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Proposal

Primary Idea:

Over the past decade, a handful of automakers (notably, Tesla, Nissan, and Toyota) have made significant progress in their development of fully electric vehicles. Viewed as cars of the future, Tesla's Model S and Model X, Nissan's Leaf, and Toyota's Mirai have attracted an increasing number of buyers. However, a major challenge facing the electric car industry is the need to provide sufficient infrastructure for recharging cars on trips spanning long distances. While the number of electric charging stations is steadily increasing, there are still very few and their number pales in comparison to gasoline stations; what's more, consumers often are unaware of the locations of already existing charging stations. We intend to create a website that will, using a mapping API such as Google, Apple or another open-source maps option and the electric charging API from openchargemap.org, produce a mapquest-style routing option that will significantly help electric car owners. This website will provide concrete location data of charging stations along their route, enabling consumers to plan their long trips ahead.

Secondary Idea (back-up):

Scheduling a road trip is a time-consuming process that can be frustrating for many people. This prompted the emergence of apps such as TripAdvisor or Kayak that help compare flight costs between airlines to reduce this stress. Skyscanner provides a free API that allows stress-free booking of hotels and flights, placing priority on finding the cheapest and fastest options. However, each of these options involves searching for a one-way or round-trip option. What happens when people look to plan trips around Europe or the United States, or even the world without returning home until the end? Currently, the best option is to use Skyscanner to plan each one-way trip individually. However, planning a budget trip still takes orchestration. Does the order of cities to visit matter? We look to make a site that will allow entry of each destination and length of time, as well as full trip beginning and end dates, and find the best options for the overall trip, producing a financially or time-optimized order of site visits, then displaying the options for confirmation. Once booked, the entire trip could be exported to a calendar in one action. This would require the use of the Skyscanner Hotel API, the Skyscanner live pricing API, the Google calendar API, and construction of .ics files for Outlook and Apple calendars.