**Area of a circle:** Use Case Documents

|  |  |
| --- | --- |
| **Name:** | Start Up |
| **Summary:** | The application is up and running ready for use |
| **Preconditions:** | System displays a welcome message and ask user to enter values |
| **Triggers:** | (**input option**) - User keys in values |
| **Main Success Scenario:** | Launches Applications |
| **Alternative Success Scenario:** | **N/A** |
| **Post-conditions:** | * System displays a welcome message * System displays input for circumference * System displays input for diameter * System displays input for area * System makes calculations based on the value entered * System displays result * System task completed |
| **Rules:** | To get the actual result of the area of a given circle, the circumference, diameter and area must be entered |
| **Note:** | When the system is up and running, the application opens an input options where each value will be entered |
| **Author:** | Uchechukwu Ferdinand Nkenta |
| **Date:** | 14-Nov-2019 |
| **Version:** | 1.0 |

|  |  |
| --- | --- |
| **Name:** | Triggers input option for the Circumference |
| **Summary:** | User enters the value for Circumference |
| **Preconditions:** | * System Start * System displays enter the Circumference |
| **Triggers:** | User enters the value for Circumference |
| **Main Success Scenario:** | Circumference value input is stored |
| **Alternative Success Scenario:** | **N/A** |
| **Post-conditions:** | System stores the circumference value entered |
| **Rules:** | The calculation wont process if the remaining two values are not yet entered (Diameter and Area) |
| **Note:** | Here the system displays the option to enter the Circumference and it is stored and awaits for the remaining two values to be keyed in. |
| **Author:** | Uchechukwu Ferdinand Nkenta |
| **Date:** | 14-Nov-2019 |
| **Version:** | 1.0 |

|  |  |
| --- | --- |
| **Name:** | Triggers input option for the Diameter |
| **Summary:** | User enters the value for the Diameter |
| **Preconditions:** | * System Starts * System displays Enter the Diameter |
| **Triggers:** | User enters the value for the Diameter |
| **Main Success Scenario:** | Diameter value input is stored |
| **Alternative Success Scenario:** | **N/A** |
| **Post-conditions:** | The value for the Diameter is stored |
| **Rules:** | To get the actual result of the area of a given circle, the circumference, diameter and area must be entered |
| **Note:** | Now that the system has the value for the circumference and the diameter, the next is to enter the area. In which this two is not enough to give the actual result for an area of a circle. |
| **Author:** | Uchechukwu Ferdinand Nkenta |
| **Date:** | 14-Nov-2019 |
| **Version:** | 1.0 |

|  |  |
| --- | --- |
| **Name:** | Triggers input option for the Area |
| **Summary:** | User enters the value for the Area |
| **Preconditions:** | * System Starts * System displays Enter the Area |
| **Triggers:** | User enters the values for the Area |
| **Main Success Scenario:** | Area value input is stored |
| **Alternative Success Scenario:** | **N/A** |
| **Post-conditions:** | The value for the Area is stored |
| **Rules:** | To get the actual result of the area of a given circle, the circumference, diameter and area must be entered |
| **Note:** | With the right circumference, diameter and the area of the circle in place, the system is ready to process the request and make the calculation |
| **Author:** | Uchechukwu Ferdinand Nkenta |
| **Date:** | 14-Nov-2019 |
| **Version:** | 1.0 |

|  |  |
| --- | --- |
| **Name:** | Run Calculations |
| **Summary:** | System runs the calculations based on the users value inputs |
| **Preconditions:** | * System Starts * System makes a background calculations |
| **Triggers:** | System calculation running |
| **Main Success Scenario:** | Processing request/calculation |
| **Alternative Success Scenario:** | **N/A** |
| **Post-conditions:** | * System runs the calculations * System displays the result |
| **Rules:** | To get the actual result of the area of a given circle, the circumference, diameter and area must be entered |
| **Note:** | The System was able to make the process on the condition that all three required values are entered |
| **Author:** | Uchechukwu Ferdinand Nkenta |
| **Date:** | 14-Nov-2019 |
| **Version:** | 1.0 |

|  |  |
| --- | --- |
| **Name:** | Display Result |
| **Summary:** | Print out result to the screen |
| **Preconditions:** | * System Starts * System displays the result * User closes task |
| **Triggers:** | User closes task after the result is printed out |
| **Main Success Scenario:** | Application prints out the result |
| **Alternative Success Scenario:** | **N/A** |
| **Post-conditions:** | * The system displays the result * Option for user to close the task |
| **Rules:** | To get the actual result of the area of a given circle, the circumference, diameter and area must be entered |
| **Note:** | Once the result is printed out, users can verify the accuracy and then close the task |
| **Author:** | Uchechukwu Ferdinand Nkenta |
| **Date:** | 14-Nov-2019 |
| **Version:** | 1.0 |

|  |  |
| --- | --- |
| **Name:** | Close Window |
| **Summary:** | Close the application |
| **Preconditions:** | System Starts |
| **Triggers:** | User clicks on the close window option |
| **Main Success Scenario:** | Application closes or is terminated |
| **Alternative Success Scenario:** | N/A |
| **Post-conditions:** | Application is closed |
| **Rules:** | N/A |
| **Note:** | User closes the application |
| **Author:** | Uchechukwu Ferdinand Nkenta |
| **Date:** | 14-Nov-2019 |
| **Version:** | 1.0 |