

Structures Energy Efficiency Predictor (Wireframe Document)

A wireframe for a data science project is a visual representation of the project's workflow and how the different components interact with each other. It's similar to a blueprint for a house, but instead of rooms and walls, it shows the flow of data, the models being used, and the outputs generated.

Indexpage

Here is some information about the interface you see:

Welcome to Structures Energy Efficiency predictor

This project uses machine learning to predict Structures Energy Efficiency based on various factors. Enter the details on the prediction page, and the system will provide an estimate of the corresponding Energy Efficiency values.

Factors considered include:

- 1-Relative Compactness (ratio):** Represents the ratio of the compactness of the building.
- 2-Overall Height (m):** Indicates the overall height of the building.
- 3-Orientation (Degrees):** Denotes the orientation of the building in degrees.
- 4-Glazing Area (m²):** Refers to the glazed area of the building.
- 5-Glazing_Orientation:** Represents the orientation of glazing.
- 6-Aspect Ratio:** Denotes the aspect ratio of the building.
- 7-Total Area:** Represents the total area of the building.

► [Navigate to Prediction Page](#)

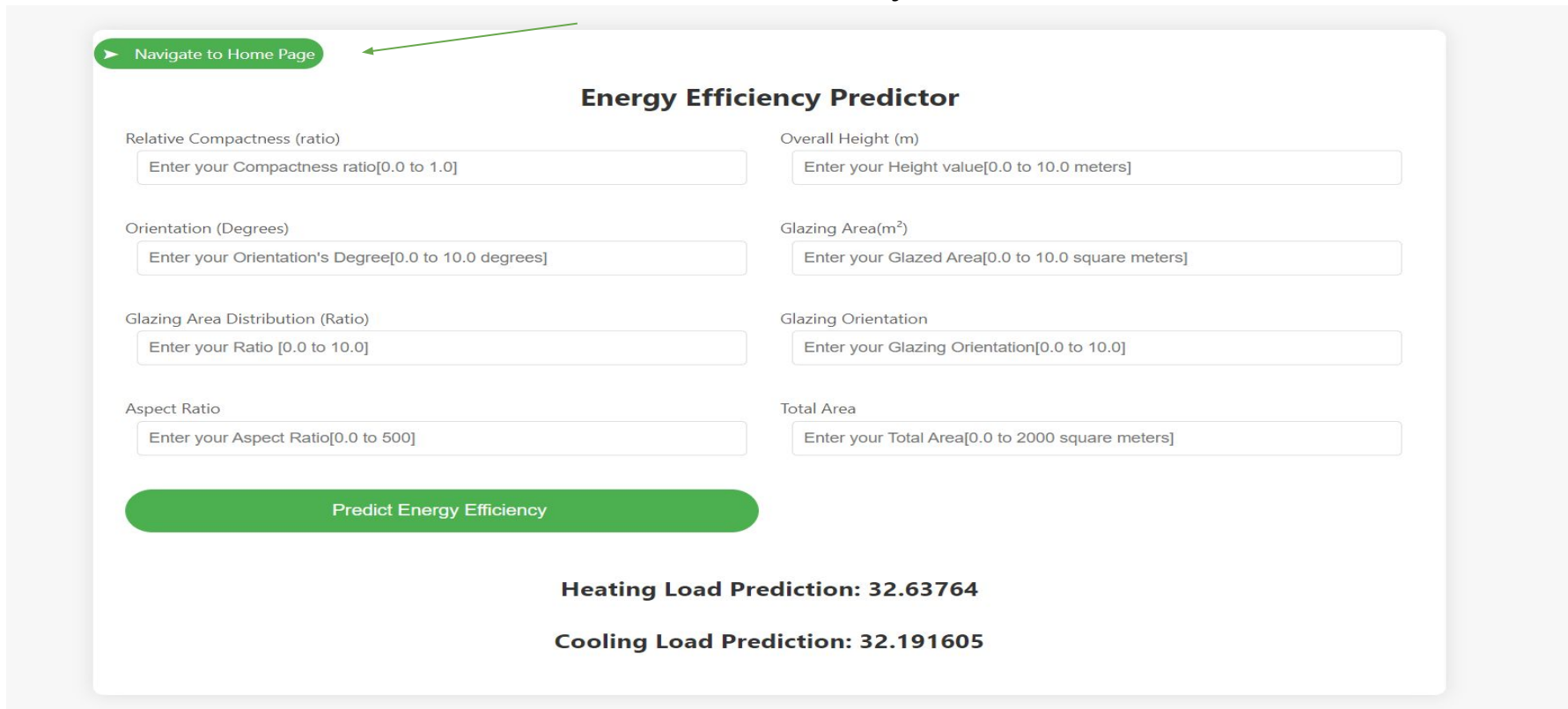
The image shows a webpage interface for “Structures Energy Efficiency predictor”.

- The interface uses machine learning to predict Structures Energy Efficiency based on various factors.
- Users are instructed to enter details on the prediction page, and the system will provide an estimate of the corresponding Energy Efficiency values.
- There is a list of factors considered for predicting energy efficiency, including Relative Compactness, Overall Height, Orientation, Glazing Area, Glazing Orientation, Aspect Ratio, and Total Area.
- A green button labeled “Navigate to Prediction Page” is available for users to proceed with entering their details

To navigate to prediction page, Click on "Navigate to Prediction page"

HomePage

Here is some information about the interface you see:



The screenshot shows a web interface for an "Energy Efficiency Predictor". At the top left, there is a green button with a right-pointing arrow and the text "Navigate to Home Page". A green arrow points from the top of the page towards this button. Below the button, the title "Energy Efficiency Predictor" is centered. The form consists of eight input fields arranged in two columns. The left column contains: "Relative Compactness (ratio)" with a placeholder "Enter your Compactness ratio[0.0 to 1.0]"; "Orientation (Degrees)" with a placeholder "Enter your Orientation's Degree[0.0 to 10.0 degrees]"; "Glazing Area Distribution (Ratio)" with a placeholder "Enter your Ratio [0.0 to 10.0]"; and "Aspect Ratio" with a placeholder "Enter your Aspect Ratio[0.0 to 500]". The right column contains: "Overall Height (m)" with a placeholder "Enter your Height value[0.0 to 10.0 meters]"; "Glazing Area(m²)" with a placeholder "Enter your Glazed Area[0.0 to 10.0 square meters]"; "Glazing Orientation" with a placeholder "Enter your Glazing Orientation[0.0 to 10.0]"; and "Total Area" with a placeholder "Enter your Total Area[0.0 to 2000 square meters]". Below the input fields is a large green button labeled "Predict Energy Efficiency". At the bottom, two prediction results are displayed: "Heating Load Prediction: 32.63764" and "Cooling Load Prediction: 32.191605".

[▶ Navigate to Home Page](#)

Energy Efficiency Predictor

Relative Compactness (ratio)
Enter your Compactness ratio[0.0 to 1.0]

Orientation (Degrees)
Enter your Orientation's Degree[0.0 to 10.0 degrees]

Glazing Area Distribution (Ratio)
Enter your Ratio [0.0 to 10.0]

Aspect Ratio
Enter your Aspect Ratio[0.0 to 500]

Overall Height (m)
Enter your Height value[0.0 to 10.0 meters]

Glazing Area(m²)
Enter your Glazed Area[0.0 to 10.0 square meters]

Glazing Orientation
Enter your Glazing Orientation[0.0 to 10.0]

Total Area
Enter your Total Area[0.0 to 2000 square meters]

Predict Energy Efficiency

Heating Load Prediction: 32.63764

Cooling Load Prediction: 32.191605

The image shows a user interface of an online tool named 'Energy Efficiency Predictor'.

- Various input fields are organized in two columns, each labeled with parameters related to building specifications like compactness, orientation, glazing area, etc., along with their units of measurement or range where applicable.
- A prominent green button at the center-bottom is designed for users to click after entering their data to predict energy efficiency.
- Results of predictions, specifically heating load prediction and cooling load prediction values, are displayed below the green button.
- The top left corner has a "navigation to home page" button leading back to the home page.