Package proposal:

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Obesity and overweight have become a worldwide problem. The obese population has nearly tripled since 1975. Thus, we decide to develop a package called fitness which could track users’ daily calorie intake burn, also provide an intuitive visualization of the changes in weight and calories consumption. This package contains two sub-packages, calorie intake and calorie burn.

The sub-package of calorie intake provides information of three main dietary nutrients: protein, fat, and carbohydrate, as well as the overall calorie intake. By entering the detailed dietary nutritional and body-related information, the user will receive a summary indicating the calories obtained from each nutrient, and suggestions for re-arranging their daily diets to develop a more balanced eating habit, e.g. proportions of various nutrients among total intake. In addition, a plot module is included to provide a visualization of calorie intake tracking during a certain period, e.g. weekly or monthly. The trends of the diets then can be illustrated more clearly so that the users will be able to build up a long-term diet plan accordingly.

The calorie burn sub-package has two modules, info and plots. The info module has two classes, Records and KPI, in which KPI is the sub-class of Records; It has four major functions, display(), BMI().BMR() and totalcal(); plots modules only has one class called change and have different function for visualization.