Url: <a href="https://github.com/hoominchu/dataviz2">https://github.com/hoominchu/dataviz2</a>

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## Data

Our team was assigned the data set that contained the **top peaks in every Indian state**. We decided on 5 peaks for the final scrollytelling as we did not want it to be too long or too short. We came up with several different ideas what the story for each peak should be. Some of the ideas are as follows:

- 1. We wanted to explore the correlation between the first ascent of the peak and its age. Intuitively, younger mountains should have a more recent first ascent.
- 2. The correlation between tourism and general weather conditions in the area where the peak is located. We wanted to see if there was any particular season in which tourism rates were higher (or lower).
- 3. We wanted to look at death rates for each peak and see if there was any correlation with the peak's height or terrain or weather patterns.
- 4. We also wanted to look at the correlation between the height of the peak and the difficulty level of climbing it. One would assume that the higher the mountain, the more difficult it is to climb. But, some research in this area showed that even though Mt. Everest is the highest mountain in the world, climbing K2 is more difficult than climbing Everest.

Unfortunately, we could not proceed with any of the above ideas as we could not find enough data to find any correlations. Finally, we decided to look at the first recorded ascent of 5 peaks and the nationalities of people who climbed these peaks for the first time. For this case, we got enough data for an interesting insight. Even though all 5 peaks are more or less part of India, none of their first ascents were carried out by Indians. Following is a table summarising the data we collected:

Name of the Peak	Date of First Ascent	Names of First Climbers	Nationality of first climbers
Anamudi	May 4th, 1862	Gen. Douglas Hamilton	British
K2	July 31st, 1954	Lino Lacedelli Achille Compagnoni	Italian
Kanchenjunga	May 25th, 1955	George Band Joe Brown	British
Namcha Barwa	Oct. 30th, 1992		Japanese and Chinese joint expedition

Joint expedition	Nanda Devi	Aug. 29th, 1936	Noel Odell Bill Tillman	American and British joint expedition
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We looked into the stories behind the first ascent of each of these peaks and some were quite interesting while some were even quite controversial. We selected these 5 peaks based on how interesting the stories of their first ascent were as well as them being difficult peaks to climb.

## Visualisation

**Template**: As the data we got is about peaks in India, we decided to use a template that complements nature. After trying some variations, we decided to add a satellite layer over the basic Mapbox layer rather than using the satellite template as the latter lacked basic state and country labels. These labels are essential for the spatial orientation of the viewer and thus form an important part of the scrollytelling experience. Moreover, the bottom label provided these labels with a fairly decent aesthetic appeal.

**Layers**: Our main layers are as follows:

- 1. State, country, city and road labels: as mentioned above, these labels influence the spatial orientation of the viewer and are thus important. We did not include the labels for minor roads as they were unnecessary and adding them would have resulted in an overcrowded map which would have taken away from the overall visual experience.
- 2. Water bodies and waterways, and land-use of national parks: these elements enhance the effect of the underlying 'natural' theme without taking away from the main data points: peaks.

**Icons for data points**: We did not want to use a generic icon for the peaks. The natural choice was to use triangles instead of circles as they would represent the shape of the peaks. But, we realised that as we were building our story around the first ascent of these peaks, we could choose a different icon that would be more appropriate than triangles. Finally, we decided on an icon that portrays a mountain with a flag on top--a representation that supports our story about the first ascents.

**Pitch**: We wanted to start the scrollytelling by giving the viewer a birds eye view of the map that they will explore further. This also helps in the spatial orientation of the viewer and gives him/her a view of all the top peaks in the country. We wanted to create a 3D experience for the viewer as a 3D view of the peaks is more realistic and hence more visually appealing than a 2D view. We realised that creating actual 3D visuals would be extremely time consuming and thus decided on keeping the pitch at a constant 60 so as to give the illusion of a 3D view. Changing the pitch for each peak would have taken away from the visual experience as it would have disoriented the viewer.

**Order of the peaks to be shown**: The virtual journey to our story will go in the order where we start climbing up all the way from the bottom of the India from the Everest of south, Anamudi followed by K2, Kanchenjunga, Namcha Barwa and finally, Nanda Devi.