

[Title slide]

In this project, we will build a Knowledge Graph for 21 Century Art and Artist.

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The goal of this project is to utilize a knowledge graph and data visualization to draw connections and map relationships in the field of contemporary arts among the artists and artworks. The team is planning to collect every artwork created in the 21st century and its corresponding artist from the website of Artsy. This knowledge graph will contain the information of the artworks, including names, sizes, styles, prices, photos, descriptions, and the information about the corresponding artists, including their names, dates of birth, their social media pages, etc.. The availability of large collections of digitized artworks can foster a deeper understanding of fine arts, ultimately supporting the spread of culture.

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Index of contemporary artists will be collected from Wikiart, as well as other personal information about the artists. WikiArt also provides a list of art genres, which might be useful for us to classify the genre of the artworks. Then we are going to connect the artists to their Social Media accounts. Since we are focusing on the artworks in the 21st century, we believe that Instagram would be a good pathway for our users to get familiar with the artists. Our alternative plan is to find out their personal websites for those artists who do not have Instagram accounts.

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We will scrape the artworks and artists information from the websites. Then we will pair the linkage between the artists in the knowledge graph and their instagram using **The Record Linkage ToolKit (RLTK)**. **Neo4j** database will be used to manage the large scale of datasets. We will use the query language Cypher to retrieve data from the knowledge. Finally, **React** will be used for the web user interface design.