

Technical Report

The data for the meal plan was taken from the mess menu & then nutrients composition was determined by google search.

These were the inputs given to the program already & user has to input his/her personal data for the ~~eds~~ nutrient requirement calculation.

Body Weight, Height, Age, Exercise Calories, Physical Activity & How much caloric surplus or deficit user want.

(Note: For future work these inputs won't be required from user & will be calculated based on user target like how much weight user wants to gain/lose & in what period)

Then using these variables caloric & other nutrients requirement was calculated.

These input were given to the linear programming solver in the ~~o~~ which is present in solver.py.

The food nutrients, caloric & other constraints were applied to make the meal distributed over the day & not

just concentrated to one time.

Thus this meal plan from the linear program solver was given as an output to the user.

The user intake data was also generated manually to get performance of the user & generate meal plan according to it.

The weights for different food items were calculated & used in the objective function of linear program solver.

This provided output which was biased for the user.

3- different models were used to use the weights determined from the user data & respective output meal plan is provided in different excel files.

For future better models can be implemented to find the weights & ^{performance} can be evaluated based on how closely the user follows the meal plan is decided.