BHASKARACHARYA NATIONAL INSTITUTE FOR SPACE APPLICATIONS AND GEO-INFORMATICS

WEEKLY PROGRESS REPORT (16/02/2026 – 22/02/2026)

WEEK 11

PROJECT NAME	DIGITAL TOWN PLATFORM

PROJECT DESCRIPTION :	**DESIGN TO PROVIDE TOWN-LEVEL INFORMATION, SERVICES,THROUGH A SINGLE SYSTEM**
GROUP MEMBER :	**Vandit Muniya, Mitanshu Parmar**
GROUP ID :	**2025G152**
GROUP GUIDE :	**Dr. MANOJ PANDYA**
GROUP COORDINATOR :	**SIDHDHARTH PATEL**
COLLEGE GUIDE NAME :	**NEHA FOTEDAR**
COLLEGE GUIDE No. :	**NOT ASSIGNED**
COLLEGE GUIDE EMAIL. :	**Nehafotedar.ce@ddu.ac.in**
COLLEGE NAME :	**DHARMSINH DESAI UNIVERSITY,NADIAD**

16/02/2026	• **Vandit Muniya: Absent.** • **Mitanshu Parmar: Initiated implementation of interactive manual location selection. Integrated `useMapEvents` from `react-leaflet` to capture map click events and enabled draggable functionality for the "Your Location" marker. Structured `onUserLocationChange` prop flow for parent-child communication.**
17/02/2026	• **Vandit Muniya: Implemented `handleManualLocationChange` in `Services.jsx` to update `currentLatLng` state based on user interaction. Connected updated coordinates with service-fetching workflow and ensured smooth state updates.** • **Mitanshu Parmar: Integrated reverse-geocoding API (`/api/location/reverse-geocode`) to dynamically fetch city/area name from selected coordinates and update UI location display.**
18/02/2026	• **Vandit Muniya: Ensured integration between map interaction and backend location APIs. Verified that `useEffect` dependency on `currentLatLng` automatically triggers `fetchNearbyPlaces` after manual location change.** • **Mitanshu Parmar: Performed frontend testing for multiple scenarios (marker dragging, map clicks, rapid coordinate updates) and validated stable rendering without unnecessary re-renders.**
19/02/2026	• **Vandit Muniya: Resolved `undefined coordinates` issue in `ServiceMap.jsx` by standardizing backend GeoJSON response format and ensuring consistent `location.coordinates` structure.** • **Mitanshu Parmar: Added validation checks before marker rendering to prevent crashes due to missing or invalid location data. Conducted edge-case testing.**

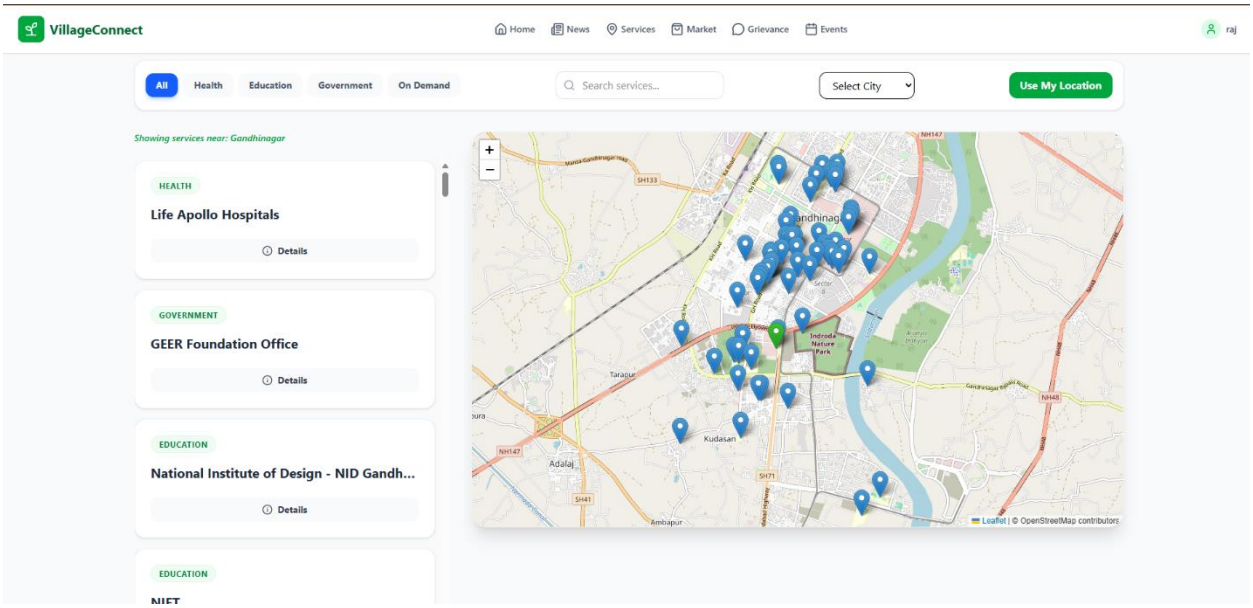
20/02/2026	• **Vandit Muniya: Refined Service Provider role architecture (user, service_provider, admin) and implemented controlled role upgrade logic in backend. Improved authorization structure for scalability.** • **Mitanshu Parmar: Implemented and tested role-based middleware for secure access to service-provider-specific routes. Verified route protection and permission handling.**
21/02/2026	• **Vandit Muniya: Optimized geospatial radius-based service fetching logic and improved controller-level error handling. Refactored service response schema for better frontend compatibility.** • **Mitanshu Parmar: Conducted API response validation for location-based service retrieval, verified distance calculations, and confirmed consistency of returned service data.**
22/02/2026	**Holiday (Sunday)**

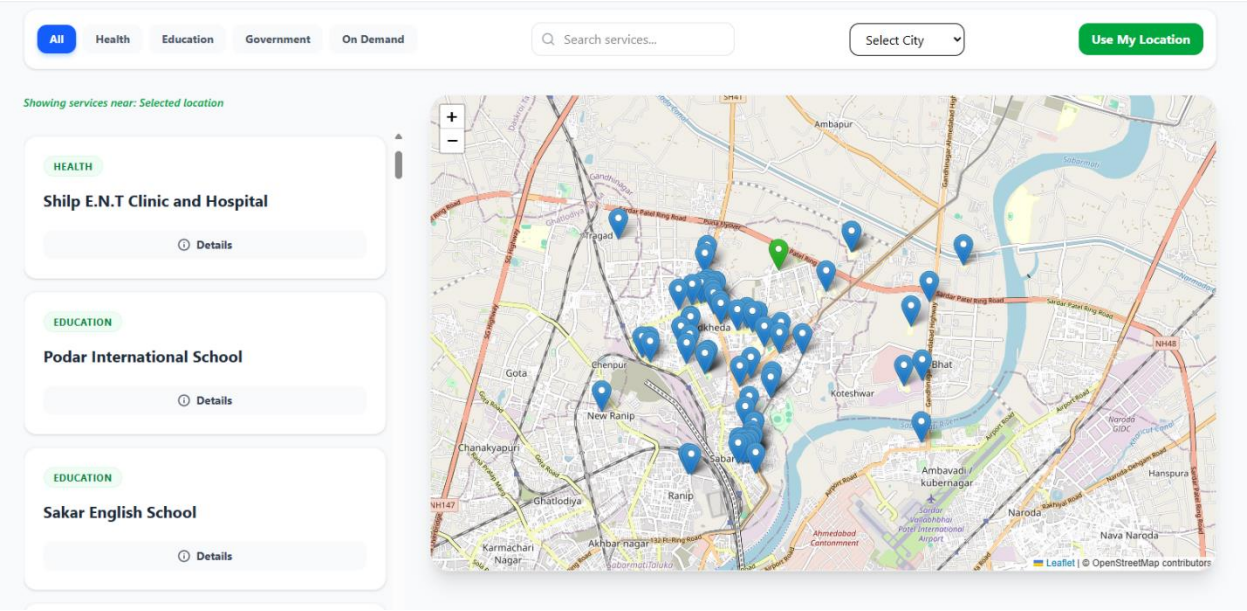
Next Week Plan	• **Continue development of the Marketplace module by refining seller workflows, improving dashboard experience, and stabilizing cart and order management logic.** • **Enhance role-based access control to properly manage Buyer, Seller, Service Provider, and Admin functionalities without conflicts** • **Improve admin-side management features, including reviewing and handling seller applications more efficiently.**

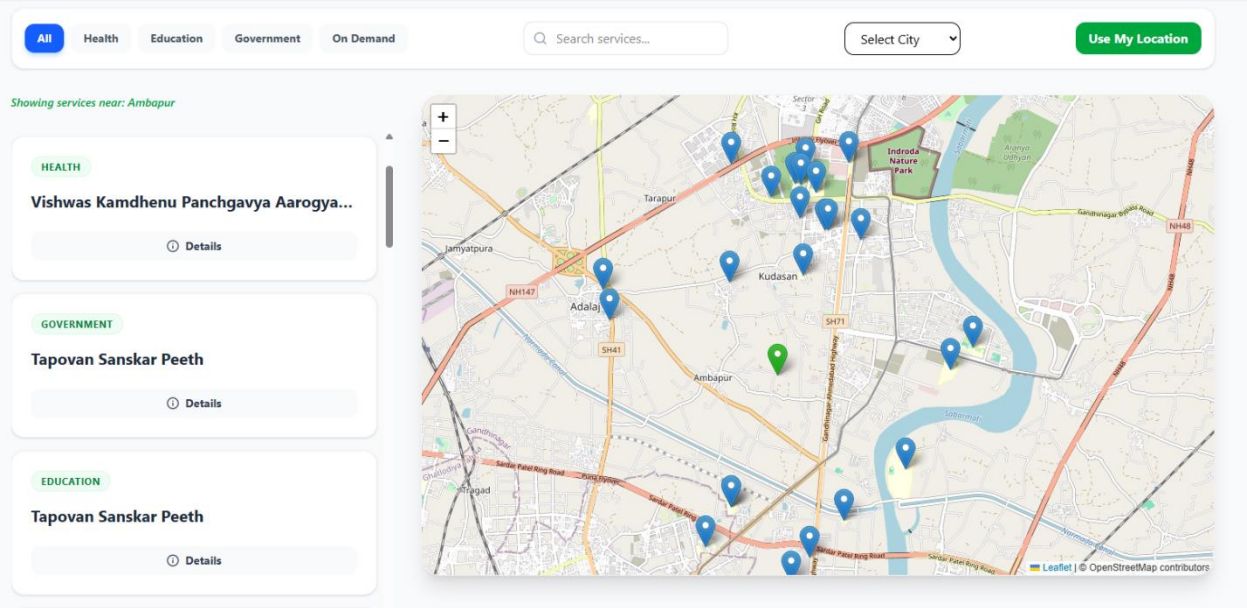
Github link:

https://github.com/MeetanshuP/Digital_Town_Management

SCREEN SHOTS :



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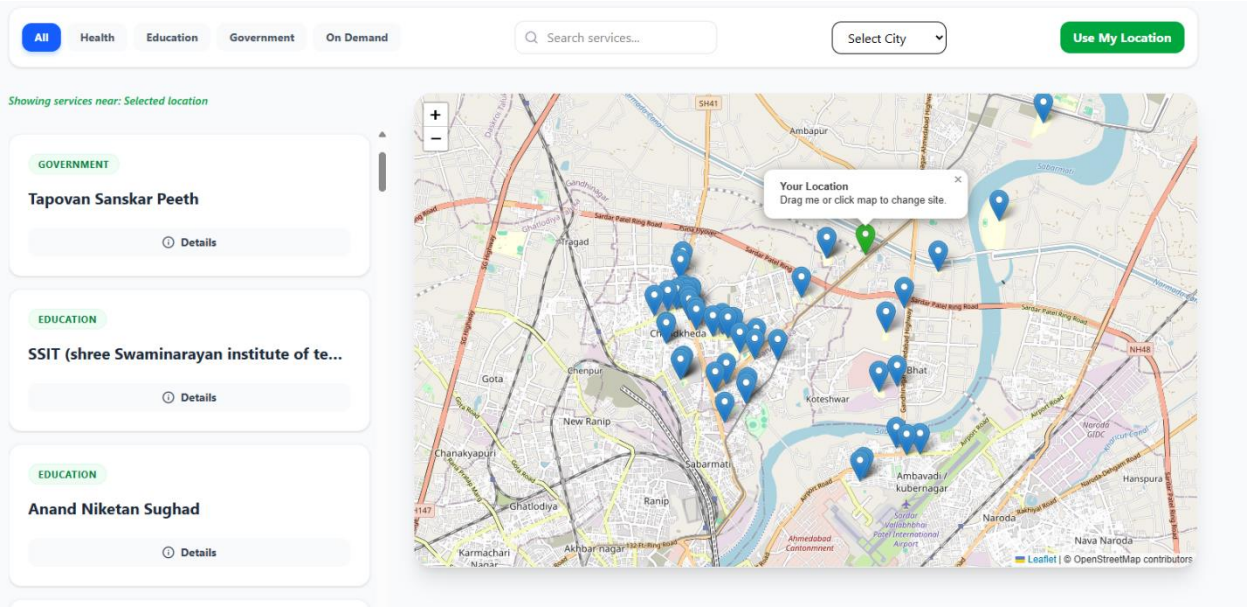
Indroda Nature Park
Leaflet | © OpenStreetMap contributors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