

ORGANIZATION	National Institute of Urban Affairs (NIUA)
FUNCTIONAL TITLE	Technical IT Manager
LOCATION	New Delhi

Swachh Bharat Mission-Urban (SBM-U):

Swachh Bharat Mission-Urban (SBM-U) 2.0 aims to achieve;

- Garbage Free cities through Sustainable Solid Waste Management
- Sustainable Sanitation and treatment of used Water
- Awareness creation and,
- Creation of institutional capacity

Building on the success of the first phase, Swachh Bharat Mission 2.0 aims to expand the efforts on several aspects related to sanitation and public health. In the past seven years of Swachh Bharat Mission, around 63 lakh individual household latrines (IHHLs) and over 6.3 lakh community toilets (CTs) and public toilets (PTs) have been built across India.

In order to sustain the Open Defecation Free (ODF) status and ensure that no slippage occurs, the Ministry of Housing and Urban Affairs (MoHUA) has introduced the ODF+ and ODF++ protocols and Water+ protocols. ODF++ protocol focuses on addressing safe containment, evacuation, transportation and processing of fecal sludge from toilets and ensuring that no untreated sludge is discharged into open drains, water bodies or open fields. Water+ protocol helps ensure that no untreated waste (used) water is discharged into the open environment or water bodies.

About the National Institute of Urban Affairs (NIUA):

Established in 1976, the National Institute of Urban Affairs (NIUA) is a premier institute of the Ministry of Housing and Urban Affairs, Government of India, for research and capacity building for the urban sector in India. NIUA's broad objective is to bridge the gap between research and practice on issues related to urbanization. For more than 40 years now, NIUA has been the vanguard for contributing to and building the urban narrative for a fast evolving urban India. The Institute has been actively working on bringing forth key areas of concern for urban India in order to build the urban discourse at various urban scales. It has utilized its competencies in research, knowledge management, policy advocacy and capacity building to address urban challenges and continuously striving to develop sustainable, inclusive and productive urban ecosystems in the country. It has emerged as a thought leader and knowledge hub for urban development in India and is sought after by

both Indian and international organizations for collaborations and partnerships in India's urban transforming journey. NIUA is committed towards aligning its efforts towards achieving Sustainable Development Goals (SDGs) through all its initiatives and programmes.

National Urban Digital Mission (NUDM):

In this context, it may be noted that MoHUA has launched the National Urban Digital Mission (NUDM) in February 2021 to digitalize the urban citizen services in the country with the intent of improving transparency, governance, Ease of Living (EoL) and Ease of Doing Business (EoDB). National Institute of Urban Affairs (NIUA) has been nominated as the anchor institution for implementation of NUDM and works closely with all the States / UTs for Mission implementation. The NUDM currently anchored by the Centre for Digital Governance (CDG) Team at NIUA shall become the vehicle for activating the proposed initiative under Swachh Bharat Mission, ensuring necessary convergence of the programs/schemes for achieving positive transformation in delivery of citizen services.

To facilitate the online delivery of urban services in the States / UTs, a shared Digital Public infrastructure in the form of Urban Platform for Delivery of Online Governance - UPYOG has already been developed with ready-to-use 18 reference applications for providing Government to Citizens (G2C), Government to Business (G2B) and Government to Government (G2G) services for improving Ease of Living, Ease of Doing Business and internal efficiencies of ULBs. These 18 reference applications include Property Tax Assessment and Payment, Online Building Plan Approval System, Public Grievance Redressal, Trade License Issuance and Payment, No-Objection Certificate Issuance, Water and Sewerage Connection Management, NMAM-Compliant Municipal Accounting and Finance, Birth and Death Certificates, Miscellaneous Collections and Desludging Service, Pet Registration, Community Hall Booking, Advertisement/Hoardings, Asset Management, E-waste Management, Street Vendors Management.

The development and rollout of the proposed Integrated Service and Information Management Infrastructure for Desludging shall therefore leverage the UPYOG platform, owing to the availability of existing infrastructure.

Responsibilities:

- Oversee the design, implementation, and maintenance of IT infrastructure related to sanitation projects;
- Ensure the availability, security, and performance of IT systems deployed
- Analyze and evaluate business requirements, consult with key stakeholders and identify areas for the development of technical solutions to automate and/or improve business processes
- Translate business requirements into clear and concise functional specifications for technical teams
- The candidate will be responsible for coordinating with the system integrator, NIUA and concerned ministries”.
- Creation of requirement documents, process flows, use cases and other technical documents such as BRS, SRS and FRS.
- Collaborate with technology teams to design solutions that meet business needs.
- This would be more of a managerial role rather than a developer/coder role.
- Collaborate with project managers to define project scope, objectives, and deliverables
- Participate in system testing, user acceptance testing, and validation of implemented solutions
- Identify areas for process optimization, recommend process improvements and assist in their implementation
- Collaborate with domain experts to develop custom software solutions tailored to the specific needs of projects; implement and maintain software applications
- Design and manage databases related to sanitation data, ensuring data integrity and accessibility
- Develop data analytics and reporting tools for the projects Integrate various IT systems used in sanitation projects to streamline workflows and enhance efficiency
- Implement IoT solutions for real-time monitoring of sanitation processes
- Conduct regular security assessments and audits
- Provide training to personnel of Urban Local Bodies (ULBs) on the use of IT systems and software and offer technical support and troubleshooting assistance as needed
- Support Rural Local Bodies (RLBs) for providing training to personnel on use of IT systems and software and offer technical support and troubleshooting assistance as needed.

Skills, Qualifications, and Experience:

- Bachelor's degree in Computer Science, Software Engineering, or a related field (or equivalent work experience)

- A minimum of 8-15 years of related experience
- Proven experience as a business analyst
- Strong understanding of microservices architecture and its principles
- Proficiency in front-end technologies such as HTML, CSS, JavaScript, and modern front- end frameworks like React.js
- Experience with back-end technologies and frameworks such as Java, Bash, Shell, Spring boot and Node.js
- Familiarity with Git/Open Forge for version control and collaboration
- Knowledge of RESTful API design and implementation
- Ability to work collaboratively in a team environment and communicate effectively
- Understanding of DevOps tools and CI/CD pipeline
- Knowledge of server-side technologies, databases (PostgreSQL preferably), APIs and ability to understand system architecture and technical documentation
- Understanding of various IDEs such as VS Code, Eclipse, etc.
- Experience with containerization and orchestration technologies (e.g., Docker and Kubernetes) is a plus
- Assist in integrating external APIs and third-party services into backend systems
- Configure and manage web servers, databases, and JSON files for optimal performance and security
- Create and maintain RESTful and Swagger APIs for communication with front-end systems
- Design and optimize database schemas and queries for efficient data storage and retrieval
- Strong communication skills and the ability to work within project schedules and deadlines.

Last Date to Apply: 25 July, 2025.

Application process: Submit your application through the NIUA Job Portal.