

# JR. REACT DEVELOPER ASSIGNMENT



Bangalore | 9886690688 | [careers@elspectra.com](mailto:careers@elspectra.com) | [www.elspectra.com](http://www.elspectra.com) | [www.caselets.io](http://www.caselets.io)

---

## ABOUT ELSPECTRA

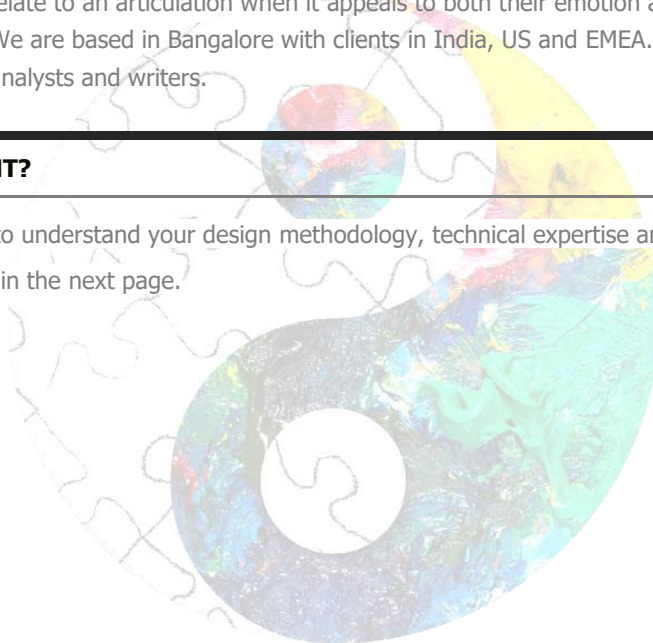
elSpectra is a sales & marketing solutions firm. We offer a smart-content sales enablement platform that helps B2B & Tech/IT firms to articulate their solution use cases and case studies in a clear, deep, and impactful manner at different abstraction levels, as Caselets™. Sales and customer facing teams can sell better & faster with Caselets™ by quickly sharing the right content for the context from anywhere. We also provide Caselets™ development as a service to help our clients with a comprehensive solution of content development services and a platform.

We believe audience will relate to an articulation when it appeals to both their emotion and logic, thus the name of our company, elSpectra. We are based in Bangalore with clients in India, US and EMEA. We are building a team of technologists, designers, analysts and writers.

---

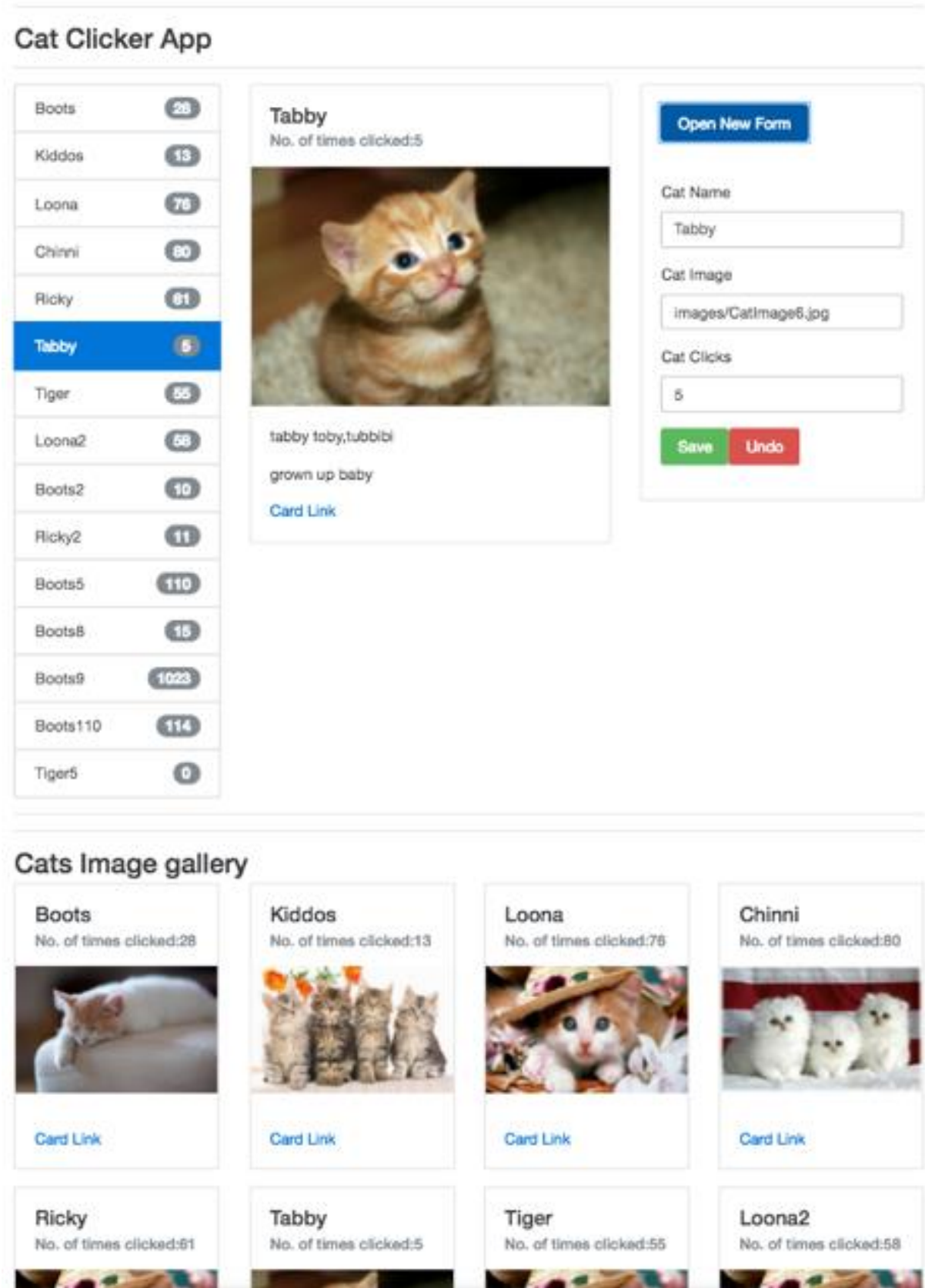
## WHY THIS ASSIGNMENT?

This assignment helps us to understand your design methodology, technical expertise and coding style. Assignment details shown in the next page.



ASSIGNMENT 1 – CAT CLICKER, A SINGLE PAGE WEB APP

Reference visual interface



## Details

1. The key entity of focus: Cat with its name, age category, pic and nick names.
2. Key Actions: Clicking the cat image, Adding a new cat, Updating an existing cat, Selecting a Cat in the list, Selecting a Cat in the gallery
3. Data: Leverage pre-loaded data (you can either use a database or use local storage that gets initiated with pre-loaded information)
4. The app consists of four user interface areas/panels
  - a. Left Nav: List of Cats with its name and number of times it was clicked
  - b. Center: Cat Card with name, image, nick names and age
  - c. Right: Form to Update the Cat with fields Cat Name, Cat Image and Cat Clicks
  - d. Bottom across full width: Cat Image Gallery
5. Events
  - a. Left Nav: When a Cat is clicked that Cat need to be shown in the center and the selected Cat list item background color needs to be changed
  - b. Center: When a user clicks a Cat Image in center panel, the number of clicks need to be incremented by 1
  - c. Bottom: When a user clicks a Cat Image in the bottom panel gallery, the number of clicks need to be incremented by 1 and the center panel should show the clicked Cat and the focus to move to the center panel
  - d. Center & Bottom Click: Whenever the click count increases, update the age based on the number of clicks (0 to 5: Infant, 6 to 12: Child, 13 to 25: Young, 26 to 40: Middle-Age, 41 to 60: Old >61: Very Old)
  - e. Right: Create New Cat or Update Existing Cat
    - i. Have a button to open Edit form
    - ii. When the form is opened the fields will have default values of the active Cat (the Cat that is clicked and shown in the center)
    - iii. User can change the Image or the click count for an existing Cat
    - iv. User can change the name - is like adding a new Cat with the given image and the click count as values
    - v. User can save and the saved cat will become active - example, a new cat is added, that Cat is selected in the list and also shown in the center panel. When the User updates, the values get updated and that Cat becomes active.
    - vi. When the user Saves, the above will happen and the form gets closed
    - vii. User can also Cancel without any changes and the form gets closed
  - f. Development
    - i. React, Webpack, DB (Local storage or any other db), Redux
    - ii. Design methodology: Leverage stateless/Pure UI components
    - iii. User Interface: Leverage Bootstrap or Material UI and the app needs to be responsive across mobile, tab and desktop
  - g. Output
    - i. Github, The app should be accessible from a public url (either use Github server or any other free cloud services)

---

## ASSIGNMENT 2 – JAVASCRIPT CODING

---

Consider the below skills and capabilities of cats:

Skills/Capabilities	2019 score	2024 score
Agility and Coordination	64%	71%
Hunting and Predatory Skills	76%	70%
Communication	60%	75%
Adaptability	82%	63%
Independence	67%	78%
Affection and Socialization	70%	84%
Climbing	90%	95%
Balance	88%	96%
Senses	86%	90%
Flexibility	75%	83%
Problem-solving	67%	78%
Stealth	59%	72%

- Write a JavaScript code to Read the input in JSON file and parse it using the suitable module.
- Calculate the rank today (2019 score) and ranks in future (2024 score) based on the percentages.
- Identify top-3, bottom-3, top-3 accelerating (fastest growing) and top-3 decelerating (fastest declining) capabilities.
- Ranks needs to be calculated dynamically based on the percentages.
- Also, the program should output the rank of the skill based on the user input.

**Note:** Do not use ChatGPT or any other code sources to complete this assignment. We may ask you to perform certain functions during the interview.