📝 Product Information

Our website 'Parsons Problems' is designed to facilitate an interactive learning experience through the use of code block reordering puzzles (commonly known as Parsons Problems) aimed at data analytics and programming concepts. Users can engage with a variety of problems that are designed to improve their understanding of core topics such as linear regression, regression models, and other technical subjects. The platform allows users to interactively drag and drop code snippets into the correct order, simulating real-world problem-solving and coding tasks.

In addition to providing immediate feedback on problem completion, users can track their progress and performance through features like saved problems, and a profile and analytics page, allowing for a more tailored and personalised learning experience. The interface also includes a workspace where problems can be selected, dragged, and reordered, offering an intuitive user experience that encourages engagement and deeper understanding.

Key Features:

- **Interactive Code Block Reordering**: Allows users to rearrange code blocks to learn how to structure code correctly.
- **Progress Tracking**: Users can save problems, revisit them later for practice, and track their performance via the profile and analytics page.
- **Feedback System**: Immediate feedback on success or failure helps guide users toward correct solutions.

From the outset of the project, we worked closely with the client to fully understand her educational goals and the needs of her target audience. Through a series of in-depth discussions and feedback sessions, we established a clear understanding of her vision for an interactive learning platform that would engage users with hands-on problem-solving tasks in data analytics and programming.

To ensure the product would align with her expectations, we employed an iterative approach to development, consistently involving the client in key decision-making processes. This included:

1. **Requirements Elicitation**: During the initial phases, we conducted comprehensive meetings with the client to gather detailed requirements. We focused on understanding the desired user journey, learning outcomes, and the types of problems she wanted users to interact with on the platform. By defining these key objectives early on, we were able to shape the platform to be both educational and user-friendly.
2. **Prototyping and Feedback**: We created early prototypes of the drag-and-drop problem-solving feature to give the client a visual and functional feel of the system. Through continuous feedback loops, we refined these prototypes to match the client's exact preferences, ensuring that the interface was intuitive and aligned with the educational objectives. For instance, our client wanted a page tailoured for the admin user, not just for a student user.
3. **Customisation for Target Audience**: The client expressed the importance of tracking user progress, offering immediate feedback, and allowing users to revisit problems. To meet these needs, we developed key features such as saved problems, solved problem history, and progress tracking, which were custom-tailored to enhance the user's learning experience.

According to our client, the target audience is primarily aimed at students and computer science students, and thus we ensured a platform that is tailoured as such.