# Functional requirements:

# User:

# Service contracts:

1. Service GIS request
2. Add GIS information
3. Modify GIS information
4. Remove GIS information
5. Update GIS Map
6. Verify GIS Map

# Case 1: Service GIS request

# Input values:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input Element | Type | Value Specification | Valid | Invalid | Exceptional Cases |
| XYZ coordinates | string | Non-empty string | Satisfies value specification | Does not satisfy value specification | None |

## Test case generation/use case based test:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test case | Username | Valid | Expected result | Actual result |
| 1 |  | Valid |  |  |
| 2 |  | Valid |  |  |
| 3 |  | Valid |  |  |
| 4 |  | Invalid |  |  |
| 5 |  | Invalid |  |  |

# Case 2: Add GIS information

# Input values:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input Element | Type | Value Specification | Valid | Invalid | Exceptional Cases |
|  |  |  |  |  |  |

## Test case generation/use case based test:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test case | Username | Valid | Expected result | Actual result |
| 1 |  | Valid |  |  |
| 2 |  | Valid |  |  |
| 3 |  | Valid |  |  |
| 4 |  | Invalid |  |  |
| 5 |  | Invalid |  |  |

# Case 3: Modify GIS information

# Input values:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input Element | Type | Value Specification | Valid | Invalid | Exceptional Cases |
|  |  |  |  |  |  |

## Test case generation/use case based test:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test case | Username | Valid | Expected result | Actual result |
| 1 |  | Valid |  |  |
| 2 |  | Valid |  |  |
| 3 |  | Valid |  |  |
| 4 |  | Invalid |  |  |
| 5 |  | Invalid |  |  |

# Case 4: Remove GIS information

# Input values:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input Element | Type | Value Specification | Valid | Invalid | Exceptional Cases |
|  |  |  |  |  |  |

## Test case generation/use case based test:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test case | Username | Valid | Expected result | Actual result |
| 1 |  | Valid |  |  |
| 2 |  | Valid |  |  |
| 3 |  | Valid |  |  |
| 4 |  | Invalid |  |  |
| 5 |  | Invalid |  |  |

# Case 5: Update GIS Map

# Input values:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input Element | Type | Value Specification | Valid | Invalid | Exceptional Cases |
|  |  |  |  |  |  |

## Test case generation/use case based test:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test case | Username | Valid | Expected result | Actual result |
| 1 |  | Valid |  |  |
| 2 |  | Valid |  |  |
| 3 |  | Valid |  |  |
| 4 |  | Invalid |  |  |
| 5 |  | Invalid |  |  |

# Case 6: Verify GIS Map

# Input values:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input Element | Type | Value Specification | Valid | Invalid | Exceptional Cases |
|  |  |  |  |  |  |

## Test case generation/use case based test:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test case | Username | Valid | Expected result | Actual result |
| 1 |  | Valid |  |  |
| 2 |  | Valid |  |  |
| 3 |  | Valid |  |  |
| 4 |  | Invalid |  |  |
| 5 |  | Invalid |  |  |

# Non-functional requirements: