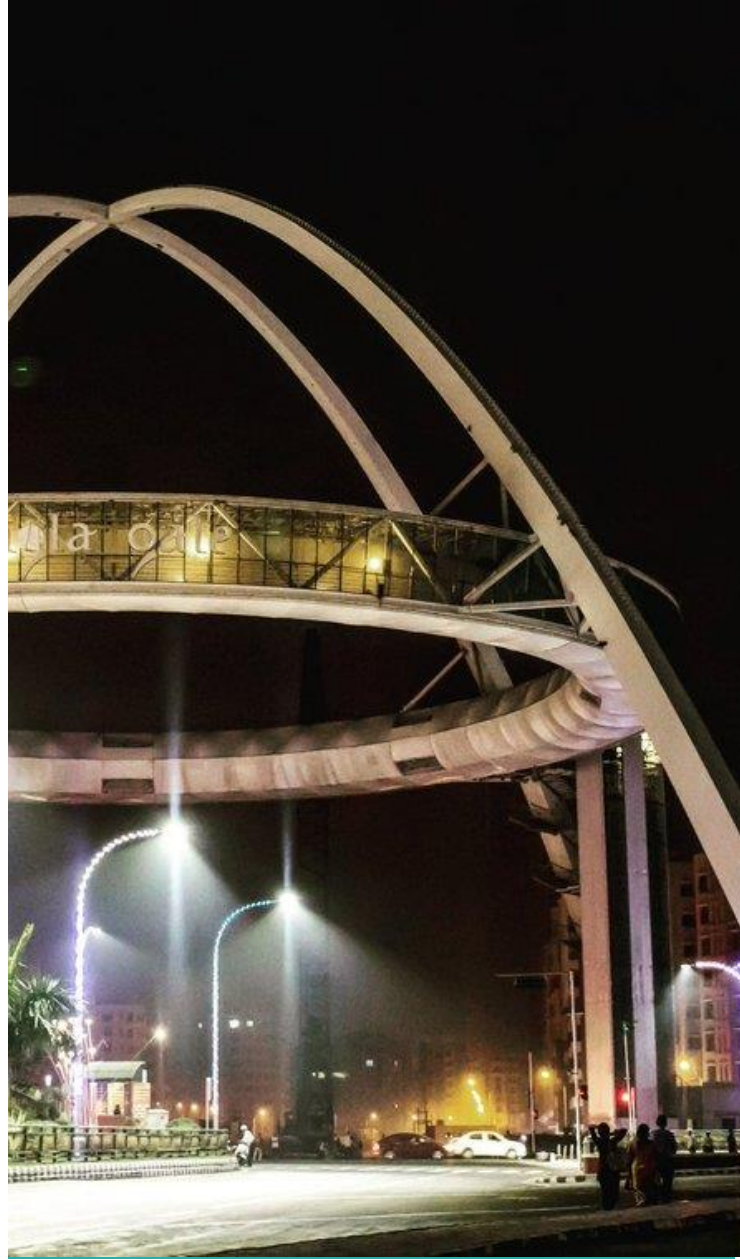


WATER HACKATHON

OCTOBER 5

NEW TOWN KOLKATA GREEN SMART CITY
CORPORATION LIMITED



Background

New Town Kolkata has been selected as a Smart City under the Smart Cities Mission, Government of India. New Town Smart City aims to incorporate various smart technology and effective techniques to combat climate change and natural disasters. For this reason, New Town Smart City invites students, professionals and organisations all over the country and world to participate in an online hackathon aimed at improving the water and drainage network in the city. Selected ideas may be incubated by New Town for actual on-ground implementation.

Objective

New Town Kolkata Green Smart City is launching a Hackathon to solve some of the most pressing problems faced by the city administration in improving the water and drainage network at New Town. The objective of the hackathon is:

1. To inculcate a culture of innovative thinking and problem solving.
2. Generate ideas to ensure climate resilient infrastructure and better disaster preparedness to increase the quality of life in urban areas.
3. Promote innovative out-of-box thinking, data driven decision making, intelligent warning systems and crowdsource problem solving of water management related challenges.

Participant

The Hackathon is open for students (undergraduate and above), researchers, professionals, start-ups and corporates. The Hackathon will have three rounds, with the finalists of the first round being eligible to present their solutions to a grand jury in round 2, and implement the same in round 3 post which the winners will be declared.

Team Guidelines

Each team shall consist of a maximum of four participants. It is expected that they brainstorm on the problem statements provided and come up with innovative ideas to solve the issues presented. The teams may use open source data, research existing solutions implemented around the world or come up with new ideas to develop their solution.

Teams may consist of a mixed group of students, professionals, business thinkers and data enthusiasts.

Team Eligibility

Undergraduates and above including professionals.

Four members per team not necessarily from the same institute/organization

JUDGING CRITERIA

Teams shall be judged on the following parameters in both rounds:

1. Identification of existing pain points and areas of improvement
2. Out of the box thinking (already existing vs new solution)
3. The practicality of the proposed solution
4. Cost-effectiveness of the solution
5. Ease of scalability
6. Sustainability of the solution
7. Risks, Issues and Mitigation plan
8. Quick to implement solutions would be appreciated

ROUND 1 – ONLINE SUBMISSION OF CONCEPT NOTE

A 10 page concept note has to be submitted. A presentation format is available for download from the website. The jury will verify the concept note. Please structure your idea under the following guidelines.

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1. Team Name and Team members
 2. Problem Statement Chosen (Out of four)
 3. Idea: Brief understanding of the Problem Statement
 - Proposed Solution
 - Overview of Working of the Proposed Solution
 - Intended Beneficiary/user segment and how it helps them
 - Relevance in New Town Smart City
 - Potential Impact; the impact metrics that one can use to analyze the effect of the solution
 - Financial implications
 - Ease of implementation - Stakeholders involved, Infrastructural requirements
 - Potential risks and mitigation plan.
 4. The submission must be limited to 10 pages max. including pictures, flow diagrams, algorithms if any.

ROUND 2 – PRESENTATION TO JURY OF PROBLEM STATEMENT

1. The shortlisted teams from ROUND 1 shall appear for a presentation in front of a jury. This shall be an Online presentation.
2. A fixed time will be allocated for each presentation. 15 mins to pitch the solution & 10 mins for Q & A
3. The teams selected by the jury will have an option to work on a prototype of their solution subject to a maximum cost consideration of INR 5 lakhs

ROUND 3 – IMPLEMENTATION OF THE SOLUTION

1. The shortlisted teams from ROUND 2 shall implement their ideas on the ground on a pilot basis.
2. The solution shall be evaluated by NKDA/ NKGSCCL and PHED officials post which the winners will be declared.

PROPOSED TOPICS FOR SUBMISSION

1. Designing of Smart Solution including sensors and apps for Monitoring the underground drainage networks in urban areas. The solution can comprise of an intelligent prediction system for siltation and other parameters.
2. Designing a Smart Solution for cleaning of gully pits, underground sewer system and underground drainage systems.
3. Monitor the quality of water outflow from construction sites in cities with an alert system based on the colour of water and other parameters.
4. Automatic monitoring and control of sluice gates and flaps through apps in the Canals using CCTV and sensors.
5. Devise apps that intelligently combine real-time data from rainfall, canal levels, tide times and drainage water levels to predict water logging at various sites in real time.

IMPORTANT DATES

Last Date of Submission: 5th December, 2021

SUBMISSION LINK

Please mail your submissions to: waterhackathon@nkda.in