**Table C16 Time Recording Log**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Student | | Venkata Navadeep Reddy | | | | | Date | 12/4/24 |
| Instructor | | K. S. Gayathri | | | | | Program # | 2 |
|  | |  | | | | |  |  |
| **Date** | **Start** | **Stop** | **Interruption**  **Time** | **Delta**  **Time** | **Phase** | **Comments** | | |
| 12/4/24 | 12: 45 | 1: 15 | 0 | 30 mins | Planning | Studied about abstract syntax trees and how they organize data | | |
| 12/4/24 | 1: 15 | 1:35 | 0 | 20 mins | Design | Studied how the ast module works in python | | |
| 12/4/24 | 1:35 | 2: 10 | 5 | 30 mins | Coding | Calculation of classes and total functions was done | | |
| 12/4/24 | 2: 10 | 2: 30 | 0 | 20 mins | Debugging | Logical error where methods were being counted along with classes | | |
| 12/4/24 | 2: 30 | 2: 50 | 0 | 10 mins | Compiling | The part of program to find lines of code and counting elements were put together | | |
| 12/4/24 | 2:50 | 3:10 | 5 | 15 mins | Testing | Paths of the files were fed into the program to obtain the output | | |
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**Table C18 Defect Recording Log**

**Defect Types**

**10 Documentation 60 Checking**

**20 Syntax 70 Data**

**30 Build, Package 80 Function**

**40 Assignment 90 System**

**50 Interface 100 Environment**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Student | | | | Venkata Navadeep Reddy | | | | | | | | Date | | 12/ 4/ 24 | |
| Instructor | | | | K. S. Gayathri | | | | | | | | Program # | | 2 | |
| Date |  | Number | | |  | Type |  | Inject |  | Remove |  | | Fix Time |  | Fix Defect |
| 12/4/24 |  | 1 | | |  | Syntax |  | r |  |  |  | | 2 mins |  | 1 |
| Description: | | | The backslashes in the path were being read as part of an escape sequence in windows, had to convert it into a raw string to fix it or use / instead of \ in linux. | | | | | | | | | | | | |
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| Date |  | Number | | |  | Type |  | Inject |  | Remove |  | | Fix Time |  | Fix Defect |
| 12/4/24 |  | 2 | | |  | Function |  | ast.iter\_child\_nodes |  | ast.ancestor\_nodes |  | | 5 mins |  | 1 |
| Description: | | | Wrongly attempted to use an ancestor fuction on nodes of the tree which does not exist, iterated through child nodes instead | | | | | | | | | | | | |
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| Date |  | Number | | |  | Type |  | Inject |  | Remove |  | | Fix Time |  | Fix Defect |
| 12/4/24 |  | 3 | | |  | Data |  | func\_count - method\_count |  |  |  | | 20 mins |  |  |
| Description: | | | Subtracted individual method count from function count to obtain the individual functions | | | | | | | | | | | | |
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| Date |  | Number | | |  | Type |  | Inject |  | Remove |  | | Fix Time |  | Fix Defect |
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**Table C25 PSP0.1 Project Plan Summary**

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| --- | --- | --- | --- |
| Student | Venkata Navadeep Reddy Satti | Date | 12/4/24 |
| Program | Finding the Lines Of Code of Python files | Program # | 2 |
| Instructor | K. S. Gayathri | Language | Python |

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| ***Program Size (LOC)*** | ***Plan*** | | |  | ***Actual*** | | |  | ***To Date*** | | |
| ***Base(B)*** | ***0*** | | |  | ***0*** | | |  | ***0*** | | |
|  |  | | |  | ***(Measured)*** | | |  |  | | |
| ***Deleted (D)*** | ***5*** | | |  | ***7*** | | |  |  | | |
|  |  | | |  | ***(Counted)*** | | |  |  | | |
| ***Modified (M)*** | ***20*** | | |  | ***27*** | | |  |  | | |
|  |  | | |  | ***(Counted)*** | | |  |  | | |
| ***Added (A)*** | ***30*** | | |  | ***50*** | | |  |  | | |
|  |  | | |  | ***(T-B+D-R)*** | | |  |  | | |
| ***Reused (R)*** | ***5*** | | |  | ***0*** | | |  |  | | |
|  |  | | |  | ***(Counted)*** | | |  |  | | |
| ***Total New & Changed (N)*** | ***50*** | | |  | ***77*** | | |  |  | | |
|  |  | | |  | ***(A+M)*** | | |  |  | | |
| ***Total LOC (T)*** |  | | |  |  | | |  |  | | |
|  |  | | |  | ***(Measured)*** | | |  |  | | |
| ***Total New Reused*** |  | | |  |  | | |  |  | | |
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| **Time in Phase (min.)** | ***Plan*** |  | **Actual** | | |  | **To Date** | | |  | **To Date %** |
| Planning | 20 mins |  | 30 mins | | |  | 55 mins | | |  | 18 |
| Design | 10 mins |  | 20 mins | | |  | 50 mins | | |  | 17 |
| Code | 30 mins |  | 30 mins | | |  | 70 mins | | |  | 24 |
| Compile | 10 mins |  | 10 mins | | |  | 40 mins | | |  | 13 |
| Test | 10 mins |  | 15 mins | | |  | 35 mins | | |  | 12 |
| Postmortem | 10 mins |  | 10 mins | | |  | 40 mins | | |  | 13 |
| Total | 80 mins |  | 115 mins | | |  | 290 mins | | |  |  |
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| **Defects Injected** |  |  | **Actual** | | |  | **To Date** | | |  | **To Date %** |
| Planning |  |  |  | | |  |  | | |  |  |
| Design |  |  | 1 | | |  | 2 | | |  |  |
| Code |  |  | 1 | | |  | 1 | | |  |  |
| Compile |  |  |  | | |  |  | | |  |  |
| Test |  |  |  | | |  |  | | |  |  |
| Total Development |  |  |  | | |  |  | | |  |  |
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| **Defects Removed** |  |  | **Actual** | | |  | **To Date** | | |  | **To Date %** |
| Planning |  |  |  | | |  |  | | |  |  |
| Design |  |  |  | | |  |  | | |  |  |
| Code |  |  | 1 | | |  | 2 | | |  |  |
| Compile |  |  | 1 | | |  |  | | |  |  |
| Test |  |  |  | | |  |  | | |  |  |
| Total Development |  |  |  | | |  |  | | |  |  |
| After Development |  |  |  | | |  |  | | |  |  |

**Table C27 Process Improvement Proposal (PIP)**

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| --- | --- | --- | --- | --- |
| Student | Venkata Navadeep Reddy Satti | | Date | 12/4/24 |
| Instructor | K. S. Gayathri | | Program # | 2 |
| Process |  | Elements |  | |

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| **PIP Number** | | |  |
|  |  | **Problem Description:** | |
| 1 |  | Did not know how to access the parent nodes of a node as there was no function | |
| 2 |  | Did not know why the compiler was reporting an encoding error when feeding it the path of the file | |
| 3 |  | Counted the methods in the count for individual functions | |
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| **PROPOSAL** | | |  |
| **PIP #** |  | **Proposal Description** | |
| 1 |  | Instead used the existing child node function to solve the issue | |
| 2 |  | Had to convert the path into a raw string to prevent it from being read as escape sequences | |
| 3 |  | Subtracted method count from the total function count | |
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| **Notes and Comments:** | | |  |
|  |  | **Convert path into raw strings on windows** | |
|  |  | Provide comments for common counter variables in the same line | |
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