

BRICKBYBITS

A DEMO

<https://kyra-anand21.github.io/brickbybit/>

This is the starting page!

Aside from the sleek modern format this page

also allows users to toggle between the map and the user feedback page.

This page also allows for users read a bit more about the creators of the site

The screenshot shows the homepage of the BrickbyBit prototype tool. The background is a photograph of a dense urban cityscape at dusk or night. In the top left corner, there is a navigation bar with links to "Home", "Map", and "Form". The main title "BRICKBYBIT" is centered in large white capital letters. Below the title is a subtitle: "A prototype tool for city planners, architects and environmental engineers to assist the analysis and creation of sustainable cities, presented by NextByte." A blue button labeled "Go to the Map" is positioned below the subtitle. In the bottom half of the page, there is a section titled "ABOUT US" in white capital letters. It contains five circular profile pictures of young women, each with a name and a brief description below it. The names are Shreya Kopuri, Sanaya Patil, Aimal Jatoi, Kyra Anand, and Nikita Nair. The descriptions indicate they are all Year 12 students at Dubai College, except for Nikita Nair who is a Year 11 student at Jumeirah College.

Home Map Form

BRICKBYBIT

A prototype tool for city planners, architects and environmental engineers to assist the analysis and creation of sustainable cities, presented by NextByte.

Go to the Map

ABOUT US

We are a team that's passionate about building the next generation of healthy, sustainable cities, combining data science, machine learning, and sustainable urban development to create innovative solutions that balance environmental health, societal progress and human well-being.

Shreya Kopuri
Year 12 student at Dubai College

Sanaya Patil
Year 12 student at Dubai College

Aimal Jatoi
Year 12 student at Dubai College

Kyra Anand
Year 12 student at Jumeirah College

Nikita Nair
Year 11 student at Dubai College

Home Map Form



This is the core of our project: the map page! This page visually represents all of our data points where urban developers may access information by clicking on the icons

This page would fetch data from NASA databases for the coordinate as well as any suggestions submitted by residents within 5km of the selected coordinate. It would then use the data provided and analyse it using AI models to generate risk percentages as well as recommendations for the location

Home Map Form

[Go back to Map](#)

AL NUAIMIA - ADMAN, UAE



Suggestions...

"Everytime I go to buy my signature iced latte with double whip, vanilla and 2 shots of espresso it is sold out!! There needs to be better management of resources for our population." - a young woman, sullen without her caffeine

"I am a young graduate struggling slightly to find a job within the area, I was wondering if this could be helped?" - a hardworking ex-student

"I am so thirsty all the time! Why is it so hot out here? Maybe I should have taken those paper straws after all..." - an exhausted individual, clearly requiring water

Statistics

Population Density (per hectare): 7.11
Temperature (°C): 32
Relative Humidity (%): 59.5
Windspeed (km/h): 6.5
Air Quality Index: 97 (Moderate)
Wastage: 1 million tons
Employment Rate: 70%
Economic Output: \$10.9 billion

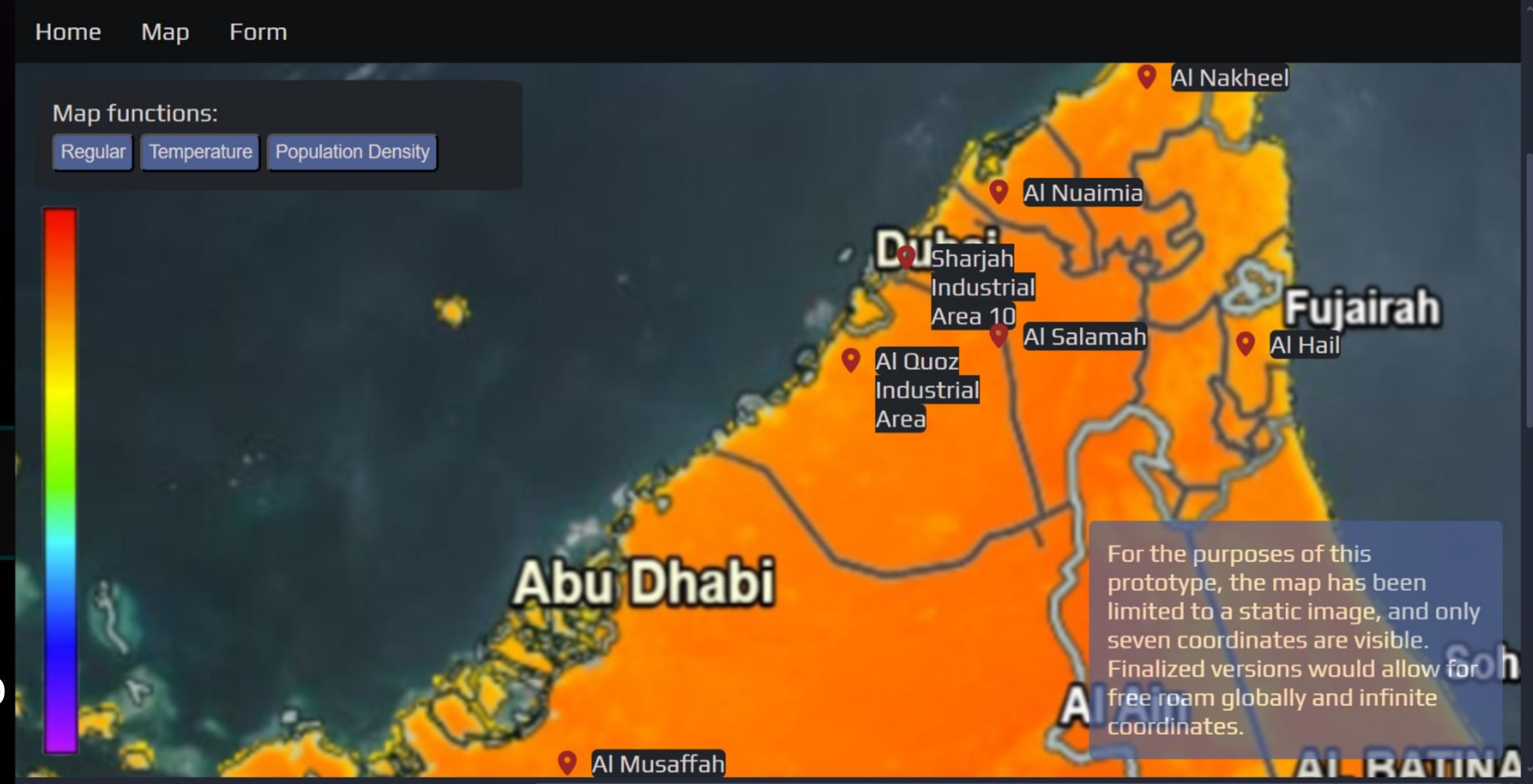
Risk Percentage: 51.21%

Population: 61.53%
Temperature: 45.45%
Humidity: 96.67%
Wind Speed: 1.22%

Comments

Very high humidity increases discomfort; wear breathable clothing and hydrate.
Small economy with decent employment
Moderate air quality and manageable waste levels.

This is the heat map option on the map which the user may access by clicking on the heat map button. It is a detailed representation of heat data taken from the nasa website with a scale bar to indicate level





This toggle displays the population density heat map of the area, taken from NASA databases. This allows urban developers to see a brief overview of areas with high vs low population density, impacting where they build. In future versions, additional heat maps may also be included

This form would allow regular citizens to submit issues and challenges they face in their own location. It takes the user's location based on IP address, and submits complaints onto the page displayed to the urban developers. This allows for greater cohesion between citizen needs and projects, implementing a bottom up approach in urban development.

Home Map Form

CONTRIBUTE TO LOCAL DEVELOPMENT!

If you would like to submit information on your area, please fill out the form below with as much detail as possible. Your input will help us improve our urban planning projections and make better recommendations for development projects. Your feedback is greatly appreciated.

Submit issues in your area!

aimalisapro@gmail.com [Switch account](#) 

Not shared

* Indicates required question

Where are you located? *

Choose 

What issue are you facing in your area *

Population
 Climate
 Energy
 Other: _____

Population - what is the sub-issue?

Choose 

Demo limitations

- Limited map
- Limited coordinates
- Unoptimized site
- Limited data
- Lack of integrated LLM
- Form responses are not live