August 2022

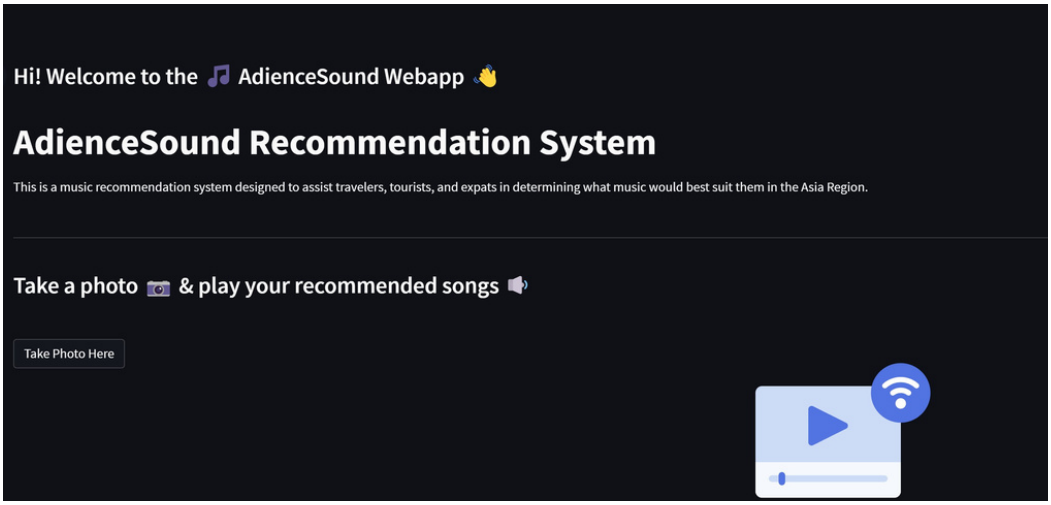
Capstone Project

ADIENCESOUND MANAGEMENT REPORT

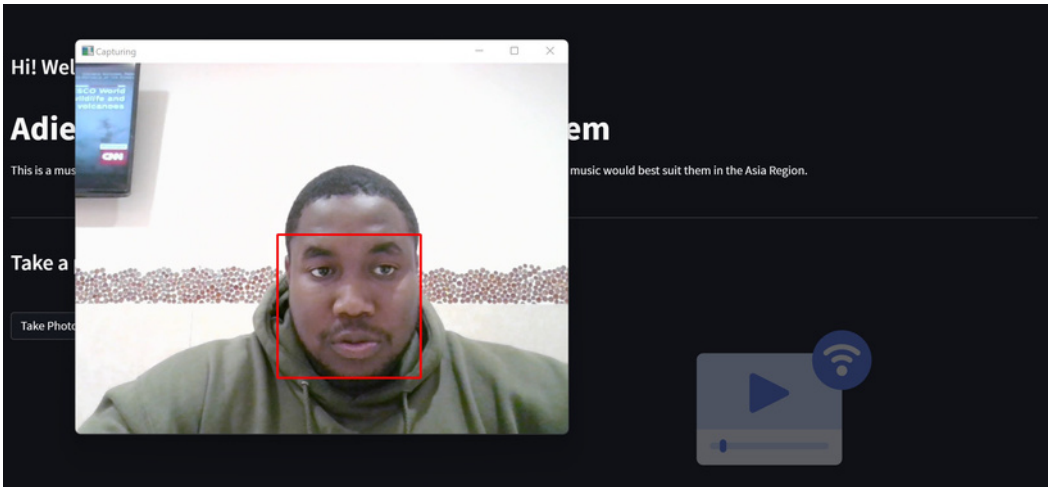
Prepared by:
Clifton Lee

ANNEX: PRODUCT GUI (WEB APP)

VIEW 1



VIEW 2



VIEW 3

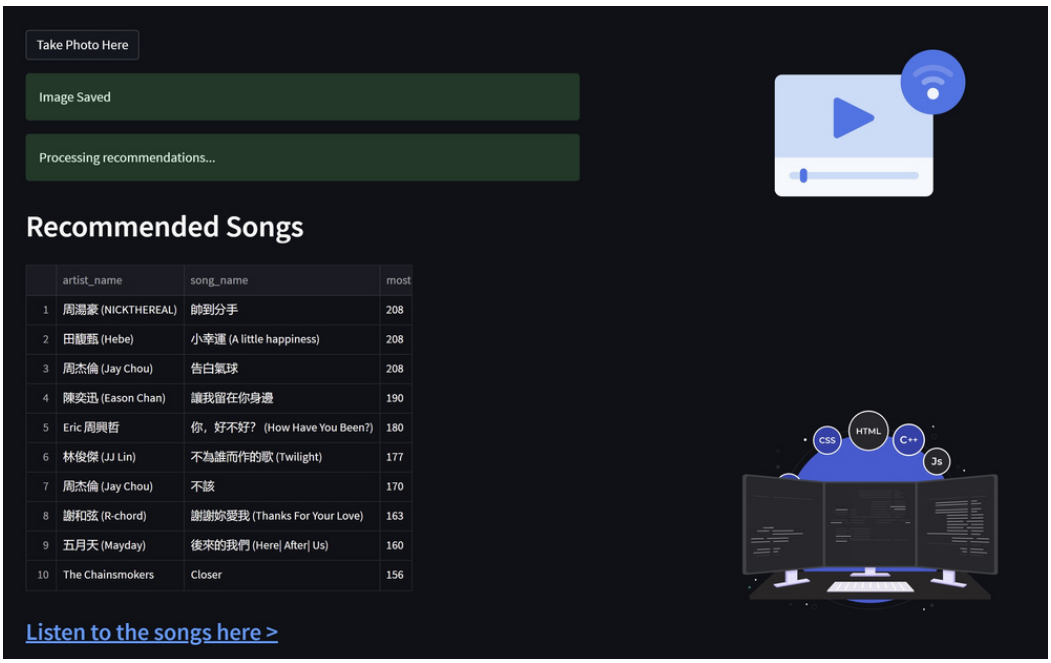


TABLE OF CONTENTS

EXECUTIVE SUMMARY

AdienceSound is a facial recognition-based music recommender service. This recommendation system can help travelers choose songs based on other users' preferences. The AdienceSound music recommendation system aims to help travelers in Asia. This project combined two datasets to create the AdienceSound recommendation system.
The Adience dataset contains 26,580 images and 2,284 participants from eight age groups.
The KKBOX dataset includes 10 million user music recordings and demographic information.
The project developed a website-integrable music recommendation system. The project's deliverables include a music recommender product along with technical documentation, to aid users.

OBJECTIVES

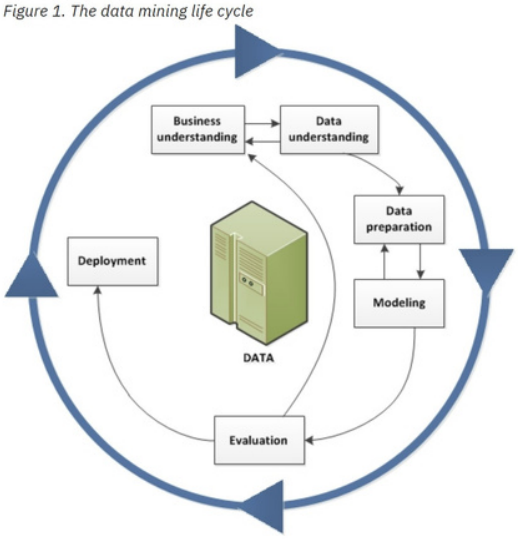
The objectives of this project aim to help visitors traveling to Asia maximize their trips by using AdienceSound. The system will recommend music based on age, gender, race, interests, and musical preferences. This allows tourists to experience Asia's sounds and rhythms while seeing its sights. The finished product will:

- Help tourists understand the local music scene and improve their travel experience.
- Assist tourists to explore new and traditional musical forms.
- Create better regional and cultural ties.
- Promote indigenous music
- Create new job opportunities for Asian musicians.

STRATEGY

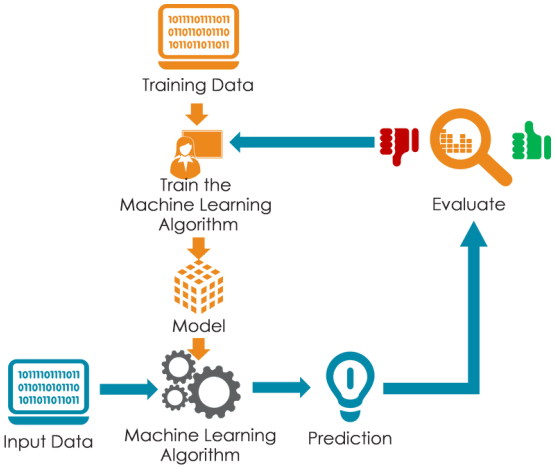
The Cross-Industry Standard Process for Data Mining (CRISP-DM) Methodology was used to create such a product. This is a tried-and-true method for directing data mining efforts.

Figure 1. The data mining life cycle



KEY PERFORMANCE INDICATORS (KPIs)

The evaluation of the models, as well as the gamification of the WebApp, are key performance indicators that the product is working well and is a success.
View of Model Process:



Please refer to the technical documentation for statistical analysis.

The Annex section contains a view of the WebApp.

FINDINGS

- More images of visitors and locals will improve the accuracy of the product's facial recognition section.
- Allowing users to enter their permanent address details can help even more with song recommendations.
- Developing a mobile app version will significantly increase product usage.

CONCLUSION

The project's goals were accomplished. The product was developed and songs were recommended based on the user's age and gender. The WebApp has a gamification vibe to it. The product was also relevant to tourists visiting Asia.

RECOMMENDATION

- Add entry fields for users to tell you where they live so you can get a better sense of their culture.