**Problem statement**

After the internet became fast enough, that most of the internet users were able to play videos. Videos in short time became huge part of the internet. According to amazon data the second most visited website on the internet is video streaming platform YouTube. Hundreds of thousands of hours of video are uploaded to YouTube every day. With this number of videos being uploaded, it is impossible to manually label and sort all the videos.

**Problem Motivation**

Categorizing videos could benefit the video streaming websites in multiple ways.

* Increased watch time. Considering that the website has personal information about the registered users, we could spot relations in the data like which genre is most popular among different age groups. Then start recommending videos based on the genre and therefore increase watch time and number of video views on the platform. Which would lead to more revenue and financial prosperity of the company.
* Additional data for neural network training
* Content sectioning. Websites like YouTube have filtered out content for young users, YouTube calls this section “YouTube kids”. For example, when video is labeled as drama then it could be automatically ruled out as a content suitable for kids.
* Content filtering in streaming services and movie databases.

**Jakarta Smart City**

Jakarta is the largest city in Indonesia, with population of more than 10 million (United Nations - Department of Economics and Social Affairs, 2018). Jakarta supports its citizens in giving a feedback on what should change, in order to deliver better public services. Mobile app named Qlue was built in order to give the citizens easy way of submitting the feedback. The city government currently receives on average 1,400 feedbacks daily and that is over 40,000 per month. It is impossible to manually handle every message. The aim of this project is to process the data faster. With enough processed data, the city will be able to identify the most important issues and focus on solving them (IBM, 2017).

**WatsomApp**

WatsomApp is an Ai-driven chatbot which is supposed to identify and prevent bulling in school, before it takes a toll on mental health of children. The company currently offers two robots, to which children can talk. The robot utilizes speech to text in order to work with the data and text to speech to interact with children. After the data is processed, the report is then shared with the head teacher or psychologist (IBM, 2018).

**CTIL – cement division**

CTIL is company which ships large amounts of cement across India. In order to complete the shipment, a valid electronic waybill is required for India’s ‘goods and services tax’. CTIL ships more than 10 million tons of cement each year and the company must manage and register thousands of electronic waybills each week. CTIL automated the electronic waybill process, allowing the company’s system to communicate directly with government systems. This system allowed for paperless processing and saves 60% of time compared to the manual processing (IBM, 2018).

**Aigine**

Ever since General Data Protection Regulation (GDPR) was adopted on April of 2016, many businesses had to change the way they are storing and dealing with the customer data. Since some companies hold so large amounts of data and it is almost impossible to manually filter out the files that contain personal information, company named Aigine created Ai which solves this problem. It searches the files in the system, which contain personal information. The Ai uses Natural Language understanding and Natural Language Classifier in order to achieve its goal (IBM, 2019).

**Kiwi.com & Interactions, LLC**

Support center calls for flight ticked providers must resolve the problems, that their customers have as soon as possible, since their flight can be taking off in few minutes. So, in 2017 Interactions, LLC announced that the company will be provider of Intelligent customer care for kiwi.com. The Ai can recognize what the customer needs just through a speech on a phone call. It can perform basic tasks such as resending the flight ticket to a customer. The Ai is not able to solve every inquiry and for more complex problems a call center agent is still required. Although the Ai is not able to deal with every customer, it greatly reduces the pressure on call center and thus eliminating the waiting lines (interactions LLC, 2017).

**Project statement**

The aim of this project is to create system that would be able to categoriz e genre based of the description of the movie. In the future this system could be used in movie databases (IMDb, CSFD etc.), movie streaming services (Netflix, Amazon video etc.) to automatically categorize movies and video streaming services (YouTube, Vimeo etc.) for content sectioning. The system is being built for English language. But with enough datasets it could potentially be used also for other languages.

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