Web Development Assignment: Carousel Design

Objective:

Design and implement a responsive, rotating carousel component that displays a series of cards. Each card will include an image and descriptive text consisting of a *title* and *content*. The carousel should be dynamic, allowing the display of n cards, while only x cards (x < n) are visible on the screen at a time. You are provided with a *HTML*, *CSS*, *JS*, and *MD* file. Use those files to implement the carousel. The ideal design should follow something like below.

Requirements:

1. **Card Design:**

   o   Each card should contain:

   ▪   An **image** (centered, responsive, or fit appropriately within the card).

   ▪   A **title** (displayed prominently).

   ▪   A **content** section (smaller text, placed under the title).

2. **Carousel Behavior:**

   o   At any given time, only x cards should be visible on the screen.

   o   Clicking the **right arrow** should:

- Shift the visible cards to the left.

- Bring the card just outside the right boundary into the visible window.

  o Clicking the **left arrow** should:

- Shift the visible cards to the right.

- Bring the card just outside the left boundary into the visible window.

  o **Rotating Carousel:**

- If there are no cards to the right, clicking the **right arrow** should bring the first card in the list to the visible area.

- Similarly, if there are no cards to the left, clicking the **left arrow** should bring the last card in the list to the visible area.

3. **Responsiveness/Animation:**

  o The carousel should adapt to various screen sizes (e.g., desktop, mobile).

  o Ensure a smooth sliding animation when navigating between cards.

4. **Dynamic Input:**

  o Allow the number of cards (n) and the number of visible cards (x) to be easily configurable.

5. **Usability:**

  o Include **arrow buttons** for navigation.

  o Optionally, implement a **pagination indicator** (e.g., dots below the carousel) to show the current position within the carousel.

  o Optionally, allow keyboard navigation.

6. **Technology Stack:**

  o Use **HTML**, **CSS**, and **JavaScript** for the implementation.

  o **Do not use any framework, or library, or AI tool (e.g., ChatGPT, Gemini).**

7. **Bonus Features (Optional):**

  o Add **autorotation**, where the carousel automatically slides to the next set of cards after a set interval.

- Provide support for swiping gestures on touch devices.

Deliverables:

1. Source code files (HTML, CSS, JavaScript). Opening the index.html file should render the carousel on the browser screen.
2. A working demo video.
3. Documentation explaining the code structure, how to configure n and x, and any additional features implemented. This can be a ReadMe.md file in the same directory.

Share a drive (e.g., google drive, onedrive, dropbox) link or github link of the completed code, video demo, and the documentations.

Deadline:

December 31, 2024

Reply to this email with the link to your updated codes.