash, or App bug, NO Personal data breach may happen on the mobile device or on the Server.
30. NIN official social media accounts to be linked on NIN App 2.0 viz. Facebook, YouTube Chanel, Instagram, Twitter (X), NIN Website, etc.

Reviews written by NIN App 1.0 version users, collaged by Rajunaik from Play Store, 8th Nov 2023.

1. Deleting the existing Nutrify India Now App from Playstore.
2. Slow, lagging in loading, not able to login, password forgot not available.
3. Not able to register or login in existing NIN App on Playstore.
4. Search "Nutrients" in "ALL category", if search results are more which doesn't fit in single page, then scroll option to be enabled to view the results
5. Download option for the nutrients estimated in the diet plan
6. NIN logo while App loading is taking 10 seconds of time, which is not required.
7. In summary the total number of food items added in the diet, it should be displayed.
8. Flexible to calculate BMI for the dynamic data entered manually, other than BMI value reflected in the user profile.

9. Types of various millets information and nutrients in them details to be provided.
10. Types of various sprouts information and nutrients in them details to be provided.
11. Food database to be improved exhaustively including fast food items from reputed brands KFC, McD, etc.
12. State name "Rajasthan" is not visible in the registration page. Add all states and UT names while user registration.
13. Milk and dairy products language used (Aurat ka dudh/ Gadha ka doodh) is not proper
14. Nutrify India Now NIN App based guidelines for the diseased
15. "Recipe" word to be removed from the "List of Foods" menu
16. Adding "required diet for different age, gender, weight, height groups"
17. Nutrition guide for Dieticians
18. Nutrition guide for Clinicians
19. List of common Indian foods
20. FAT content in Nutrients should also be displayed in grams (g) not in milligrams (mg)
21. Quantity of food is only available in grams (g), it would be nice if it had quantity in per piece.
22. Nutrition guidelines in all the languages.

Suggestions from Rajunaik for NIN App 2.0 development, 8th Nov 2023

1. "National Institute of Nutrition (NIN)" App ICON/logo creation for playstore and app store.

2. Menus to be added --- "Nutritive Values of Indian Foods (NVIF)" menu (NVIF by food category-1 (sub-menu): Cereal grains, Pulses and legumes, Leafy vegetables, Roots and tubers, Other vegetables, Nuts and oil seeds, Condiments and spices, Fruits, Fishes and other sea foods, Meat and poultry, Milk and milk products, Fat and edible oils, Sugars, Beverages alcoholic, Beverages non-alcoholic.) (NVIF by nutrients category-2 (sub-menu): Vitamins, Minerals & Trace Elements, Carbohydrates, Energy, Fats, Dietary Fibre, Proteins, Essential amino acids, Fat and fatty acid foods)
3. "My nutrient requirements" menu
4. "Nutrients in my food" menu
5. "My diet and activity" menu
6. "Search foods by nutrients" menu
7. "Search foods by language" menu
8. "Nutrition-rich Foods" menu (Sub-menus: Beta-carotene, Calcium, Energy, Fibre, Folic Acid, Iron, Protein, Riboflavin, Vitamin-A, Vitamin-B12, Vitamin-C, Alpha Linolenic Acid(Omega-3), etc.)
9. "Food Categories" menu (Sub-menu: Cereal grains, Pulses and legumes, Leafy vegetables, Roots and tubers, Other vegetables, Nuts and oil seeds, Condiments and spices, Fruits, Fishes and other sea foods, Meat and poultry, Milk and milk products, Fat and edible oils, Sugars, Beverages alcoholic, Beverages non-alcoholic)
10. Estimated energy requirements for various age, gender, weight, physiology status, and activity groups.
11. Some common Indian recipes and their nutritive values
12. Some therapeutic diets
13. Dietary tips for the Elderly(≥ 60 years)
14. Diet and Diabetes
15. Diet and Heart disease
16. Low cost nutrition supplements
17. Nutrition & Health
18. Body Mass Index (BMI) calculator(Variables: Gender, Age, Height, Weight)

19. Basal Metabolic Rate (BMR) calculator(Variables: Gender, Age, Height, Weight)
20. Calorie Calculator (Variables: Gender, Age, Height, Weight, Physical activity: BMR, Sedentary, Light activity(1-3 times a week), Moderate activity(3-5 times a week), Heavy activity(5-7 times a week), Very high activity (sports or physical job), Pregnant woman, Lactation (0-6months, 7-12months))
21. Ideal Weight Calculator(Variables: Gender, Age, Height)
22. Carbohydrate calculator(Variables: Gender, Age, Height, Weight, Physical activity)
23. RDA for Indians (Adult Male(>18yrs), Adult Female(>18yrs), Infant(0-12 months), Children(1-9 years), Boys(10-18years), Girls(10-18years), physical activity)
24. Physical Activity Ratio (PAR)(Energy Cost) for Adult Males and Adult Females ---->(Categories: Sleeping, Lying resting, Sitting(1.20), Standing(1.40), Sitting at desk(1.30), Standing+Lab work(2.0), Personal care (dressing, bathing, etc.), Eating, Household work(general), Light leisure activity, Sitting and reading, Ironing, Sweeping, Dusting, Cycling, Typing(sitting)(1.58), Walking(2-3 km/hr)(3.71), Walking(4-8 km/hr)(3.20), Running(7-9 km/hr)(6.34), Washing clothes(manual) (3.0), Washing clothes (machine)(1.92), Agriculture activities (Harvesting(3.6), Hand saw(7.4), Ploughing, Puddling, Working push-hoe, Trimming bunds, Making channels for irrigation, Making of bundles, Threshing, Transplanting, Germinating seeder, Bending and holding weights 2kg, Spreading grains on floor, Pounding, Winnowing, Weeding with sickle, Uprooting(sitting), Uprooting(bending), Harvesting paddy field, Transplanting paddy seedling, Harvesting (bending)), Carrying load 20-25 kg, Pounding (single), Digging dry soil using spade, Carrying loads, pulling carts, mining activities)
25. "NIN Books" menu

Suggestions for NIN App 2.0 development from Rajunaik on 15th Nov 2023

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