Operational Specification Template

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| **Student** | Gerardo Galván Olvera | **Date** | 3/20/18 |
| **Program** | PSP 2.1 | **Program #** | 6 |
| **Instructor** | Adriana B | **Language** | Python |

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| --- | --- | --- | --- | --- |
| **Scenario Number** | **0** | **User Objective** | To perform the given search | |
| **Scenario Objective** | |  | | |
| **Source** | **Step** | **Action** | | **Comments** |
| Program is used with a positive integer | 1 | Search answer and return it | |  |
| Program is used on a negative integer | 2 | Return an error. | | Throw an error or return error code |
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Functional Specification Template

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| **Student** | | | Gerardo Galván Olvera | | **Date** | 3/20/18 |
| **Program** | | | PSP 2.1 | | **Program #** | 6 |
| **Instructor** | | | Adriana B | | **Language** | Python |
|  | | | | | | |
| **Class Name** | | t\_simpsons | | | | |
| **Parent Class** | | none | | | | |
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| **Attributes** | | | | | | |
|  | **Declaration** | | | **Description** | | |
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| **Items** | | | | | | |
|  | **Declaration** | | | **Description** | | |
|  | students\_t | | | Students T formula. | | |
|  | round\_half | | | Round float to nearest 1/2 | | |
|  | t\_simpsons | | | Approximate T distribution values. | | |
|  | t\_search | | | Search for t\_simpsons input producing a given result. | | |
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State Specification Template

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| **Student** | | | Gerardo Galván Olvera | | **Date** | | 3/20/18 |
| **Program** | | | PSP 2.1 | | **Program #** | | 6 |
| **Instructor** | | | Adriana B | | **Language** | | Python |
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| **State Name** | | | | **Description** | | | |
| Calculating | | | | Program is performing computations. | | | |
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| **Function/Parameter** | | | | **Description** | | | |
| T\_search / Value to look for | | | | Function looks for the integration value producing the presented value | | | |
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| **States/Next States** | | | | **Transition Condition** | | **Action** | |
| none | | | |  | |  | |
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Logic Specification Template

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| **Student** | Gerardo Galván Olvera | **Date** | 3/20/18 |
| **Program** | PSP 2.1 | **Program #** | 6 |
| **Instructor** | Adriana B | **Language** | Python |

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| --- | --- |
| **Design** | * the Operational, Functional, and State templates |
| **References** | * the program’s requirements |
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| **Parameters** | area |
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| def search\_t(p, threshold): |
| Error = math.inf, prev = 0, cur = 0 |
| while error > threshold: |
| calculate |
| Error = cur-prev |
| Return cur |
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