

**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*  
*Use Case 3: The Coffee Drinker shall add water to the Reservoir***Stakeholders & Interests:**

- Coffee Drinker: wants coffee

**Preconditions:** Power is supplied to the Coffee Maker. The Coffee Drinker already added fresh coffee. Water is added to the Reservoir (See *Use Case 3: The Coffee Drinker shall add water to the Coffee Maker*)**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. Start the Brewing Process	
	2. Brews the coffee
	3. Alerts Coffee Drinker when brewing complete

**Extensions (Alternative Flows):**

- 1a. If there is no Water in the Reservoir, then the System alerts the Coffee Drinker to add Water (See *Use Case 3: The Coffee Drinker shall add Water to the Reservoir*).
- 2a. 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:**

- 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?