

## Design Challenge

We present three design challenge themes for your consideration. Please review the detailed descriptions of each and select the one you wish to explore further.

### ***Design challenge I: All about music***

Since its inception in 2003, streaming services have revolutionized our daily engagement and exploration of music. Leading this transformative market are giants like Spotify, SoundCloud, Apple Music, Pandora, and Amazon Music, YouTube Music, etc. Spotify, a major player, boasts approximately 286 million active users and a vast library of 50 million songs. Despite this, many users express dissatisfaction, feeling that even with advanced recommender algorithms, they struggle to uncover truly fresh musical experiences. Critiques have even labeled Spotify's 'Discover Weekly' feature as 'Discover Weakly'. A core issue appears to be the algorithm's preference for popular tracks, overshadowing lesser-known gems. Additionally, users lament that these platforms rarely align music recommendations with contextual factors such as location, activity, current weather, or mood.

This challenge invites you to reimagine the user experience, crafting innovative ways for users to consume and discover music in harmony with their individual contexts and preferences.

### ***Design challenge II: Change***

Breaking bad habits is notoriously challenging. Common pitfalls like smoking, leading a sedentary lifestyle, procrastination, and overspending are just a few examples. Once these habits are entrenched, altering them becomes a daunting task, even for those who are determined to change. Often, the path to change is obstructed by a lack of crucial information needed to make informed decisions.

In this digital era, can advanced technologies like recommender systems and Large Language Models (LLMs) serve as catalysts for personal and communal behavior modification, helping individuals align their actions with their aspirations? These sophisticated tools could be transformative, offering personalized guidance and support. Whether it's adopting a more active lifestyle, embracing healthier eating habits, managing finances more astutely, contributing to environmental sustainability, or engaging more proactively in civic duties, technology might hold the key.

But this journey begins with introspection and awareness. How do we recognize the need for change and set appropriate, achievable goals? What strategies can effectively initiate and sustain this evolution?

This challenge invites you to craft a novel user experience centered around behavioral change, harnessing the power of technology to transform habits and nurture a culture of positive, personal growth and collective betterment.

### ***Design challenge III: Empower***

Assistive Technologies represent a vital domain of design, aiming to meet the unique and often complex needs of diverse users. These individuals may face sensory challenges, such as blindness or deafness, or physical conditions that hinder their ability to speak or limit their motor functions, making traditional device operation difficult due to conditions like tremor or paralysis. Others may have cognitive differences that pose daily challenges. There's an immense potential for positive impact by channeling our design expertise towards these communities, tailoring solutions to cater to the wide spectrum of needs and abilities, down to the individual level.

This challenge calls for the creation of a new user experience within the realm of Assistive Technology, encouraging innovative approaches to enhance accessibility and empowerment for those navigating these challenges.

### ***Incorporating AI into Your Design***

In every aspect of user experience design, technology plays a pivotal role. This encompasses everything from data analysis to music searching capabilities, and even the use of recommender systems for suggesting recipes. This year, we're challenging each of you to integrate Large Language Models (LLMs) into your solutions.

### ***Adopting the Wizard of Oz Approach: Technology Implied, Not Implemented***

Given the time constraints, our focus will be primarily on the design of user experiences rather than the full-scale implementation of LLM systems. This enables you to simulate the functionality of any existing technology within your design. This modern take on the 'Wizard of Oz' approach involves sophisticated interaction prototyping, where the technology's full capabilities are emulated in a controlled manner. This method allows us to present a seamless and interactive user experience, akin to the final product, without the need for complete backend development. It's a strategic way to test and refine user interactions, gather valuable insights, and iterate on the design before fully committing to the development of the underlying technology.

## ***Stretching the Bounds of Technology***

While we encourage creativity and forward-thinking, your technological assumptions should remain within the realm of the near future. You're welcome to push the boundaries slightly, but your envisioned technology should not be too far-fetched.

## ***Prioritizing HCI Over AI***

It's easy for design solutions to become overly reliant on AI, resulting in a 'black box' with minimal human interaction. Our focus is on Human-Computer Interaction (HCI), not AI. Remember, AI should serve to enhance, not replace, the user experience.

## ***Choosing Your Platform***

For the development of your final interactive prototypes, we recognize desktop and mobile applications as the primary software/hardware platforms. We encourage you to leverage these mainstream platforms to showcase your innovative solutions.