In our UX design project, we initially considered using Flutter for our prototype but ultimately opted for Figma. This report provides a comparative analysis of the two tools, highlighting their respective strengths and weaknesses, and explaining the rationale behind our decision.

## Figma

***Strengths*:**

Ease of Use:

Figma is user-friendly and does not require extensive coding knowledge. It allows designers to focus on design rather than development.

*Collaboration*:

Figma excels in real-time collaboration. Multiple team members can work simultaneously on the same project, providing instant feedback and making it ideal for iterative design processes.

*Design Flexibility:*

Figma offers a range of design tools that facilitate the creation of detailed, high-fidelity prototypes. It supports vector graphics, prototyping, and interaction design seamlessly.

*Version Control:*

Figma's version control and history features enable tracking of changes, making it easier to manage and revert to previous designs if necessary.

***Weaknesses:***

*Interactivity:*

While Figma supports interactive prototypes, the interactivity is limited compared to what can be achieved with a coded prototype in Flutter.

*Performance Simulation:*

Figma prototypes do not simulate app performance or behaviour as accurately as a prototype built with Flutter, which can impact the understanding of the final user experience.

## Flutter

***Strengths:***

*High Fidelity:*

Flutter allows the creation of highly interactive and responsive prototypes that closely mimic the final app. This is particularly useful for testing and demonstrating complex interactions and animations.

*Cross-Platform Development:*

Prototypes created with Flutter can be deployed across multiple platforms (iOS, Android), providing a realistic view of how the app will function on different devices.

*Performance Testing:*

Flutter enables performance testing of the prototype, offering insights into how the app will perform in real-world scenarios.

***Weaknesses:***

*Complexity:*

Flutter requires programming knowledge (Dart language), making it less accessible to team members without a coding background. This can slow down the prototyping process and reduce collaboration efficiency.

*Time-Consuming:*

Developing a prototype in Flutter is more time-consuming compared to Figma. The need for coding and debugging can extend the project timeline, which can be a significant drawback in fast-paced environments.

## Overall Decision:

In this situation, we have chosen to use Flutter for the time being, our goal is to create a highly interactive prototype, that is ideally cross-platform in design.

In order to account for the time-consuming nature of flutter, we will ensure that we minimise our use of flutter by using Figma as a lo-fi design tool.