Video Concept:

**Intro**

We are 1StepAhead are our approach is to be always one step ahead of the situation!

We are a group of passionate createives and coders who want to help fighting this crisis and our project is all about predicting the epidemic growth rate of the current outbreak of the novel coronavirus.

**Problem description**

Since first seen, wordwide case number of Covid19 rise unbelievably quickly causing chaos all over the world.

Governments introduce measures to hopefully stop further spread with different success lowering the epidemics growth rate.

We are interested in two main things:

first how the beginning growth rate is related to external factors, mainly of developmental properties. And second, how given interventions can lower the growth rates.

**Solution description**

Out approach is a Regressive Prediction Model!

First we obtained the newest Data from Johns Hopkins dataset and fitted an exponential model to the data, giving us the growth rate.

We then use this growth rate and data of the Human Development Report and Prosperity Index to fit our Regression model.

This first model allows us to predict spreading of the virus in countries, where it is not yet or only partially found!

To tackle our second question, we put together a unique dataset of interventions and their introduction date, allowing us to calculate epidemic growth rates after those interventions were made.

Adding this data into our previous model now gives us a tool to even predict how certain measures will influence the course of the epidemic in countries where there is no empirical data yet.

**WHAT IS NEW ABOUT THIS APPROACH?**

* explain how effective certain measures are through new dataset
* predict the spread of the virus in e.g. **developing countries** where we see only few cases today

**Outlook**

This was "only" a 72 hour Hackathon, so we got our Prototype model working. In the future we plan to expand our intervention dataset, fit more data into our model and do reliability tests.

Also we already worked on a data flow architecture, which updates our model automatically in real time with the current Johns Hopkins data.

We are 1Step Ahead and always One Step Ahead!