



UPPSALA  
UNIVERSITET

Software Testing

Project Report

**Group X**

December 6, 2021

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# 1 Introduction

## 1.1 Brief library description

## 1.2 Brief description of functions you have chosen with examples of use

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## 2 Black Box Testing

### 2.1 What is black box testing?

### 2.2 Testing strategy

Overall strategy here.

And the following are the testing strategy for all functions you chose. If the strategies are duplicate, you can mention they have been described in other functions' strategies. For example, there are several find functions in bf4, and they have some same input parameters. The strategies for them are same, you just need describe them once.

#### 2.2.1 Example 1

**itertools.count(start=0, step=1)**

Count method of itertools helps us to create iterators which can lead to faster and efficient program execution. It mainly takes two arguments start and step, value starts with the value of start and step has a default value 1 in case it is not specified.

`count(2.5, 0.5) -> 2.5 3.0 3.5 4.0 4.5.....`

We prepared unittest to test the features of the count function. First I tested if the count method takes its default step value and create iterators, the function is checked for start parameter specified range from negative value to positive, Step argument is checked for specified range of positive and negative values.

#### 2.2.2 Example 2

***get\_attribute\_list(key, default=None)***

The function has two parameter and the returned value is a list. As parameter key represents attribute and the id attribute is special, write five test cases: (1) an usual attribute that is present on this PageElement with single value, (2) an usual attribute that is present on this PageElement with multiple values, (3) attribute id that is present on this PageElement with a string type value, (4) attribute is not on this PageElement and do nothing to parameter default, (5) attribute is not on this PageElement and assign a new value to parameter default.

The output: (1) a list with single value of the attribute, (2) a list with multiple items corresponding to multiple values of the attribute, (3) a list with single string of the id attribute (4)[None], (5) a returned list with the value of parameter default.

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## **3 White Box Testing**

### **3.1 What is white box testing?**

### **3.2 Testing strategy**

Overall strategy here.

#### **3.2.1 Function 1**

Here you should write how you achieve node coverage, branch coverage and prime path coverage. The function used for control flow graph can be described in next section.

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## **4 Control Flow Graph**

### **4.1 What is Control flow graph**

### **4.2 Control Flow Graph Showed here**

### **4.3 Test cases according to node coverage**

### **4.4 Test cases according to branch coverage**

### **4.5 Test Cases according to prime path**

## **5 Conclusion**

Briefly describe what you have done and what you have learned.

## **6 References**

## **7 Appendix**

Codes of test cases can be pasted here, or maybe the link to the repo or colab.