# Homework: Software Quality Assurance Introduction

## Think Testing: Gas Station

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| **Problem #1** | She loads in the reservoir of car wrong type of fuel. |
| **Problem #2** | She has a problem with a car battery. |
| **Problem #3** | She gets in the wrong car and try to start it. |
| **Problem #4** | She has a problem with electronic system of the car. |
| **Problem #5** | Problem with ignition mode and security check module. |
| **Problem #6** | She has a mechanical issue. |
| **Problem #7** | Missing keys. |

## Think Testing: Tooth Brushing

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| **Step #1** | Take the toothpaste tube in left hand. |
| **Step #2** | With right hand unscrew the lid. |
| **Step #3** | Put the lid on the table. |
| **Step #4** | Take the toothbrush. |
| **Step #5** | Мoisten the toothbrush. |
| **Step #6** | Put some little amount toothpaste on the toothbrush. |
| **Step #7** | Put the toothbrush with toothpaste in the right side of your mouth. |
| **Step #8** | Start brushing. |
| **Step #9** | Replace toothbrush on the front side of your mouth and keep brushing. |
| **Step #10** | Replace toothbrush on the left side of your mouth and keep brushing. |
| **Step #11** | Repeat this actions around 3 min. and then clean the toothbrush with water. |

## Think Testing: 5 Kg Bag

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| **Test #1** | Take some amount around 2 kg and put it in the bag. |
| **Test #2** | Test the bag if she is tearing apart. |
| **Test #3** | Then add more 3 kg in the bag. |
| **Test #4** | Test it is tearing apart. |
| **Test #5** | Put another new quantity of 100 g in the bag. |
| **Test #6** | Test it if is tearing apart again. |

## Login Form UX Problems

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| **Problem #1** | The given name of the website is "My Wonderful Shop", the selected address in the browser is “ your-wonderful-shop.com” |
| **Problem #2** | Wrong login form-should not to be add-to-basket. |
| **Problem #3** | Replaced buttons username and password |
| **Problem #4** | Buttons Log In and Log Out are not aligned |
| **Problem #5** | Wrong button Log Out. |

## Weather Forecast Bug

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| **Mistake** | The developer made the following mistake: We have not conversion of degrees to Celsius. |
| **Bug (location)** | The bug in the code should be in the module / function, responsible for: Degree conversion |
| **Failure (symptoms)** | When the buggy code goes in production, it fails as follows: Shows wrong data of temperature. |

## Age Checking Machine

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| The value age equal to eighteen is not included.  The wrong logic in the code is called Bug.  The failure will be at age equal to eighteen. |

## Testing an Electric Water Kettle

### Test Scenario #1: Boil water

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| Test case #1 | Boil 1 liter of water -à success |
| Description | Pour 1 liter of water, start the kettle, and wait until it gets hot. |
| Steps | 1. Fill 1 liter of cold water in the kettle and close the boiler lid.  2. Plug the power base in the electrical network.  3. Plug the boiler into the power base.  4. Switch on the kettle.  5. Wait until the water gets hot and the kettle automatically switches off (2-3 minutes). |
| Expected results | The boiling process should complete in less than 4 minutes. The water should get hot. The kettle should automatically power off when the water gets too hot. The kettle lid should stay closed. |

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| Test case #2 | **…**Boil an empty kettle- à fail |
| Description | Try to boil an empty kettle (no water inside) and make sure the boiling stops (automatically switches off) almost immediately after starting. |
| Steps | 1. Pour out the water from the kettle. 2. Plug the power base in the electrical network.   3. Plug the boiler into the power base.  4. Switch on the kettle.  5. The kettle automatically switches off. |
| Expected results | There have not any boiling process.  The kettle should automatically power off due missing water within 0.5 and 2 s. |

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| Test case #3 | **…**Boil an 0.19 l of water - >>>> fail |
| Description | Pour 0.19 liter of water, start the kettle, and wait until it gets hot. |
| Steps | 1. Fill 0.19 liter of cold water in the kettle and close the boiler lid.  2. Plug the power base in the electrical network.  3. Plug the boiler into the power base.  4. Switch on the kettle.  5. Wait until the water gets hot and the kettle automatically switches off . |
| Expected results | There have not any boiling process.  The kettle should automatically power off due insufficient amount of water within 0.5 and 2 s. |

### Test Scenario #2: …

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| Test case #1 | **…** |
| Description | … |
| Steps | 1. … 2. … 3. … |
| Expected results | …  …  … |

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| Test case #2 | **…** |
| Description | … |
| Steps | 1. … 2. … 3. … |
| Expected results | …  …  … |

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## Testing a Coffee Machine

### Test Scenario #1: …

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| Test case #1 | **…** |
| Description | … |
| Steps | 1. … 2. … 3. … |
| Expected results | …  …  … |

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| Test case #2 | **…** |
| Description | … |
| Steps | 1. … 2. … 3. … |
| Expected results | …  …  … |

### Test Scenario #2: …

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| Test case #1 | **…** |
| Description | … |
| Steps | 1. … 2. … 3. … |
| Expected results | …  …  … |

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| Test case #2 | **…** |
| Description | … |
| Steps | 1. … 2. … 3. … |
| Expected results | …  …  … |

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