“Priority” Category Partitioning Testing Tool

OOPT stage 1000

Plan & Elaboration

Project Team

T4

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Index

Activity 1001. Define Draft Plan

Activity 1002. Create Preliminary Investigation Report

Activity 1003. Define Requirements

Activity 1004. Record Terms in Glossary

Activity 1005. Implement Prototype

Activity 1006. Define Draft System Architecture

Activity 1007. Define Business Use Case

Activity 1008. Define Business Concept Model

Activity 1009. Define System Test Case

Activity 1010. Refine Plan

Activity 1001. Define Draft Plan

1. Motivation
2. Project Objectives
3. Project Scope
4. Functional Requirements
5. Non-Functional Requirements
6. Resource Estimation
7. Other Information

Activity 1002. Create Preliminary Investigation Report

1. Alternative Solutions
2. Project Justification (Business Demands)
3. Risk Management
4. Risk Reduction Plan
5. Market Analysis
6. Managerial Issue

Activity 1003. Define Requirements

1. Functional Requirements

|  |  |
| --- | --- |
| **Function** | **Description** |
| NewSpecification | Make new specification file. |
| LoadSpecification | Load specification file. |
| RecentSpecipication | Open specification file by double clicking. |
| Quit | Shut down program. |
| SetFileName | Set specification file name. |
| AddCategory | Add category. |
| DeleteCategory | Delete category. |
| AddInputValue | Add input value. |
| DeleteInputValue | Delete input value. |
| AddProperty | Add property. |
| DeleteProperty | Delete property. |
| AddIfProperty | Add if property. |
| DeleteIfProperty | Delete if property. |
| AddErrorSingle | Add single and error constraints. |
| DeleteErrorSingle | Delete single and error constraints. |
| SetPriority | Set priority. |
| ShowAllSpecification | Show all specification information. |
| GoPrevStep | Go previous step page. |
| GoNextStep | Go next step page. |
| GoFinish | Go to complete page. |
| ExtractTestCase | Extract a Category Partitioning Test Case from a given Specification. |
| SaveTestCase | Save the extracted Category Partitioning Test Case. |
| MakeTestCaseFile | Generate the extracted Category Partitioning Test Case as an Excel file. |
| GoInitialPage | Go back to first page. |
| FileIO | Load/Save specification file. |

1. System Functions

|  |  |  |
| --- | --- | --- |
| **Reference No.** | **Function** | **Category** |
| R.1.1 | NewSpecification | Evident |
| R.1.2 | LoadSpecification | Evident |
| R.1.3 | RecentSpecipication | Evident |
| R.1.4 | Quit | Evident |
| R.2.1 | SetFileName | Evident |
| R.3.1 | AddCategory | Evident |
| R.3.2 | DeleteCategory | Evident |
| R.4.1 | AddInputValue | Evident |
| R.4.2 | DeleteInputValue | Evident |
| R.5.1 | AddProperty | Evident |
| R.5.2 | DeleteProperty | Evident |
| R 6.1 | AddIfProperty | Evident |
| R 6.2 | DeleteIfProperty | Evident |
| R.7.1 | AddErrorSingle | Evident |
| R.7.2 | DeleteErrorSingle | Evident |
| R.8 | SetPriority | Evident |
| R.9 | ShowAllSpecification | Evident |
| R.10.1 | GoPrevStep | Evident |
| R.10.2 | GoNextStep | Evident |
| R.10.3 | GoFinish | Evident |
| R.11.1 | ExtractTestCase | Hidden |
| R.11.2 | SaveTestCase | Evident |
| R.12.1 | MakeTestCaseFile | Hidden |
| R.12.2 | GoInitialPage | Evident |
| R.13 | FileIO | Hidden |

1. Performance Requirements

* Category Partitioning Test Case 생성시간은 5초 이내로 수행되어야 한다.

1. Operation Environment

* OS : 7 Microsoft Windows 7 이상

1. Development Environment

A. 운영체제 : Windows 7, 10

B. CPU : Intel

C. IDE : Eclipse, NetBeans

D. 개발 언어 : JAVA

E. UML 툴 : StarUML

1. Interface Requirements

* Tool을 시작했을 때, 최근 Specification 파일들이 최대 10개까지 보여야 한다.
* Category와 Value를 입력 받을 때, 하나 이상의 Category와 Value 값을 입력받아야만 다음 Step으로 넘어갈 수 있어야 한다.
* Property 값을 설정한 이후 Step에서는 Category와 Value값을 수정할 수 없고, 각 Step과 관련된 값들만 수정할 수 있어야 한다.
* ShowAllSpecification에서는 모든 값들을 수정할 수 없고 볼 수만 있어야 한다.
* MakeTestCaseFile를 통해 생성된 엑셀파일은 Test Case들이 Priority에 따라 보기 좋게 표현되어야 한다.
* FileLoad를 통해 불러 읽은 경우, 도중에 만들던 Step에서 시작해야 한다.

1. Other Requirements

* N/A

Activity 1004. Record Terms in Glossary

|  |  |  |
| --- | --- | --- |
| **Term** | **Description** | **Remarks** |
| Specification | Category Partitioning Test Case에 관련된 Category Value, Property, Error, Single 등의 정보들을 담고 있는 파일 |  |
| Priority | 사용자가 판단한 Test Case 각각의 우선순위[중요도] |  |
| Step | Category Partitioning Test Case에 필요한 정보들을 입력받는 순차적인 단계 |  |

Activity 1005. Implement Prototype

Activity 1006. Define Draft System Architecture

Activity 1007. Define Business Use Case

1. Define System Boundary
2. Identify and Describe Actors
3. Identify Use Cases

3.1 Actor-Based

3.2 Event-Based

1. Allocate System Functions into related Use Cases
2. Categorize Use Cases
3. Identify Relationships between Use Cases
4. Draw a Use Case Diagram
5. Describe Use Cases
6. Rank Use Cases

Activity 1008. Define Business Concept Model

Activity 1009. Define System Test Case

Activity 1010. Refine Plan

1. Project Scope
2. Project Objectives
3. Functional Requirements
4. Performance Requirements
5. Operating Environment
6. User Interface Requirements
7. Other Requirements
8. Resources
   1. Human Efforts (M/M)
   2. Human Resources
   3. Duration
   4. Budget
9. Scheduling