PS - XT Coding Assignment

Problem statement: *Develop a front-end application which would help users list and browse all launches by SpaceX program.*

Important API information that would help you to fetch the data

API end point for the first-time page load without any Filters:	API end point with Filters applied:
https://api.spaceXdata.com/v3/launches?limit=100	**Launch Success Filter:** https://api.spaceXdata.com/v3/launches?limit=100&launch_success=true **Launch & Land Filter:** https://api.spaceXdata.com/v3/launches?limit=100&launch_success=true&land_success=true **All:** https://api.spaceXdata.com/v3/launches?limit=100&launch_success=true&land_success=true&launch_year=2014

Assignment Requirements:

"Server-Side Rendering"

- Functionalities
  1. The initial launch programs landing page has to be server side rendered.
  2. A boilerplate to implement the Server-side rendering can be used.

"Build and Packaging"

- Functionalities
  1. Build should have basic set of static code quality checks and should fail the build if there is any error.

"Client Side"

- Functionalities
  1. User should be able to Filter the results with help of provided Filters.
     - Filter options are hard coded with the values shown in the visual comp below.
     - Applying any Filter should reflect the below changes:
       - Selected filter should change to selected state as shown in the visual comp (and should mimic the toggle behavior).
       - Applied filters should change the URL and update the Page with latest records without refreshing the page.
       - If the page is refreshed with the applied filters in the URL – the resulting page should be server side rendered & subsequent filters should again be client side rendered.

- Responsive Design and other UI elements.
    1. Page should visually match with the provided designs at the end of this file.
    2. Responsive Behavior – Expectation is to do a custom media query implementation and not use bootstrap or similar responsive framework:
        - **Implementation should follow Mobile first design approach**
        - **Mobile View:** Page should have only one Column until 700 px. We have provided the Visual designs for Mobile screen.
        - **Tablet View:** Page should have 2 columns between 700 and 1024 px. Design is provided for Desktop tile and that should be followed for this viewport.
        - **Desktop View:** Page should have 4 columns between 1024 and 1440 px. Beyond 1440px viewport, the content will be centered align with a max width of 1440.
- On git - elaborate your approach and stack details in the Readme file.

The ask:

1. Develop a responsive layout matching the visual comps provided. The tablet version to have a 2 column product tile layout.
2. Unit tests for Components to test the functionalities will be a bonus.
3. Incorporate all performance best practices and demonstrate a high Lighthouse score for Performance, SEO and Accessibility, and share the same as part of the readme file through screenshots.

Submission

1. Create a GitHub repo with all best practices to share the code.
2. Setup a CI pipeline and deploy the code to your preferred hosting platform, eg: - heroku.
3. ***Share the link to the deployed URL of the app and the Github Repo.***

Visual Designs for the assignment on the next 2 pages.

MOBILE VIEW

SpaceX Launch Programs

Filters

Launch Year

2006 2007
2008 2009
2010 2011
2012 2013
2014 2015
2016 2017
2018 2019
2020

Successful Launch

True False

Successful Landing

True False

FalconSat #1

Mission Ids:
- {list Mission Ids}

Launch Year: 2006

Successful Launch: false

Successful Landing: {launch_landing}

DemoSat #2

Mission Ids:
- {list Mission Ids}

Launch Year: {launch_year}

Successful Launch: {launch_success}

Successful Landing: {launch_landing}

Developed by:
{developer name}

DESKTOP VIEW

SpaceX Launch Programs

Filters

Launch Year

2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020

Successful Launch

True | False

Successful Landing

True | False

FalconSat #1

Mission Ids:
- {list Mission Ids}

Launch Year: 2006

Successful Launch: false

Successful Landing: {launch_landing}

DemoSat #2

Mission Ids:
- {list Mission Ids}

Launch Year: {launch_year}

Successful Launch: {launch_success}

Successful Landing: {launch_landing}

Trailblazer #3

Mission Ids:
- {list Mission Ids}

Launch Year: {launch_year}

Successful Launch: {launch_success}

Successful Landing: {launch_landing}

RatSat #4

Mission Ids:
- {list Mission Ids}

Launch Year: {launch_year}

Successful Launch: {launch_success}

Successful Landing: {launch_landing}

{mission_name} # {flight_number}

Mission Ids:
- {list Mission Ids}

Launch Year: {launch_year}

Successful Launch: {launch_success}

Successful Landing: {launch_landing}

{mission_name} # {flight_number}

Mission Ids:
- {list Mission Ids}

Launch Year: {launch_year}

Successful Launch: {launch_success}

Successful Landing: {launch_landing}

{mission_name} # {flight_number}

Mission Ids:
- {list Mission Ids}

Launch Year: {launch_year}

Successful Launch: {launch_success}

Successful Landing: {launch_landing}

{mission_name} # {flight_number}

Mission Ids:
- {list Mission Ids}

Launch Year: {launch_year}

Successful Launch: {launch_success}

Successful Landing: {launch_landing}

Developed by: {developer name}