Skylark Drones Technical Assessment-Full Stack Developer

At Skylark Drones, we collect a lot of data, and try to gain meaningful insights out of it.As the company grows, the data grows, and the difficulty in presenting our insight grows as well.

Problem Statement:

Create an interactive map based visualization tool for data that is spread out across time and space. We have attached some examples for projects below. If you would prefer some fancy terminology, we are looking for an interactive visualization of temporal geospatial data.

What we are looking for:

A web interface for desktop clients. It need not be usable on mobile browsers.
A clean, minimalist, intuitive UI/UX.
The final representation must be map based.
The user must be allowed to add data. You are free to choose what data is allowed to be added, and whether login credentials will be needed for the same.
Usage of appropriate database.

Guidelines: (These are some pointers to give you a sense of what we are looking for. You may choose to adapt them or ignore them if that improves the overall experience)

Changes in dashboard based on zoom level/map viewport and user interaction. The options presented to the user would not be the same when viewing the globe as a while viewing a single city/area/event
Changes in markers/icons present on map based on zoom level/map viewport and user interaction
Adding additional data (images, videos, text) that suits the project you have selected, which may appear and disappear with user interaction
Use of clean icons and animations over text based instructions
Design of UX to draw the user to certain areas/events that are of greater importance

Technical Details:
For the map, use of leaflet or mapbox is preferred.
No restrictions on language or technical stack.

Submission details:
Host the project on a service provider and send us a link. Also send us the files or a link to the repository where they are hosted.
If unfamiliar with hosting, Heroku is the suggested platform.

Some examples:
Note that you can use these examples exactly as presented, combine elements of each, or just be inspired by them to select something entirely different. Just ensure that whatever you select has elements spread across time and geography, and is interesting to explore in this manner. Also ensure that you do not use any private data in your projects.

Example 1: African Cup of Nations
Build a project that explores the last few iterations of the African Cup of Nations. The African Cup of Nations is a football tournament hosted every two years. Create a project to explore where each edition was hosted, who won, who participated, and maybe some interesting statistics about that edition of the tournament. You can also give the users the option to go to each stadium where matches were played, and some details about both the stadium and the city it is in. Allow users to select which team they were supporting, and why.
Feel free to explore the data and try to find some interesting corelations and point them out as the users explore this.

Example 2: The Mongols
Build a project that studies the growth of the Mongol Empire. Show how the territories grew over time and how other empires tried to resist this expansion. Highlight certain key battles that were fought and how they affected the empire. You can also show another empire that rose and fell entirely during the reign of the Mongols, and certain factors which led to their downfall. Allow users to add extra details to battles.

Some other ideas:
The rise in popularity of the Beatles and how their fame spread
The spread of Sony around the world
The spread of smartphone usage
The outbreak and subsequent control of H1N1 disease
The global usage of Bitcoin
The spread of Buddhism
The Harry Potter Phenomenon

Be creative.
Overall, the project must be intuitive and exciting to explore.
Focus on building a great UX. If you are unable to entirely populate all the data, focus on 3-4 elements/dashboards that will give us an understanding of the experience that you are trying to provide, and mention this in your submission. A small, clean project with missing data is preferable to one where all data is present at the cost of the overall UI/UX.