## SWEN90006: Assignment 1

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## 1 Task 1

## 1.1 Test template trees

Figure 1 - 4 shows the test template trees for the API addUser, loginUser, updateDetails, and retrieveDetails respectively.

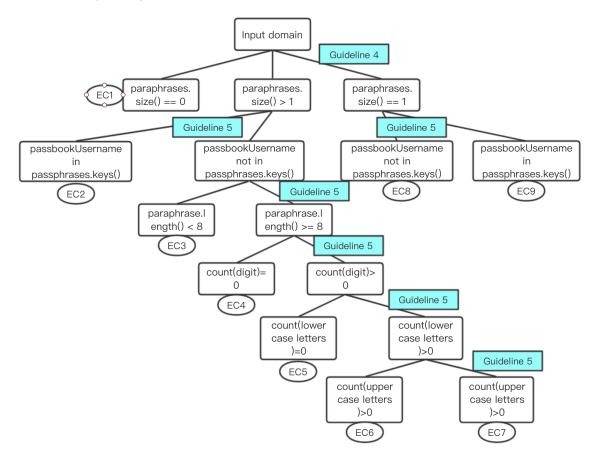


Figure 1: Test template tree for addUser()

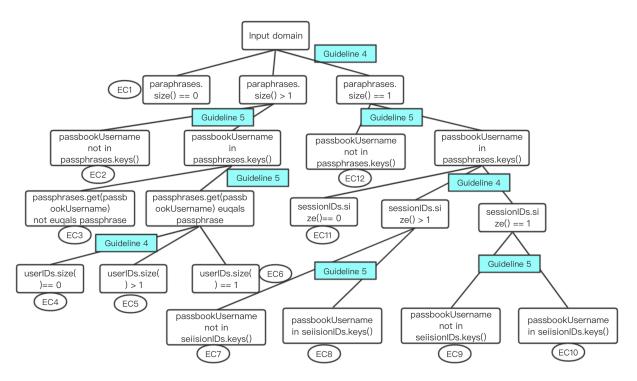


Figure 2: Test template tree for loginUser()

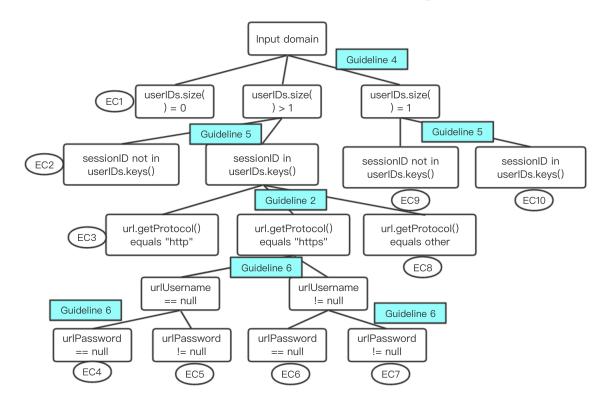


Figure 3: Test template tree for updateDetails()

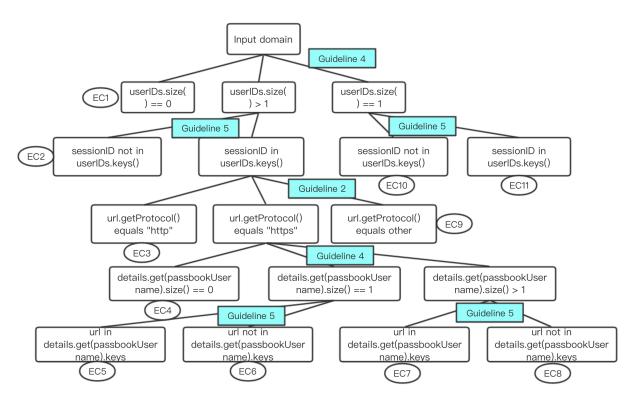


Figure 4: Test template tree for retrieveDetails()

## 1.2 Do your set of equivalence classes cover the input space?

My set of equivalence classes cover the input space. The reasons are as follows:

- 1) All leaf nodes are divided strictly and carefully, so that they do not overlap with other leaf.
- 2) The collection of the set of each sibling node covers all the cases of their parent node.
- 3) If two variables are independent of each other, then the subtree of one variable can be added to a leaf node of the other variable. In this case, all the nodes add up to cover all situations.
- 4) As part of your input domain, the instance variables should also be considered. Note that all of these variables are collections, so according to guideline 4, we should follow the zero-one-many rule. But in this particular case, we just care about whether the collection contains some values. So I combined the two cases (number of elements equals 1 and greater than 1) into one (greater than 0), which does not affect the results of the tests.