**Team Eight**

ACME company is a software company which creates collaboration software for UI/UX designers. Currently, wireframe generation and subsequent A/B testing of designs take a significant amount of time and this is where ACME would like your help to create a Generative AI system to automate this process if possible. The design team, would like to be able to give a Generative AI system a prompt and then the system should be able to create D2 Declarative Programming code (which is able to turn text into diagrams).

**Key Stakeholders**

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**Head of Design**

At ACME, UI/UX designers can spend up to 40% of their week creating new wireframes, and because wireframes are very subjective, it can be hard for designers to understand what works and what doesn’t knowledge transfer is very difficult. We have been recently using D2 to standardise some elements of our UI/UX design which then allows us to reuse designs as necessary. We are excited to see what you can create, we would like some sort of web console where we can input prompts, and then the system should be able to create D2 code, furthermore, a designer should then be able to further interact with the output, and ask the model to manipulate as necessary.

**Head of Data Science**

We have a data science team of 8 who are highly experienced with machine learning based architectures. We were approached by the Head of Design to create such a system but we are a bit unsure where to start, we are open to any suggestions for architectures, but one thing we would like to really see, is effective chain of thought reasoning, why for example a button placement is better in a certain design over another, this would give us a huge amount of confidence in the system going forward into production environments.

**Chief Financial Officer**

We are keen to explore this new space but it’s very important that we are able to forecast costs going forward, since we are at an experiment phase in development, strict budgets need to be enforced to ensure development costs don’t go over budget.