

The DC's Fellowship Program

UDAL

Urban and District Advancement through
Localising Innovations



inunity | innovation
for community



WHAT IS UDAL?

UDAL is a platform for students and innovators to work on real-world civic issues in Dakshina Kannada, mentored by experts and supported by the District Administration.

A Civic Innovation Challenge democratizes the power of innovation.

THEMES



SUSTAINABLE CITY

Driving environmental transformation in Mangaluru by addressing single-use plastic reduction, promoting sustainable waste management, and enhancing green initiatives.



PUBLIC HEALTHCARE SERVICE

Digitizing healthcare services at Wenlock Hospital, including streamlined medicine dispensary operations and blood dispatch tracking for improved efficiency and transparency.



URBAN CITY PLANNING

Improving urban infrastructure through effective road and construction management solutions tailored to the city's evolving needs.



DISASTER MANAGEMENT

Mitigating monsoon-related waterlogging by analyzing and optimizing the location and functionality of urban drainage systems.

WHY JOIN?



Get selected as a DC's Fellow

Work closely with the Deputy Commissioner & the city corporation departments on real civic innovations. Get mentored by industry & government experts.



Be recognized for your contribution

Receive the title "Most Innovative Citizen of the District," a letter of appreciation from the DC, and on-stage recognition at the MVP Showcase.



Build a standout portfolio

Showcase live projects that solve district-level problems—not just classroom assignments.



Opportunity to build your Social Enterprise/Startup

Get exclusive access to challenges at District level that has potential for Global impact. Access to Funds and Mentorship for your startup,

PHASE & TIMELINE (JUNE–OCTOBER 2025)

UDAL Challenge Launch

The UDAL program officially launches with open applications for students, mentors, and institutions

May 15

UDAL Ideation Challenge

Submit the Ideas for the themes that resonate with you. Fill your profile with greater details to improve your chances.

June 15
(Submission Deadline)

Announcement of DC's Fellows

Applications are shortlisted based on the criteria; Top 10 Fellows are paired with department Champions to solve the pressing challenges.

June 20
(Fellowship Deadline)

On-Ground Work & 5-Week Sprints

Selected teams conduct field visits to understand real-world issues. Government departments present challenges, and expert lead sprints are conducted on Ideate Different Solutions

June 23 – July 26
(Weekly sprints & Demo)

Minimum Viable Product Development

Teams begin developing their solutions with mentorship and regular feedback. The MVP developed will be tested on the field for feedback.

July 28 – Aug 23
(Weekly sprints & Demo)

Demo Day across the City Corporation Dept

Teams present their final solutions to a jury. Outstanding projects receive recognition, certificates, and potential opportunities for funding and incubation support.

August 30

Pilot Implementation across themes (8-week Sprint)

The selected projects will be provided with the assistance and the funds to pilot in a specific ward or department within the themes. Upon successful adoption, the teams will be given the assistance to scale it across the sector.

Sept 1 – Oct 30
(Weekly sprints & Demo)

PERKS OF FELLOWSHIP



Insights into
city's challenges



Scholarships
for Top teams



Expert
mentorship



Architect
your city



Innovative
Citizen Award

BE A CHANGEMAKER

ELIGIBILITY CRITERIA

For Students

- Above Age 18+, Pursuing UG or PG programs from any academic institutions* (Engineering, Arts, Science, Commerce, etc.)
- Work from the DC's office and willingness to travel on-site
- Passionate about solving problems, working in teams & quick learner

SELECTION CRITERIA

- Demonstrate leadership, self-motivation and resilience through previous works
- Alignment of personal interest & purpose with the objective of the program
- Preferences for Feasible, Innovative ideas submitted that can be implemented through modern tools and technologies (The innovation can be - process, product or service)

1.  Select a Challenge from the themes
2.  Submit your Idea
3.  Interview if shortlisted
4.  Announcement of Fellows

*Preference for participants from Dakshina Kannada

Professionals as Mentors

- Working professionals, researchers, or domain experts who have prior experience or can contribute to the themes
- Demonstrate Knowledge of Tools, domain, or technology through previous work, publications or any other IP
- Willing to contribute 2 hours/week for 6 months to guide the teams

CONTACT INFORMATION

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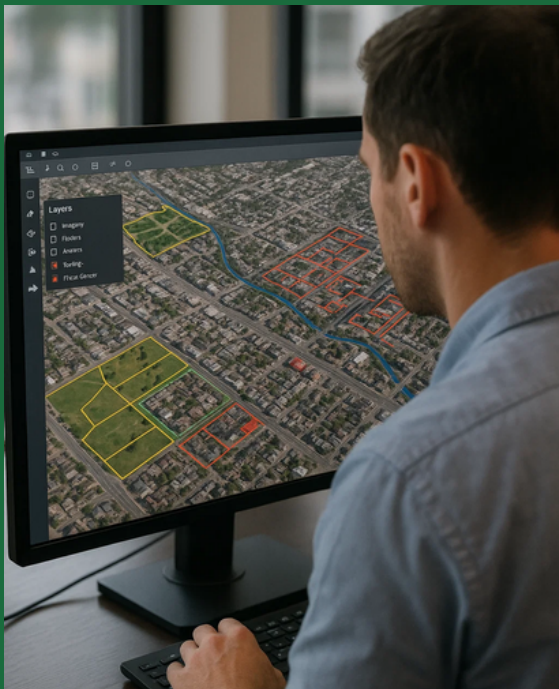
APPLY AS A PARTICIPANT



JOIN HANDS AS MENTORS



THEME: URBAN CITY PLANNING



Coordinated Scheduling of Road & Infrastructure Works

Core Issue

Lack of a centralized system for scheduling and coordinating roadwork and infrastructure projects, leading to inefficiencies and repeated digging.

Constraints

- Fragmented data across departments
- Absence of a unified digital planning system
- Contractors work independently
- Limited enforcement of digging schedules
- No shared visual map for ongoing work

Context

In each ward, multiple infrastructure agencies and contractors dig roads for different projects—laying pipelines, cables, repairing drainage—without awareness of others’ timelines. This leads to resource wastage and public inconvenience. The DC seeks a city-wide view to allocate digging permissions based on priority and to minimize duplication.

Groundwork to be considered

- What tools or platforms could be used to map existing underground utilities?
- How can one gather reliable data about who laid which pipe, and when?
- Are there existing regulations requiring utility companies to submit pipeline details?
- What sort of visual representation (e.g., GIS-based layers) would help in accountability?
- How would public access to this data improve transparency?
- What case studies from other cities could inspire the approach?

Stakeholders

- Municipal Engineering Department
- Water Supply & Drainage Board
- Private utility providers (e.g., telecom, gas companies)
- Residents and local businesses
- District Commissioner & Smart City Cell
- Civil engineers and planners

THEME: URBAN CITY PLANNING



Using Geospatial Data for Urban Planning

Core Issue

Urban planning decisions often happen in isolation without a unified geospatial view, leading to fragmented development.

Constraints

- Low adoption of geospatial tools by city officials
- Departmental data not standardized or sharable
- Limited GIS-trained manpower
- Lack of cross-departmental collaboration
- Expensive or underutilized mapping platforms

Context

Multiple departments (roads, sanitation, utilities, environment) initiate projects without visualizing how their plans interact on a city-wide scale. GIS (Geographic Information System) and geospatial tools can help integrate land-use planning, traffic flows, population densities, and infrastructure layouts for informed decision-making.

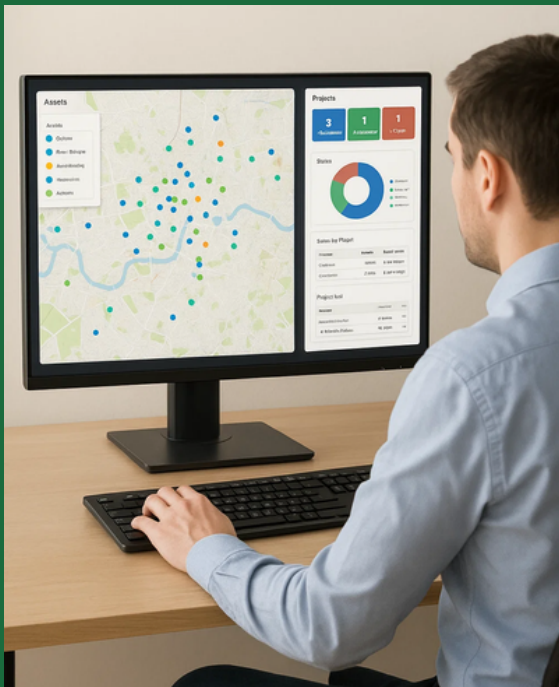
Groundwork to be considered

- What datasets currently exist and who owns them?
- How can spatial data be layered to reveal hidden issues (e.g., drainage + elevation)?
- Are there open-source or cost-effective GIS tools that can be adopted?
- What governance model would support a shared data platform?
- What kind of capacity building or partnerships are needed?

Stakeholders

- Town Planning Department
- Smart City Office
- GIS & IT Consultants
- Utility and Infrastructure Departments
- Residents and Urban Activists

THEME: DISASTER MANAGEMENT



Accountability in Stormwater Drainage Through Pipe Mapping

Core Issue

Unmapped or undocumented drainage pipelines lead to flooding and public inconvenience, with no accountability during monsoon failures.

Constraints

- No centralized or publicly accessible map of underground utility pipelines
- Lack of legal enforcement to mandate submission of pipeline data
- Limited technical tools in use for utility mapping or fault tracing

Context

During the monsoon, certain city roads repeatedly flood due to stormwater drainage issues. Many underground pipelines—laid by both public agencies and private players—drain directly onto roads or are damaged, blocked, or poorly maintained. Because these pipelines are not properly documented or mapped, it becomes difficult to identify the responsible party and take corrective action.

Groundwork to be considered

- What tools or platforms could be used to map existing underground utilities?
- How can one gather reliable data about who laid which pipe, and when?
- Are there existing regulations requiring utility companies to submit pipeline details?
- What sort of visual representation (e.g., GIS-based layers) would help in accountability?
- How would public access to this data improve transparency?
- What case studies from other cities could inspire the approach?

Stakeholders

- Municipal Engineering Department
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THEME: PUBLIC HEALTHCARE SERVICE



Digitizing Medicine Access in the Wenlock Government Hospital

Core Issue

Patients at Wenlock Hospital face delays in receiving prescribed medicines due to a slow, manual approval process involving multiple administrative layers.

Constraints

- Manual approval system without real-time tracking
- Hierarchical bottlenecks in the prescription-to-dispensation process
- No digital logs of medicine stock, usage, or expiry
- Limited staff and overworked departments
- Absence of hospital management software adoption

Context

Wenlock Hospital, a major public healthcare facility, requires every prescription to be routed to a senior health officer (like a District Health Officer – DHO) for approval before medicines are issued. This leads to long delays, particularly for low-income patients dependent on public healthcare. The lack of a digital workflow slows down treatment and strains hospital staff.

Groundwork to be considered

- What are the current approval steps for medicine allocation and who authorizes them?
- What kind of health IT systems are used, if any?
- How are stocks currently tracked and updated?
- Could mobile or web-based apps streamline requests and approvals?
- What safeguards would need to be in place for accountability and misuse prevention?

Stakeholders

- District Health Officer (DHO)
- Hospital Administrators & Doctors
- Pharmacy Staff
- Patients and their families
- Health IT Department / NIC (National Informatics Centre)

THEME: PUBLIC HEALTHCARE SERVICE



Real-Time Blood Availability for Critical Patients

Core Issue

Patients at Wenlock Hospital, especially critical and terminally ill patients, often lack real-time information on the status of blood availability after allocation.

Constraints

- No centralized system to track or update the status of blood allocation
- Manual processes (phone calls, paper slips) dominate communication
- Limited use of technology to share updates with patients or caregivers
- Regulatory concerns around medical data sharing

Context

In emergency cases like trauma, surgery, or advanced illnesses, patients depend on timely access to blood. While blood banks handle donations and allocations, patients and their families are frequently left in the dark after the blood is requested or approved. The absence of a real-time tracking or notification system causes confusion, stress, and potential medical delays. This lack of transparency can become life-threatening when every minute counts.

Groundwork to be considered

- How is blood currently requested, allocated, and communicated to patients?
- What systems (digital or manual) are being used for internal tracking?
- Are there low-cost or mobile-based solutions for notifying patient families?
- What kind of real-time dashboard could be useful for internal and external users?
- What are the privacy, security, and compliance requirements?
- How can awareness and training improve adoption of a new system?

Stakeholders

- Blood Bank Staff and Technicians
- Hospital Doctors and Nurses
- Patients and Caregivers
- District Health Officials
- Hospital IT/Administration Team
- NGOs involved in blood donation and awareness

THEME: SUSTAINABLE CITY



Enforcing a Ban on Single-Use Plastics

Core Issue

Despite policy bans, single-use plastics remain in circulation due to poor enforcement and limited awareness among businesses and consumers.

Constraints

- Poor monitoring and penalty mechanisms
- Resistance from small business owners
- Inadequate supply of eco-friendly alternatives
- Low public awareness and behavior change
- Lack of inter-agency coordination

Context

The city has banned items like plastic bags, cutlery, and packaging materials, yet these continue to be used—especially by small retailers and vendors. Weak enforcement, low-cost availability, and lack of accessible alternatives keep the plastic economy running informally.

Groundwork to be considered

- What are the most commonly used plastic items and where are they sourced from?
- What incentives or deterrents currently exist?
- What role can education and awareness play in curbing usage?
- How could local innovation support the creation of alternatives?
- Can waste audits or mapping plastic hotspots guide interventions?

Stakeholders

- Pollution Control Board
- Urban Local Bodies
- Traders' Associations
- Waste Management Contractors
- NGOs and Environmental Activists
- General Public