**Use Case Scenario 1 (SSD): Personal Information**

The scenario starts with the user launching the GreenPlate application. If the user doesn't have an existing account, they opt to create one. The system creates a new account in the user database if everything is valid. In case the user already has an account, they choose the option to log in.

Once logged in, the user navigates to the Personal Information page to update their profile details. They input new information (height, weight, and gender). If there are changes, the system updates the user database with the new information. However, if the user doesn't provide any new information, the system keeps the existing profile details unchanged.

After updating or keeping the personal information unchanged, the system confirms the successful update to the user, and the scenario concludes.

**Use Case Scenario 2 (SD): Generating a Data Visualization**

In this scenario, the user interacts with the system to either create a new account or log into an existing one. This interaction is between the user and the AccountCreation class. If the user is creating a new account, they provide their details, and the system creates the account. If the user is logging in, the system verifies them against the database and logs them in.

After the authentication process, the user proceeds to the InputMeal screen. Here, they click button to generate a visualization of their data. The InputMeal class interacts with the PersonalInformation class to fetch the user's personal information from the database. If there is existing data in the database, such as the user's height, weight, and gender, the personal information is returned to the InputMeal class. The InputMeal class then calculates and displays the visualization based on this information. However, if there is no data available in the database, the PersonalInformation class returns no data. In this case, the InputMeal class displays an empty visualization.