Basic Details of the Team and Problem Statement

Ministry/Organization Name/Student Innovation:
Department of School, Education & Literacy, Ministry of Education:

PS Code: RK779

Problem Statement Title:
Tracking the impact of PM POSHAN on a child's nutritional status and physical health and well-being.

Team Name: The Dedicoders

Team Leader Name: Bhavyashu Agarwal

Institute Code (AISHE): C-19946

Institute Name: Keshav Memorial Institute of Technology
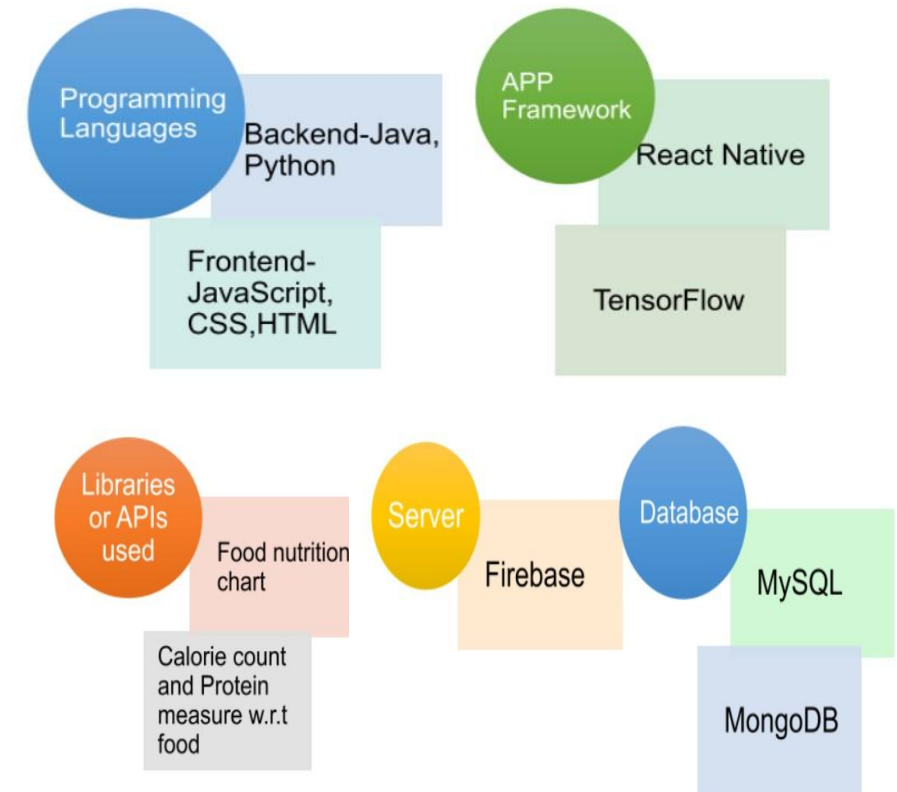
Theme Name: Fitness and Sports

Idea/Approach Details:

Tech stack :

▪ **PM POSHAN is a mid-day meal programme for giving one hot cooked and nutritious meal to students of class 1 to 8 in all Government and Government-aided schools.**

▪ **According to the PM POSHAN Scheme, the app is accessible by University Volunteer Inspector, School Management which primarily includes a Nutrition expert and Guests providing special food to students on special occasions which is the concept of TITHI BHOJAN.**

▪ **Through our app, the attendance and POSHAN intake of each student is being tracked.**
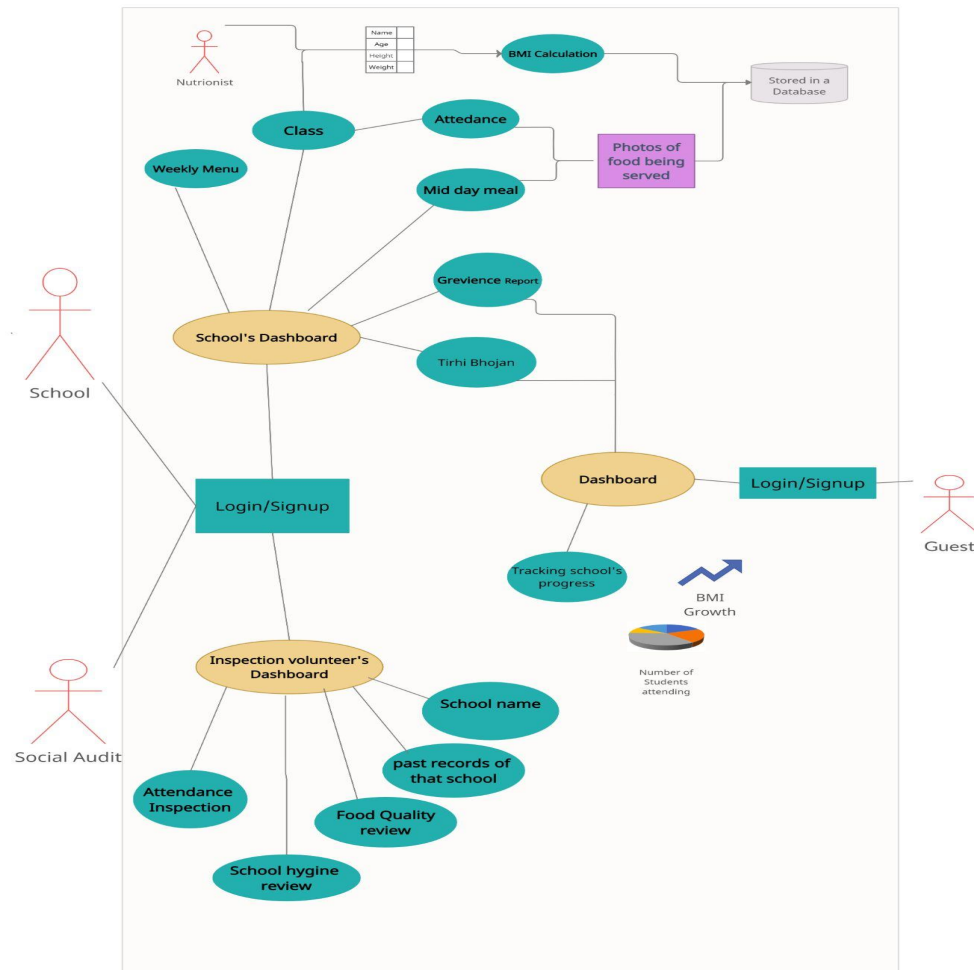
Other provisions include -
- BMI tracking through which physical health and well-being of a student is being taken care of,
- the weekly menu of the school to check if requisite calories are being served to each child which is implemented using AI based calories counting API,
- random photographs of meals being served which is implemented using OpenCV (an AI based open source tool kit that enables image processing and object tracking).

Programming Languages — Backend-Java, Python — Frontend-JavaScript, CSS,HTML

APP Framework — React Native — TensorFlow

Libraries or APIs used — Food nutrition chart — Calorie count and Protein measure w.r.t food

Server — Firebase

Database — MySQL — MongoDB

Use case diagram:

Dependencies :

- API for calorie count.
- Schools' database.
- Hosting and cloud storage using AWS.
- Algorithm that detects head count while food is being served

Show Stoppers:

- Management has to provide student database.
- Details need to be updated regularly.
- Photos should not be uploaded from gallery.

Mockup App:
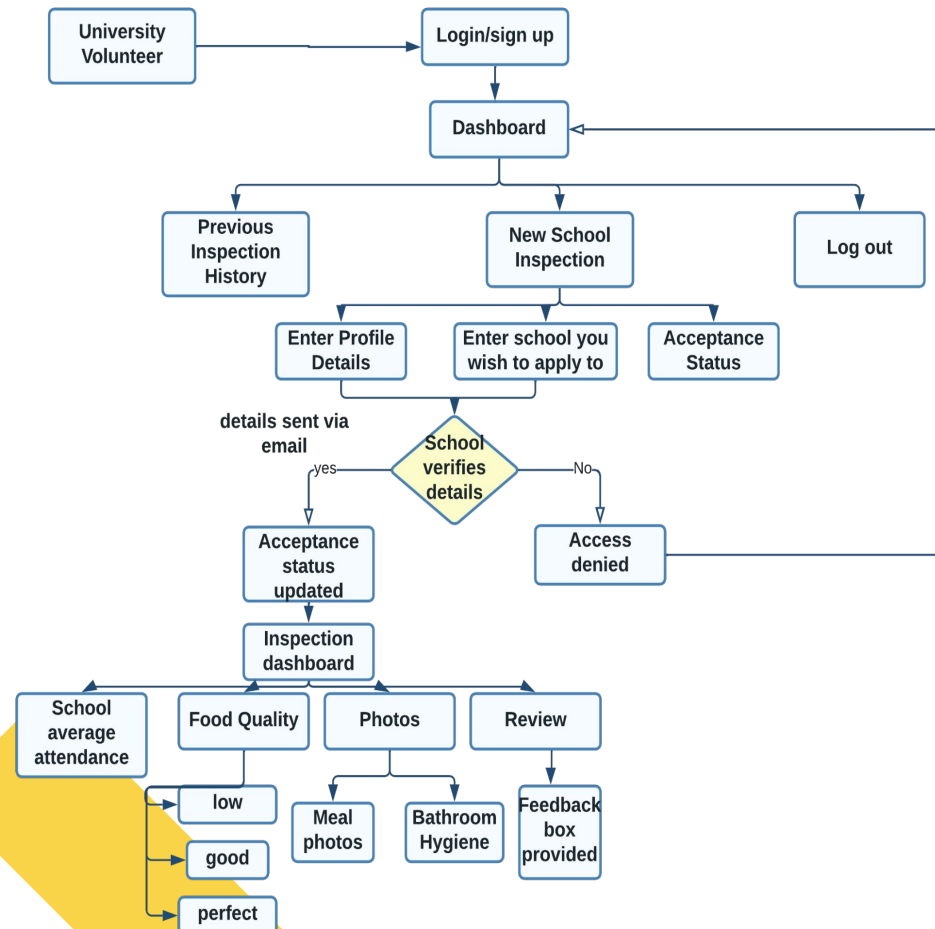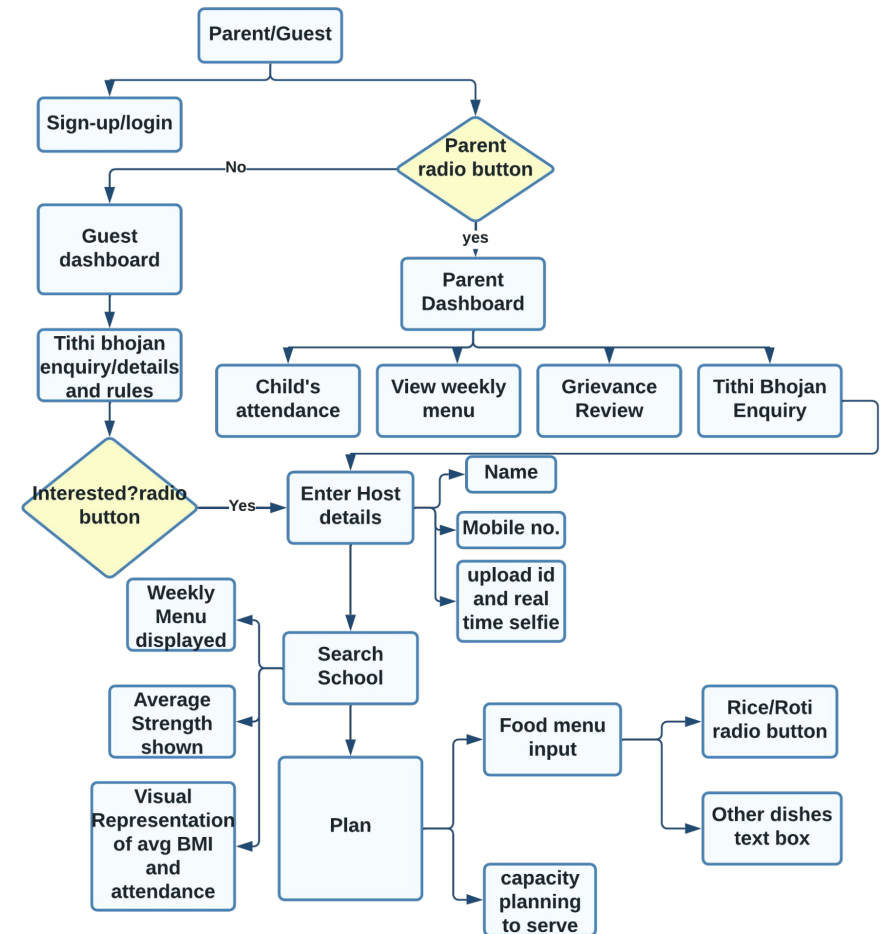

Management workflow:
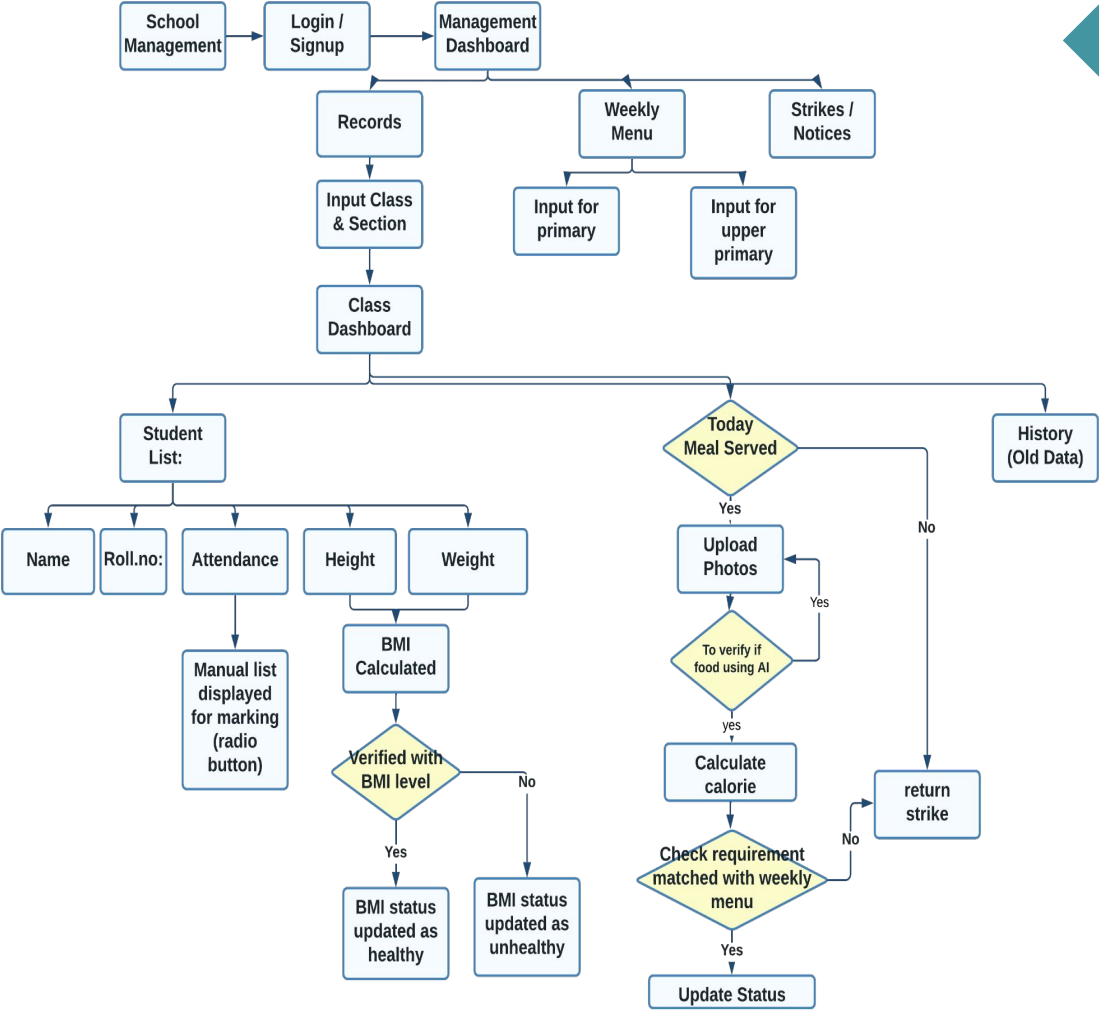
Volunteer workflow:

Guest/Parent Workflow:

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Team Member Details

Team Leader Name: **Bhavyashu Agarwal**

Branch : BTech   Stream : IT   Year : II

Team Member 1 Name: Aditya Chintala

Branch : BTech   Stream : CSE   Year : II

Team Member 2 Name: D Divya

Branch : BTech   Stream : CSE   Year : II

Team Member 3 Name: Janvi Mehta

Branch : BTech   Stream : CSE   Year : II

Team Member 4 Name: Syed Shujauddin Rafai

Branch : BTech   Stream : CSE   Year : II

Team Member 5 Name: Yuktaa Sri Addanki

Branch : BTech   Stream : CSE   Year : II