***CST8130 – Assign 3 Test Plan***

CST8130\_300

Xingyi Wu

040887028

**Menu Testing**

|  |  |  |
| --- | --- | --- |
| Condition | Input | Result |
| Menu input of 1 | **1** | Process to below testing |
| Menu input of 4 | **4** | There is no chain to verify. |
| Menu input of 5 | **5** | There is no chain to fix. |
| Menu input of 2 | **2** | Process to below testing |
| Menu input of 3 | **3** | Process to below testing |
| Menu input of 4 | **4** | Process to below testing |
| Menu input of 5 | **5** | Process to below testing |
| Menu input of 1 | **1** | Process to below testing |
| Menu input of 6 | **6** | End of program |

**Menu 1 – Display the courses**

|  |  |  |
| --- | --- | --- |
| Condition | Input | Result |
| No course | NA | “For college: Algonquin” – default college name |
| No inputted data | NA | College name, Course with Genesis:  “For college: Algonquin  For course: CST  [  0 100 2152018 current: 24455.0 previous: 0.0]” |
| Inputted data both good block and bad block | NA | College name, Course with corresponding data:  For college: Algonquin  For course: CST  [  0 100 2152018 current: 24455.0 previous: 0.0  111 20 2018 current: 24.0 previous: 24455.0]  For course: CET  [  0 100 2152018 current: 24455.0 previous: 0.0  222 50 2017 current: 26.0 previous: 0.8122511] |
| After fixing chains | NA | For college: Algonquin  For course: CST  [  0 100 2152018 current: 24455.0 previous: 0.0  111 20 2018 current: 24.0 previous: 24455.0]  For course: CET  [  0 100 2152018 current: 24455.0 previous: 0.0] |

**Menu 2 – Add courses**

|  |  |  |
| --- | --- | --- |
| Condition | Input | Result |
| Add new courses | **CST, CET** | Store in the arrayList. |
| Add a duplicate course | **CST** | Error message…please re-entry course name: |

**Menu 3 – Add blocks**

|  |  |  |
| --- | --- | --- |
| Condition | Input | Result |
| Valid input: 0<= input <arrayList.size | **0, 1** | Valid. Proceed to next step |
| Invalid: int<0 or int>= size | **-5** | Error message… please re-entry |
| Invalid : letter or float…etc. other than int | **p** | Error message… please re-entry |
| Good input: ‘g’ / ‘G’ for good block | **0, G, 2018 111 20** | previous hashCode = current hashCode:  current: 24455.0 previous: 0.0  current: 24.0 previous: 24455.0 |
| Good input: bad block (any input except ‘g’ or ‘G’) | **1, B, 2017 222 50** | previous hashCode != current hashCode:  current: 24.0 previous: 24455.0  current: 26.0 previous: 0.8122511 |
| Valid block data (integer >=0) | **2016 444 50** | Stored in linked list |
| Invalid block data (not integer) | **oop** | Error message… please an integer |
| Invalid block data (int < 0) | **-1** | Invalid entry, please re-enter an integer(>0): |

**Menu 4 – Verify chains**

|  |  |  |
| --- | --- | --- |
| Condition | Input | Result |
| No blockchain | NA | There is no chain to verify. |
| Display each blockchain(course) | NA | Prompt the message  Chain for CST is verified.  Chain for CET is not verified. |

**Menu 5 – Fix chains**

|  |  |  |
| --- | --- | --- |
| Condition | Input | Result |
| No blockchain | NA | There is no chain to fix. |
| Valid input: 0<= input <arrayList.size | **1** | Chain is fixed. |
| Invalid: int<0 or int>= size | **-5** | Error message… please re-entry |
| Invalid: letter or float…etc. other than int | **c** | Error message… please re-entry |