# Lilly Technical Challenge Documentation Template

*This documentation template serves as a place for you to discuss how you approached this challenge, any issues you faced & how you overcame them, or any other points that you feel would be relevant for the interviewers to know. The text in italics is here to guide you - feel free to remove it once you fill out each section!*

***Not every section in this document is required. This is just a template to help get you started. Feel free to add or remove sections as you feel necessary.***

## Approach

*How did you approach this challenge? Did you work through the objectives in any particular order? If so, why? Did you utilize any external resources, such as tutorials, guides, or other materials?*

1. Customise Frontend Design to look more appealing. - Maybe look at Lilly UK for themes/examples of what I can design off
2. Create a backend function to handle the average prices of all medicines

Plan: Start by focusing on the backend to retrieve and handle invalid data (missing data). Allow front end concern itself with presenting.

Started off doing tasks 1, 2 and 5 together by focusing on the backend. This is because I feel far more confident doing backend code, and knew these objectives could be handled quickly.

I used postman to get a visual representation of what the functions would be returning when I sent out a request. This helped with trying to catch potential bugs quickly.

## Objectives - Innovative Solutions

*For the challenge objectives, did you do anything in a particular way that you want to discuss? Is there anything you're particularly proud of that you want to highlight? Did you attempt some objectives multiple times, or go back and re-write particular sections of code? If so, why? Use this space to document any key points you'd like to tell us about.*

When handing invalid medications being delivered to the frontend, I felt it would be cleaner if I focused on resolving this issue on the backend, so the frontend can focus on layout and presentation, and trusting the backend functions to validate, and handle errors before it reaches the frontend.

## Problems Faced

*Use this space to document and discuss any issues you faced while undertaking this challenge and how you solved them. We recommend doing this proactively as you experience and resolve the issues - make sure you don't forget! (Screenshots are helpful, though not required)*

I decided to create an extra function in the backend that would use the existing “Retrieve all medicine” function, but filter out any invalid medications before it reached the frontend. I found myself struggling to filter through both the invalid medications, and my function kept leaving 1 in the returned data. Through some googling, I found that trying to remove from the data while iterating through it, was causing some issues. My solution was to create a new empty array that would store the valid data, and then replace the original data once it has iterated through it all and left me with a list of valid medications.

I also found it challenging to submit my data to the backend in the format that the “create” function was expecting. I was tempted to change the backend to match what I was pushing through from the frontend, but found it would be more consistent if I changed the frontend.

Trying to align the values so they are laid out neatly. I found trouble with values that contained more numbers than others.

## Evaluation

*How did you feel about the challenge overall? Did some parts go better than others? Did you run out of time? If you were to do this again, and were given more time, what would you do differently?*

I found myself struggling to work through decorating the front end. Styling has never been my strong suit, and I easily found myself spiralling on trying to resolve issues. I found far more comfortable working in the backend with the API’s, trying to retrieve valid information.

If I was to try this task again, I think I would seek other forms of help when it comes to styling the front end, like asking some friends who I know are good with front end work. This is because researching the problems caused more to arise from the “solutions” I’d find.

I definitely ran out of time when it came to finding a style that’s appropriate. I tried to put most of my time into functionality