**Senior/Associate Director Data Designer (Personalisation)  
Team Interview Brief**

In the Team Interview we would like to understand and discuss more about your expertise in Digital Experience Personalisation.

In order to accommodate this conversation, we would like you to walk us through an example of using data/ml to personalize a digital user experience.

Depending on whether you have a project you have worked on in the past that you are able to share, the interview can be conducted in one of two ways.

1. **Present an example of how you have applied ML Experience Personalisation/Recommendation at scale in the past.**
2. **Complete the take-home exercise described below.**

In either case we would like you to provide us with the **data analysis/ML code** (jupyter notebook, python files, etc.) and **a presentation** to communicate your approach and the value provided.

**(You will have 1 week to prepare)**

*Below you can find more details about each of the two possibilities.*

**1. Example of a Past Project**

Present an example of a project you have worked on where you have used data and machine learning to achieve Digital Experience Personalisation at scale and present your approach.

We would like you to walk us through the following stages.

* **Definition of the problem** - What was the problem
* **Your Solutioning Framework** - How did you go about approaching the problem
* **What was implemented and how** - What was done to solve the problem, walk us through the algorithm and the method of deployment
* **Outcome** - What was the result of the solution
* **Long term impact** - What was the lasting effect
* **Reflect** - What did you come in knowing about the task, how has this evolved over time

Please present two artifacts: a **20 min** **presentation** outlining the above,and **the code** you have written.  
  
*(In the case you do not have access to the code for the project described, you may have to complete a short technical exercise if appropriate)*

**2. Take Home Exercise**

Imagine you are on a project with **“Dohtem”,** **an** **e-commerce company** which specializes in selling technology, fashion and grocery products through their website. They sell their products through their website where users can explore, search and filter for products that they are interested in. The company also engages their customers via a number of channels including email, text messages and notifications to inform them about ongoing promotions and events.

The company is planning on exploring how they can better tailor the user experience on the website to meet the differing needs of their vast customer base. They would like to make their customers feel more **valued & understood** when interacting with the product by making each customer’s experience suited to them.

*Your task as a Senior Data Designer is to find what data can be collected about the customers throughout their shopping journey and how it can be used to make their shopping experience feel unique.*

**2.1. Psychographics**

Firstly, what are the key attributes of customers you think are worthwhile exploring to understand customer needs & preferences? What types of data could be collected throughout the shopping journey about the customers and how can it be used to tailor the user experience on the website.

*Describe 2-3 examples of what customer data you would recommend the company to collect about customer behavior and give justification of how this data can be used in creating a more personalized experience.*

**2.2** **Personalisation ML Model**

Dohtem have expressed that they currently have some existing customer data they have collected through their website which includes information such as gender, marital status, hours spent on app, number of orders, etc.

They would like to know how they can best leverage this data across the entire shopping journey to reach their goal

*Analyze this data and explore what techniques and machine learning models can be used to find patterns & commonalities amongst groups of customers. Explore how particular customer behaviors can reflect their needs & preferences. Settle on the best approach and think how it can be used by the business to tailor their user’s digital experiences.*

(Data attached as a csv)

**2.3 Productionize**

Lastly, Dohtem would like to understand how your proposed personalisation strategy can provide long term value for the company. How can they improve their business offerings based on your suggestions? How would they go about integrating your suggestions into their current ecommerce platform & what are the long term implications?

Please present two artifacts: a **20 min** **presentation** outlining the above,and **the code** you have written.