**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** | A screenshot of a cell phone  Description automatically generated |

**DESKTOP VIEW**

A screenshot of a cell phone

Description automatically generated