## JavaScript on Earth.

## Elon Musk needs tools to help find the perfect landing spot for the returning Martians.

## **Problem description**

In 2068 SpaceX the Interplanetary Transport System (ITS) is returning to Earth. The now 97-year-old Elon always envisioned the Mars journey to be a round-trip. So 32 colonists are returning to their home planet.

Elon Musk asked The Hague University to help these ex-Martians. We need to find the perfect landing spot on here on the Earth surface. There are many factors to take into account when landing on our surface, for example:

- Incoming asteroids
- Clouds or general weather conditions
- Elevation of landing site
- Traveltime to the base station at the Kennedy Space Center, Cape Canaveral, Florida
- Previews of potential landing spots (images)
- Pubs near the landing site?

## Assignment guidelines:

- Design and create an interface using at least two external API connection.
- Functionalities of these two API's should be effectively combined to support the landing of the spacecraft.
- Your interface should be interactive. It should enable user interaction with the API's
- Be innovative and dive into the external API possibilities.

Tips: Potentially interesting API's can be found on:

- OpenWeather: <a href="https://openweathermap.org/api">https://openweathermap.org/api</a>
- NASA: https://api.nasa.gov/index.html
- Elevation: https://algorithmia.com/algorithms/Gaploid/Elevation
- A general list with lots of API's <a href="https://apilist.fun/">https://apilist.fun/</a>
- Another list of API's <a href="https://github.com/toddmotto/public-apis">https://github.com/toddmotto/public-apis</a>

Different API's have different means of authentication. Please steer clear of API's that use OAUTH. This is a more complex (but more secure) authentication method that is beyond the scope of this course.