

Application for LY B. Tech Project**Department:** Information Technology **Department Thrust Area:** Knowledge Based System**Title:** FitNoQuit (Diet and Workout Recommendation System)**Category: Departmental/Interdisciplinary:** Internal/~~External~~

If External attach details with letter from the external organisation for permission to do project / thesis

Whether will receive finance from any agency: ~~Yes~~ / No.**Objectives of the project in brief (attach separate sheet if required)**

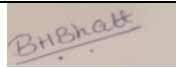


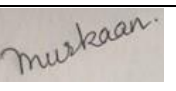
Every human being has a different body with different requirements and thus as the saying goes “one size may not fit all”, a single diet and workout routine would not serve all. To solve this issue, “FitNoQuit” aims to provide its users with personalized diet and workout recommendations. Using machine learning algorithms, we aim to provide our users with a customized diet and workout routine that best suits them. These algorithms take into context a ton of user details like height, weight, age, gender, food preference, medical conditions etc. These details enable the algorithm to formulate a plan that is accurate and easy to follow for the users. The users can also browse through the blog section where in a plethora of information with respect to current diet and workout trends, myths regarding health and so on is available. The user is recommended with related blogs using content-based filtering which aims to recommend users with blogs from a category/author that the users previously showed interest in.

To sum up, “FitNoQuit” is a knowledge-based system that aims to provide diet and workout services to its users that is personalized and most apt to the user.

Objectives

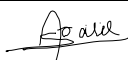
1. The diet recommendation system of “FitNoQuit” aims to provide users with a customized diet plan to improve their health based on their food preferences and health conditions.
2. Being fit is not just about eating right. Correct diet and the right exercise go hand in hand for a healthy living. The workout recommendation system of the application aims to help users reach their specific weight goals by providing them with different forms of exercise that they can do to burn specific number of calories.
3. Through our blogs section we aim to influence and encourage users to make healthier food choices

We declare that the proposed work is based on our and / or others’ ideas which will be adequately cited and referenced in the reports. We also declare that we will adhere to all principles of intellectual property, academic honesty

Roll No.	Names of the students	Branch	Email Id and Mobile no.	Signature of the Student
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	@Name	Dept. / organisation	Signature
Guide	Prof. Sonali Patil	IT	
Co-guide / External guide			
Co-guide / External guide			

@ In case of external guide give mobile no. and email id.

Date**Signature of IRRC Committee Member/s**

- All the student members of the group must have understanding in all respect towards the execution, completion and evaluation of project work
- Both guide and co-guide must have understanding in all respect towards the execution, completion and evaluation of project and will work as an examiner for all the intermediate examinations including final defense. The co-guide can be other than KJSCE.
- For interdisciplinary project there will be one Guide as principle investigator and there can be 1-2 co-guides depending upon the project.
- For interdisciplinary project there will be intermediate evaluation / final defense organised by the parent department of the guide.

Time line chart for project / thesis work completion

	Task (to be filled by the students at the time of IRRC approval)	Comment of guide about actual results / progress / level of work completed	Signature of Guide / Co-guide With date
July Second fortnight	Initiated communication with tentative project guides with the first project idea (Smart Cart based on Amazon Go Model) and three related Research papers. Discussed the idea and laid out a rough scope of the project.		
August First fortnight	Based on previous communication with guide, discussed various constraints of the project and looked for ways to solve the constraints. Modified the scope of the proposed idea and looked for other project ideas.		
August Second fortnight	On further discussion with guide, discarded the first project proposal and proposed a new idea ("FitNoQuit"). Studied related research papers and articles, defined the objectives and scope of the project. Confirmed the project idea after discussion with guide.		
Sept. First fortnight	Working on the presentation for project approval that describes our proposed system and includes flowchart, desired tech stack, problem statement, etc.		
Sept. Second fortnight	Preparing the scope of the project, i.e. laying out functional and non-functional requirements and exploring all necessary tools and technologies, preparing the SRS and SPMP document.		
Oct. First fortnight	Preparing the SDD, where data, architecture, UI, etc. is defined. Start working on STD document. Collecting data and working on the dataset required for the project.		

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Oct. Second fortnight	Implementing the basic User Interface of the application. Presenting and demonstrating our project.		
Nov. First fortnight	Working on the Synopsis Submission.		

The objectives which will be achieved before VII semester examination

1. Defining the scope of the project and finalizing the functional and non-functional requirements of the project.
2. Collect the desired data, required for implementation.
3. Creating the Software Management Plan and listing all the requirement by creating the SPMP and SRS Documents.
4. Preparing the SDD and STD documents which will allow us to collect data, define the architecture of the application and sketch the basic User Interface of the application.

Time line chart for project / thesis work completion

	Task (to be filled by the students at the time of IRRC approval)	Comment of guide about actual results / progress / level of work completed	Signature of Guide / Co-guide With date
Jan. Second fortnight	Start working on the Diet recommendation system algorithm and Login module.		
Feb. First fortnight	Continue working on diet recommendation system algorithm, handling user inputs and begin working on the blog section.		
Feb. Second fortnight	Finish the implementation of Blog section, and work on the diet recommendation system along with front end implementation.		
March First fortnight	Start working on workout recommendation system and finish the Diet recommendation system.		
March Second fortnight	Finish working on the workout recommendation system. Test the web application, make necessary tweaks in the application. Start working on the Research paper.		
April First fortnight	Work on accessory features and enhancing the user experience alongside working on Research Paper.		
April Second fortnight	Testing the application and Publishing the Research Paper.		

The objectives which will be achieved before VIII semester final defense

1. The completed implementation of a diet recommendation system based on user inputs like food preferences and health conditions.
2. A working workout recommender based on user's final weight goal.
3. A community blog section, where users will be suggested with related blogs based on previously visited categories/authors of blogs.
4. Publishing the Research Paper, written based on research carried out throughout the project.