Digest Loop

The digest looop answers the question

what does a controller watch?

Normal browser flow

- event fires
- JS creates an event object
- executes any and all functions listening, in order

$digest() cycle

- processes watchers in its current scope
- and evaluates them asynchronously
- until stabilization, i.e. `$watch` detects no changes
- if not stabilized within 10 cycles

```
$rootScope.myModel = 0;
$rootScope.watch('myModel', function(oldValue, newValue) {
  // execute code that updates your models
});
```

Hello World Example

1. During the compilation phase:

    - the ng-model and input directive set up a keydown listener on the <input> control.

    - the interpolation sets up a $watch to be notified of name changes.

1. During the runtime phase:
    - Pressing an 'X' key causes the browser to emit a keydown event on the input control.
    - The input directive captures the change to the input's value and calls $apply("name = 'X';") to update the application model inside the Angular execution context.
    - Angular applies the name = 'X'; to the model.
    - The $digest loop begins
    - The $watch list detects a change on the name property and