**Steps to Create the Webpage Sketch in Figma**

1. **Create a New Frame for the Webpage**:
   * Open Figma and create a new design file.
   * Use the Frame tool (shortcut: F) and set the frame dimensions to **1440 x 1024** pixels to represent a standard desktop view.
   * Name the frame as **Webpage Layout**.
2. **Add a Header Section**:
   * At the top of the frame, create a rectangle using the Rectangle tool to represent the header.
   * Set the height to around **80px** and make it full-width across the frame.
   * Set the background color to a red tone, using the color code you provided: **#c8102e**.
   * Add a **title text** or **logo** in the header with white text, e.g., "City Crime Dashboard".
3. **Design the Main Content Area**:
   * Below the header, create a large **content container** that occupies the remaining height of the frame.
   * Use a grid layout (e.g., two columns) to divide this area into two sections:
     + **Left Column (Map)**: This will contain the interactive map.
     + **Right Column (Legend and Details)**: This column will hold the legend, crime rate data, and charts.
4. **Add the Map Section**:
   * Draw a rectangle in the left column, covering about **70% width** of the content area and set its height to **600px**.
   * Set a placeholder map image or color (light gray) and label it as **Map**.
   * Position this rectangle so there’s a small padding on the left side, matching the mockup’s margin.
5. **Add the Legend Sidebar**:
   * In the right column, create a rectangle labeled **Legend**. This will sit next to the map to indicate different crime rate levels with colors.
   * Set the background color to light gray (**#f7f7f7**) to visually separate it from the map.
6. **Add a Details Section with Charts**:
   * Under the legend, add another rectangle labeled **Details & Charts**.
   * Inside this rectangle, create two smaller rectangles side-by-side for the **Bar Chart** and **Pie Chart** components, as shown in your sketch.
   * Add titles for each chart (e.g., “Crime Rate by Category,” “Crime Distribution”).
7. **Add Text and Icons (Optional)**:
   * Add labels for each section, such as "Map," "Legend," "Crime Rate Data," and other placeholders.
   * Use Figma’s icon library or plugins to add icons if needed (e.g., map pointer icons).
8. **Color Palette and Font Settings**:
   * Set the **font** to **Open Sans** as per your design notes.
   * Use the color codes mentioned:
     + **Red (#c8102e)** for the header background.
     + **Gray (#464f4f)** and **Cobalt Blue (#0047AB)** for text and chart colors as needed.
   * Set all text to **Open Sans**, keeping it consistent for a clean look.
9. **Make it Responsive (Optional)**:
   * If you want to simulate a mobile version, create an additional frame with a **375 x 812** layout for a mobile screen.
   * Stack sections vertically and reduce dimensions to fit a smaller screen.

**Figma Component Structure**

1. **Header**:
   * Text: "City Crime Dashboard" (using Open Sans, white color).
2. **Map Section**:
   * Placeholder rectangle labeled “Map.”
   * Use the MapLibre API style in your final app to match the design.
3. **Legend**:
   * Rectangle for the legend with placeholder labels and colors for different crime rates.
4. **Details & Charts**:
   * Place two smaller rectangles side-by-side labeled "Bar Chart" and "Pie Chart."

**Export or Share the Design**

1. **Preview**: Use the Figma preview feature to see how the design looks at different screen sizes.
2. **Share**: Click the "Share" button to invite collaborators or generate a shareable link for the design.

### Responsive Design in Figma

#### 1. ****Set Up Frames for Each Screen Size****

* Start by duplicating your main desktop frame. Adjust each frame to represent common screen sizes:
  + **Desktop**: 1440 x 1024 (already created)
  + **Tablet**: 768 x 1024 (portrait)
  + **Mobile**: 375 x 812 (portrait)
* Label each frame appropriately (e.g., "Desktop," "Tablet," "Mobile") for easy organization.

#### 2. ****Adjust Layout for Tablet (768px Width)****

* **Header**: Keep the header at full width but reduce its height slightly (around 60px).
* **Map Section**: Reduce the width of the map to **100%** to span across the entire width.
* **Legend & Details Section**:
  + Stack the legend, bar chart, and pie chart **vertically** below the map, instead of side-by-side.
  + Set each component to **100% width** to fit within the screen, making sure there’s consistent padding between them.
* **Font Sizes and Spacing**: Slightly reduce the font size and spacing for labels to fit better on the smaller screen.
* **Navigation Controls** (if applicable): Move navigation controls closer to the center or adjust their size to prevent overlap with the map.

#### 3. ****Adjust Layout for Mobile (375px Width)****

* **Header**: Keep the header full-width but make it even shorter (around 50px height) for more vertical space.
* **Map Section**: Set the map to **100% width** and reduce its height to about **400px** to fit within the mobile screen.
* **Legend & Details Section**:
  + Stack the legend, bar chart, and pie chart **vertically** below the map.
  + Adjust padding between each section for a comfortable scrollable experience.
  + Use collapsible components if necessary, or a tabbed view, where users can switch between the legend, bar chart, and pie chart without overwhelming the screen.
* **Details Section (Responsive Layout)**:
  + Consider using tabs or collapsible sections for the "Details & Charts" on mobile. For instance:
    - Tab 1: **Legend**
    - Tab 2: **Bar Chart**
    - Tab 3: **Pie Chart**
  + This can be achieved in Figma by simulating interactions with Component and Variants, or you can add buttons with labels to represent each tab.

#### 4. ****Apply Auto Layout for Flexibility****

* Use **Auto Layout** on containers that hold multiple elements (e.g., the Details & Charts section).
* This makes it easier to rearrange elements when switching between screen sizes.
* Set padding, alignment, and spacing values to create responsive behaviors in Figma:
  + **Horizontal Resizing**: Set elements to “Fill container” to adapt to different screen widths.
  + **Vertical Resizing**: Use “Hug contents” or a fixed height based on the design's requirements.

#### 5. ****Adjust Font Sizes and Spacing for Smaller Screens****

* In the **Tablet and Mobile frames**, reduce font sizes slightly for headers, labels, and legend items to make the text more readable on smaller screens.
* Adjust padding and margins to make sure the layout looks clean without elements crowding each other.

#### 6. ****Test Responsiveness Using Figma’s Prototype Mode****

* In **Prototype Mode**, create interactions for each frame to simulate navigation across different screen sizes.
* Use **Device Frames** in the preview mode to see how the design looks on actual device sizes (desktop, tablet, and mobile).
* Test scrolling within the tablet and mobile frames to ensure elements are positioned correctly and fit naturally on smaller screens.

### Final Design Touches

1. **Save Colors and Styles**:
   * Define color styles for red, gray, cobalt blue, and text colors. Apply these consistently across all frames.
   * Define text styles for each heading, label, and body text to ensure consistency across screen sizes.
2. **Interactive Components** (Optional):
   * Create interactive components for elements like the tabbed “Details & Charts” section.
   * You can create variants for each tab in Figma’s **Component** properties to showcase how each view (Legend, Bar Chart, Pie Chart) would look when clicked.
3. **Share and Test**:
   * Once your design is ready, click on the **Share** button to generate a shareable link.
   * Invite stakeholders or team members to review and test the responsiveness by interacting with the prototype.