Technology Assessment - Software Engineer

Thank you for taking the time to interview with LPG. Our commitment to ensuring we hire at the highest standards as well ensuring you understand what would be required within the role, mean that we incorporate a technical task as part of the process. If you have any questions at all following the below, please pop us an email.

The Task

Create a small **product management application** that adheres to the instructions and requirements below.

You may choose the technologies you work with, but it must include **React** and/or **Java** . Any other technology that you would like to use and demonstrate is completely up to you. The purpose of this application is to create an interface for consuming product data from an API.

The finished application must be able to:

- Pull a set of products from a persistence layer
- List the above products in a UI
- Sort the products by *Name*, *Size*, and *Category* in the UI
- Keep the products persisted even after the application has shutdown

You may also choose to incorporate some of the features and challenges below (choose these at your own discretion):

- Include a **create** product feature
  - o Challenge: Validate that the *Last Purchase Date* cannot be less than the creation date
- Include a **delete** product feature
  - o Challenge: Cache the top 5 most recently deleted products
- Include an **update** feature
- **Paginate** the list of products by 5, 10, and 20
- Add a feature to get the product with the oldest *Last Purchased Date* from a single category
- Generate purchase statistics

Feel free to build beyond the above requirements. The product and category data are included in a separate document that you will receive from a Leisure Pass representative. For any uncompleted elements of the task due to time restraints, you can explain how you would complete it in the README section. A completed application is preferred. Once finalised, the code link must be shared via a Github repository or equivalent, as well as a README explaining your coding/architectural choices. Please also include instructions on how to start your application.

This information is to be shared with your Leisure Pass HR contact.

If you have any queries in relation to the assessment, please feel free to contact us at any stage.

Wishing you all the best.