- **A combination of existing technologies**
- **HTML, Javascript, XML (JSON is popular now)**
- **Utilizes the XMLHttpRequest Javascript object**
- **Example time!**

What are we trying to accomplish?

- Build a mashup that would hook a Google map into San Francisco's BART (Bay Area Rapid Transit)
- Technologies needed:
    - MySQL or other technology (for caching)
    - HTML (to embed the Google map)
    - Javascript (for the Google map + AJAX)
    - PHP (to store cached content + to load content from cache)

End product?

- One HTML page that embeds a Google map.
- HTML controls (dropdown menu, option boxes, etc.) outside the Google map. The HTML control switches routes (only one route displays at a time).
- Each selected route to appear as a polyline.
- Each station to appear as a marker. Upon clicking on the marker, user sees real-time arrival/departure info for the station at hand in an info window.

Sequence in building this
- Embed a centered Google map in an HTML page.
- Confirm that you understand and are able to use markers, info windows, and polylines from the Google maps Javascript API v3.
- Identify what data would be needed from BART's Real API (for caching and real-time requests).
- Cache routes' data from BART's Real API
- Build HTML controls outside of the Google map. Use HTML controls to trigger a load from cache into the polylines and markers.
- Have the marker call up an info window when clicked on. The info window should get the real time info through a call to BART, over the net.

Sample time!