# Project Design Phase II

**Solution Requirements (Functional & Non-functional)**

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| Team ID | PNT2022TMID52764 |
| Project Name | Smart Waste Management system for Metropolitan Cities |
| Maximum Marks | 4 Marks |

# Functional Requirements:

Following are the functional requirements of the proposed solution.

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| **FR.NO** | **Functional Requirements** | **Sub Requirement (Story/Sub-Task**) |
| FR-1 | User registration | Registration through e-mail id & Mobile number |
| FR-2 | User confirmation | Confirmation via email Confirmation via OTP |
| FR-3 | Web application | Node-Red -Service |
| FR-4 | Configure to Device | IBM Watson IOT Platform |
| FR-5 | Database | Detailed database of bins and stands |
| FR-6 | Python Script | IBM IOT Platform |

# Non Functional Requirements

Following are the non-functional requirements of the proposed solution

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| **FR.NO** | **Non-Functional Requirement** | Description |
| NFR-1 | **Usability** | The reduction of waste |
| NFR-2 | **Security** | Prediction in bin fulness |
| NFR-3 | **Reliability** | Effective waste disposal |
| NFR-4 | **Performance** | Optimize source allocation, reduce running costs and increase sustainability of waste services |
| NFR-5 | **Availability** | Available for the allocated time by the municipality or the private companies |
| NFR-6 | **Scalability** | This is very effective in managing waste in big city. Here priority system is used to clean the city all the time without any overflowing dumpsters |