**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/lau nches?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.

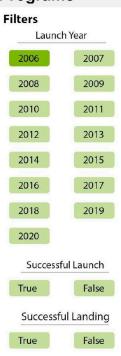
### **Submission**

- 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**





# FalconSat #1

• {list Mission Ids}

Launch Year: 2006

Successful Launch: false

Successful {launch\_landing} Landing:



# DemoSat #2

# Mission Ids:

• {list Mission Ids}

Launch Year: {launch\_year}

Successful {launch\_success}

Successful Landing:

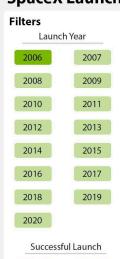
{launch\_landing}

# Developed by:

{developer name}

### **DESKTOP VIEW**

# **SpaceX Launch Programs**



False

False

Successful Landing

True

True



### FalconSat #1

• {list Mission Ids}

Launch Year: 2006

Successful Launch: false

Successful {launch\_landing} Landing:



### DemoSat #2

### Mission Ids:

• {list Mission Ids}

Launch Year: {launch\_year}

Successful {launch\_success} Launch:

Successful {launch\_landing} Landing:



### Trailblazer #3

# Mission Ids:

• {list Mission Ids}

Launch Year: {launch\_year}

Successful {launch\_success}

Launch:

Successful

{launch\_landing}



### RatSat #4

### Mission Ids:

• {list Mission Ids}

Launch Year: {launch\_year}

Successful {launch\_success} Launch:

Successful Landing:

{launch\_landing}



### {mission\_name} # {flight\_number}

### Mission Ids:

• {list Mission Ids}

Launch Year: {launch\_year}

Successful {launch\_success}

Launch:

{launch\_landing} Landing:

Successful



# {flight\_number}

### Mission Ids:

• {list Mission Ids}

Launch Year: {launch\_year}

Successful {launch\_success}

Launch:

Successful {launch\_landing} Landing:

{mission\_name} #

# {mission\_name} # {flight\_number}

### Mission Ids: • {list Mission Ids}

Launch Year: {launch\_year}

Successful {launch\_success}

Launch:

Successful {launch\_landing} Landing:



{mission\_name} # {flight\_number}

### Mission Ids:

• {list Mission Ids}

Launch Year: {launch\_year}

Successful {launch\_success}

Launch:

Successful {launch\_landing}

Landing:

**Developed by:** {developer name}