A system which computes requirements for and schedules life support functions for a spacecraft, organizing meal schedules, oxygen requirements, beverage requirements, and factors in recycler modules like CO2 scrubbers etc. We can incorporate a weight limit and output information about whether it is possible to provide sufficient life support on a given weight budget.

Do you think this sounds plausible? Could we accomplish it using only experta and SKfuzzy? We'd use SKfuzzy to determine when food and beverage requirements are met, given a level of baseline hunger/thirst and body mass; exact amounts of food and beverages are slightly flexible (people won't die if they are slightly hungry or thirsty one day), so a fuzzy means of determining sufficiency seems fine.

Ok, let's plan this out. We'll store our SKFuzzy and experta logic in a file called engine.py, use app.py for endpoints (we'll use flask for API), and we'll have a templates folder containing HTML, JS. We may add a static folder with CSS later. Let's start by figuring out all the different input fields we need.

We need:

* Mission duration Weight limit (crew mass excluded)
* Num crew
* Crew body mass
* Activity level (dropdown menu with "low", "moderate", "daily exercise" as options)
* Liquid recycler parameter (recycler efficiency as a continuous, percentage value)
* CO2 scrubber parameter (recycler efficiency as a continuous, percentage value)
* CO2 scrubber weight, extent (weight per cartridge, mass of gas recycled per cart)
* Foods (database; user inputs food name, calories per gram, 1-5 rating--each crew member has different preference ratings per food)
* Beverages (database; user inputs beverage name, calories per gram, preference rating)
* Per-crew-member variety parameter--says how much they need variety in food and drink

The CO2 scrubber parameter is used to feed into a calculation which takes the trip duration, num crew and CO2 scrubber parameter and CO2 scrubber weight, extent to compute the most efficient combination of oxygen supply and CO2 scrubber cartridges to meet the oxygen requirements for the trip with minimal weight expenditure. Oxygen is more vital than food and water, so we figure this out first.