Frontend Engineer Assignment – Segwise

Heyyy! Thank you for applying to Segwise. We are as excited as you to get you onboard!



First of all, congratulations on making it to this stage! Give yourself a pat on the back. We had to go through thousands of profiles to handpick you, so well done! This is the second step in our process, where we would like to assess your frontend skills, problem-solving ability, and creativity. This is a take-home assignment, so please read through the details carefully, especially the requirements. If you follow all the steps correctly and understand the requirements, you're already halfway there!

About Segwise & Expectations

Segwise is a data-first company that provides observability for marketing teams, and a second product that helps creative teams get insights out of their data. Our work revolves around numbers, analytics data, and lots of charts. As a frontend developer, your responsibility will be to design and build our dashboards to present this data in the most user-friendly, efficient, and visually appealing way. This means:

- Writing clean, maintainable, and well-documented code.
- Keeping up with the latest developments in frontend technologies.
- Structuring projects efficiently for scalability and ease of maintenance.
- Understanding **UI/UX principles** and implementing them effectively.

Achieving this requires a deep understanding of **JS**, **CSS**, and frontend frameworks, as well as a focus on **performance and usability**. This assignment is designed to simulate real-world tasks and assess your ability to meet these standards.

Additionally, being part of a startup means working in a **fast-paced environment** and occasionally giving 200%. For this reason, we have set a strict **48-hour deadline** for this assignment. This helps us evaluate your ability to **work under constraints while maintaining quality**.

Assignment Overview

This task will evaluate your skills in **React and CSS**, focusing on your ability to **translate a Figma design into a fully functional UI** while ensuring interactive functionality.

Task Details

You will receive a **Figma design file** that contains a **set of filters** that need to be applied to a **mock dataset**. Your goal is to create a **pixel-perfect** implementation of the design while ensuring all filtering functionality works as expected. Please also make a table which shows all the columns and on which filters will be applied. This will test two core skills:

- Your ability to implement a high-quality UI using CSS.
- Your proficiency in **React** for handling interactions and data flow.

Additional Features

Apart from the filters, you also need to display the **mock data in a table**. This table should support:

- Searching through the data.
- **Sorting** by columns.

Unlike the filters, the **table does not have a predefined design in Figma**. You will need to **design and implement it yourself** while maintaining consistency with the overall UI. This will test your ability to build UI components from scratch while following best design practices.

Interactive Preview Feature

In addition to the table, we would like you to implement a small interactive feature:

- When a user clicks on the first cell of any row, a small preview of that row's data should open in the bottom-right corner of the screen.
- This preview should be similar to how chat boxes work on platforms like **LinkedIn**.
- As an optional enhancement (bonus feature), clicking on this preview should expand it into a full modal displaying the complete row data.

Reference Videos

For a better understanding of how this feature should work, refer to these videos:

- Small preview box: YouTube Link
- Full flow demonstration (relevant section around 12:00): YouTube Link

Important Links

1. Mock Data -

https://drive.google.com/file/d/1avhPq79dJm4cw_NuaxES7xXhioWO0P5g/view?usp=sharing

Feel free to use AI to generate more data to test scalability.

2. Figma Design -

https://www.figma.com/design/nRg3rghUIETyLkr4X9mN5L/fllters?node-id=0-1&t= N5G7QMGXTahix58P-1

Implementation Guidelines

- Use **React or Next.js** as the framework.
- You are **free to use any libraries** that help you efficiently meet the requirements.
- The **preview modal content** is flexible—you can analyze the mock data and decide how best to present it.
- Deploy your solution on Vercel or Netlify so we can review the live demo.
- Please use **Typescript**

Mock Data Details

You will be working with the following dataset:

- 1. **creative_id** Unique identifier for the creative.
- 2. **creative_name** Name of the creative asset.
- 3. **tags** Various attributes describing the creative (e.g., concept, audio type).
- 4. **country** Country where the ad is being shown.
- 5. **ad_network** The advertising network (e.g., Meta, Google Ads).
- 6. **os** Operating system targeted by the ad (e.g., Android, iOS, unknown).
- 7. **campaign** Name of the ad campaign.
- 8. **ad_group** The ad group within the campaign.

- 9. **ipm** Installs per thousand impressions.
- 10. **ctr** Click-through rate (percentage of users who clicked on the ad).
- 11. **spend** Amount spent on the ad campaign.
- 12. **impressions** Number of times the ad was displayed.
- 13. clicks Number of times users clicked on the ad.
- 14. **cpm** Cost per thousand impressions.
- 15. **cost_per_click** Cost incurred per user click.
- 16. **cost_per_install** Cost incurred per install.
- 17. installs Number of app installs generated from the ad.

Evaluation Criteria

Your submission will be assessed based on:

- **Pixel-perfect implementation** of the Figma design.
- Functionality (filters, search, sorting, and interactive preview must work as expected).
- Code quality (clean, readable, and well-structured React + CSS implementation).
- ✓ UI/UX creativity (table design and expanded preview modal).

Bonus Points

- Implementing **pagination** in the table.
- Enhancing the **preview modal** with **expanded full-screen functionality**.

A Note on use of Al

We welcome the use of AI to accelerate our productivity, so please don't hesitate to use it. However, we discourage getting the *entire* assignment written by AI.

Submission Instructions

Please submit the following via email:

- 1. **Deployed app link** (Vercel or Netlify).
- 2. GitHub repository link (make sure it's private).
- 3. Add mihir@segwise.ai and daga@segwise.ai as collaborators with write access.

P.S. Feel free to reach out via email to **mihir@segwise.ai** or **daga@segwise.ai** if you have any questions or need clarifications. Good luck!

