

Use Case 1: Brew Coffee**Scope:** Coffee Maker**Level:** Coffee Drinker Goal**Primary Actor:** Coffee Drinker**Scenario:** None**Related Use Cases:** *Use Case 2: The Coffee Drinker shall get Coffee***Stakeholders & Interests:**

- Coffee Drinker: wants coffee

Preconditions: Power is supplied to the Coffee Maker. The Coffee Drinker already added fresh coffee.**Postconditions:** Coffee is brewed, in the Carafe and ready for serving.**Success Guarantees:** The System brews the coffee.**Main Success Scenario:**

Coffee Drinker	System
1. Add Water	
2. Start the Brewing Process	
	3. Brews the coffee
	4. Alerts Coffee Drinker when brewing complete (when the Reservoir is out of water).

Extensions (Alternative Flows):

- 1a. If the Coffee Drinker does not add water, then the System uses what ever water is already in the Reservoir.
- 3a. If the Coffee Drinker pulls the carafe before the Coffee Maker is finished brewing the coffee, then Coffee Maker stops brewing, continuing once the carafe is returned (under the spigot).

Special Requirements:

- As stated in the Assumptions, the Coffee Drinker adding coffee is not modeled in this Use Case; since this Use Case addressed brewing coffee, the brew behavior will continue regardless of the addition of unbrewed coffee grounds.

Technology & Data Variations List:

- 1a. The Coffee Drinker adding water is optional. If the Reservoir is empty, and the Coffee Drinker does not add any Water, consider having the System alert the Coffee Drinker to add water.
- 2a. Predict the adding ability of choice to the Coffee Drinker to automate coffee brewing in future upgrades and improvements.

Frequency of Occurrence: Dependent upon the brewing time combined with the demand of Coffee Drinkers.

Open Issues:

- The size of the carafe is variable
- What about a Coffee Maker with multiple carafes? Would that alter the 3a Alternative Flows?