PANGEA

THE WORLD AT A GLANCE

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In 2016, the **Global Literacy Survey** revealed significant gaps between the knowledge young adults currently hold about today's world, and what they should know to successfully navigate in it.

KEY POINTS

- **1,203 college-aged adults** who attend or have attended a 2- or 4-year college in the United States were asked 75 questions about **geography**, **recent foreign affairs**, and **economics**

- **86%** said they consider themselves **at or above average** in terms of knowledge about global affairs

THE RESULTS?

THE AVERAGE SCORE ON THE SURVEY WAS

55%

A **FAILING GRADE** BY MOST EDUCATIONAL STANDARDS

OUR SOLUTION?

A CONVENIENT WAY TO ACCESS WORLD NEWS

What is PANGEA?

PANGEA as a Data Visualization Tool

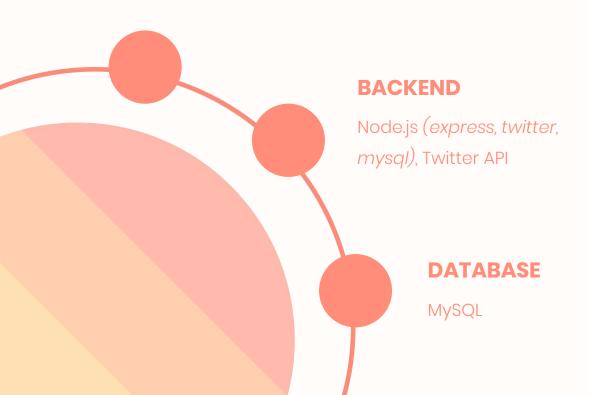Pangea is a web application with a simple map interface where users can select a location on the map and observe the recents news and trends in that area.

PANGEA as a Learning Tool

The interactive display not only informs users of trends on a global scale, but also fosters a learning environment that promotes cultural awareness and a knowledge of geography, world demographics and foreign affairs.

FRONTEND

HTML, CSS, JavaScript, Mapbox API

BACKEND

Node.js *(express, twitter, mysql)*, Twitter API

DATABASE

MySQL

Development Timeline

WEEK 10

Established MySQL database connection with Node.js server & completed testing

WEEK 9

Integrated server-side and client-side scripts & implemented mobile-responsive design

WEEK 8

Set up server-side Node.js environment & leveraged Twitter API & library for current trending news

WEEK 7

Visualized website architecture and utilized Mapbox API to build simple frontend map interface

Data Flow

GEO-based trends

The latitude and longitude are extracted from the marker and passed to the Twitter API's *trends/closest* endpoint, which return a JSON containing location data, from which the WOEID ("Where On Earth ID") and location name are passed to the *trends/place* endpoint, which then returns a JSON of trending topics & hashtags.

Marker on drag

pass lat & long to server-side endpoint

/getlocation

pass lat & long to Twitter API endpoint

trends/closest

pass woeid & name to Twitter API endpoint

trends/place

return json response to client-side script

Populate popup innerHTML

Bookmarks button on click

pass username to server-side endpoint

/bookmarks

if table does not exist

if table exists

Initialize table in database for user

pass username to /bookmarks

Query MySQL table (SELECT *)

use mysql response to build table HTML

Render bookmarks table

Bookmark icon on click

pass trend & url to server-side endpoint

/add

if user not logged in

if user is logged in

Alert user to log in

Query MySQL table (INSERT)

What We Learned

Time Management

Communication

Teamwork

PANGEA

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