

## Feature: Changing Elements

Many of you will need to have elements that change based on what the player's actions. Examples of this include:

- Rooms whose descriptions vary
- Items whose descriptions vary either based on something the player does with the item or simply because of the passage of time
- NPCs whose interaction with the player changes (e.g., the conversation script changes as the player has done things)

## Implementation

All of these are implemented in a similar way.

1. Modify the field that is storing the changing element to store a collection of those elements instead of a single element and add an integer field to store the index of the active element in the collection. For example, for rooms and items whose descriptions vary use an `ArrayList<String>` for the description rather than a single `String`.
2. Refactor existing methods to handle the collection using the index of the active element.
3. Add the additional elements in the appropriate places in the `World` class.
4. Add a method that will changes the active element by changing value of the active element field.
5. Be sure to test your project thoroughly and check your changes into Github.

## Example

Suppose that I have a room that is filled with ice when the game starts, but the player can thaw the ice by starting a fire in the room. For the description of this room I would store "Solid ice everywhere you look" in the first position and "Puddles cover the floor" in the second position. When the game starts, the active element would be 0, so the first description is printed when I walk into the room. When the player takes the action of starting the fire, I would change the active element to 1. From now on, the second description will be used.