

Kiarra Watson  
GIXD 503A: Creative Prototyping  
Reading Responses  
October 21, 2024

#### A. Programming Design Systems - Introduction

“Digital products are displayed on screens of different sizes and with dynamic content. Digital products allow users to interact with their content, and take advantage of motion and animation. Furthermore, digital products often have temporal logic where a linear narrative is replaced by a set of complex states and transitions. All in all, digital products all share a common trait: They are created with programming languages.”

Response: This piece stood out to me because it introduces programming languages as the foundation for all digital products. I think that this solidifies the importance of the topic at-hand. Efficient designers must learn programming languages to create more dynamic work and evolve with the trajectory of the field.

“...there is a century-long bond between the field of design and new advances in technology, and if graphic designers do not become fluent in this new digital reality, they will become irrelevant. We now have the ability to write code that produces beautiful designs, and the designer of tomorrow will have to understand how to deliver on that promise.”

Response: This expands on my last response. If designers learn programming languages, they have the opportunity to expand on their design skills. If they don't, they risk being replaced with those who do.

“What happens when we try to redefine the graphic design curriculum using a programming language as the tool for the designer?...First of all, graphic designers have always used systems in their work. We use grid systems to balance our layouts and color circles to pick colors with proper distance to each other. History has shown us that systems can cure the fear of the blank canvas, and it is a powerful concept to encode these ideas into actual software. Second, code enables designers to do things they couldn't do before. Variations of a design can be tested much faster during the prototyping phase, and randomization can be used to reveal designs that the designer would never have created with a pencil. Third, it enables designers to create dynamic systems that can change their designs based on time, place, or use. Throwing a design over the wall for production is a bad legacy of the printed page, and there is no reason for the design process to end with the birth of a product.”

Response: Finally, this piece makes three arguments for why design programs should teach programming as a tool. They already use related systems and will simply be leaning into the technical aspects of their field. It also changes the way that they are able to design and to create systems as technology evolves.

#### B. What do Prototypes Prototype?

“If the artifact is to provide new functionality for users—and thus play a new role in their lives—the most important questions may concern exactly what that role should be and what features are needed to support it. If the role is well understood, but the goal of the artifact is to present its functionality in a novel way, then prototyping must focus on how the artifact will look and feel. If the artifact’s functionality is to be based on a new technique, questions of how to implement the design may be the focus of prototyping efforts.”

Response: This section provided an overview of the different ways that teams can consider the needs of a project. Based on the goal, the role of the prototype changes.

“We have proposed a shift in attention to focus on questions about the design of the artifact itself: What role will it play in a users life? How should it look and feel? How should it be implemented?”

Response: I think that this relates to the change in direction towards human-centered design thinking. When considering different ways in which a product may impact a users life, the display of the prototype will change. These few questions may present the designer with ways to consider the scope of the project at hand.

“Efficient prototypes produce answers to their designers’ most important questions in the least amount of time. Sometimes very simple representations make highly effective prototypes: e.g., the pizza-box prototype of an architect’s computer [Example 10] and the storyboard notebook [Example 1]. We define a prototype as any representation of a design idea—regardless of medium; and designers as the people who create them—regardless of their job titles.”

Response: I thought this summary was useful in relation to the examples of prototypes offered before it. Depending on the goals of the project, the needs presented by the prototype will change. Prototypes can be simple or complex.