Case study: Intelligent cognitive system for logo design

A common problem that start-ups face is to have a unique and memorable logo reflecting the brand identity or the image that the company wants to convey. Being start-ups tight with funding, they often cannot afford to engage a design firm to create the logo. InspireTech, a smart app solution provider, would like to create an app, Logo Design Assistant (LD Assistant), to encapsulate the expert knowledge in the design domain and automate the logo design process, so that users like start-ups can interact with the LD Assistant to create a nice design of brand logo quickly step by step. The LD Assistant needs to interact with the user using natural language (text) and visual prompts (images).

As an employee of InspireTech, you are assigned to shadow a logo designer, Marc Kors, to understand how logos are designed, so that you can use that knowledge in designing and developing a cognitive system to automate the process.

You found out from Marc, that when he is engaged to create a logo for a client, he typically starts by gathering essential information from the client, such as the industry the client is in, the name of the company, a slogan or key phrase they would like to include in the logo. He also needs to know the client's preference on the style and look of the logo, which may be obtained by asking the client what are the well-known logos they like or don't like, or presenting the client with logos of some existing companies and making him select his preferred ones.

After gathering enough information, Marc then starts to put things together by considering a few design elements like *logo type*, *style*, *color theme*, *icon/symbol*, *layout*, *container*, and *font*. For each element, he needs to choose from available choices. For example, the logo type may be *monogram* (using letters/acronym of company name), *wordmark* (using company name), *iconographic* (using special icon/symbol), or *combined* (using both letters/words and icon); the style can be *classic*, *retro*, *modern*, *fun*, *or handcrafted*. Figure 1 illustrates a logo with major elements labelled.

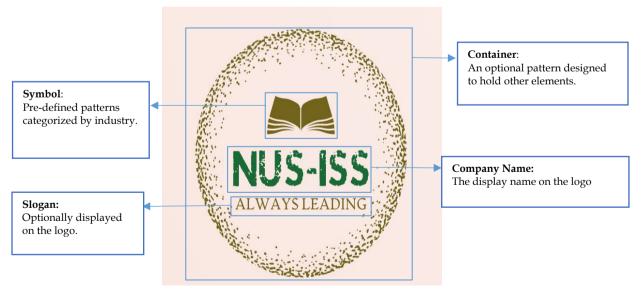


Figure 1: Example Logo

A draft design is created after making decisions on the above elements, considering the client's preferences at the same time. Marc usually discusses with the client to pick the icon and decide on the type and style. The rest of the design elements are inferred from the client's preferred logos.

Clients usually don't want their logos to be too similar to an existing one in the public domain. So after creating a draft, the designer also needs to do a check against a list of known logos to confirm the uniqueness of the draft logo. Otherwise the draft has to be modified to make the logo more distinctive.

The draft typically requires many iterations of modification and fine-tuning based on feedbacks from the client, until the client is satisfied with the design.