

Title: Nutrition assistant

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Abstract: This thesis explores and implements the options for adaptive generation of meal plans. We implement our approach as a mobile application for the Android operating system. The application aims to help the user to achieve the desired weight loss or weight gain results by custom made recommendations and, at the same time, allowing small deviations from the meal plan. In case of this deviation from the proposed meal plan, the application adapts to such cases with respect to user preference. The additional feature of the application is built-in support for exploring the meal options in nearby restaurants. Our application design is modular. The implementation of the user interface is separate from the logic behind the meal plan generation. The module for meal plan generation can also be easily extended to support new meal plan generation approaches. Also, the data we currently use can be easily replaced by any other data source for food information.

Keywords: Android, Nutrition, Heuristic