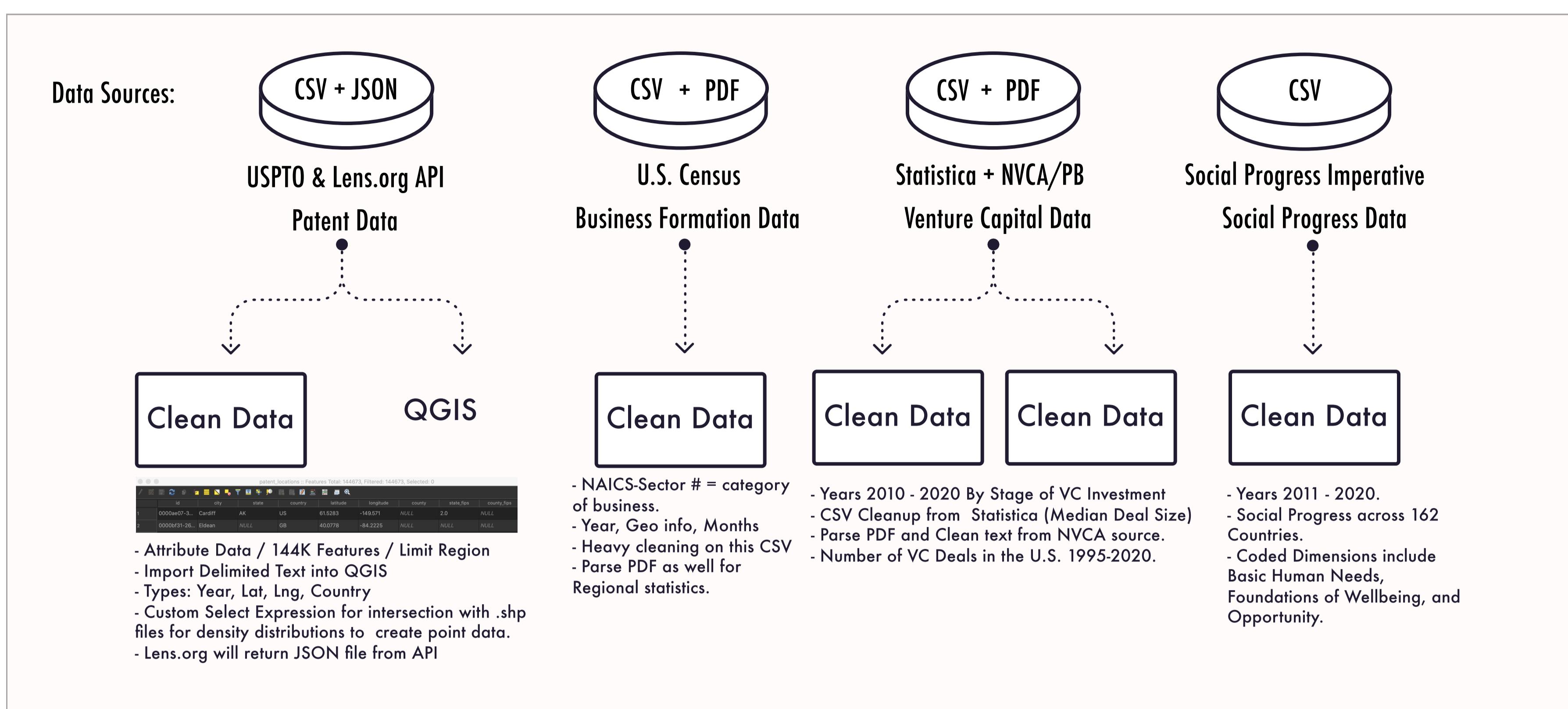


Mapping Entrepreneurial Ecosystems Through Intellectual Property Landscapes

System Diagram V_1.0 Feb. 16th, 2021 | Lee Kuczewski



Server and Backend:

Given time frame: **Will NOT** have an opportunity to connect AWS Cognito or Auth for Secure Access to App, also need to Discuss Load Balancer, Route 53 for domain.

*
**EXPLORING
ARANGO DB As
Graph Database**

If Using AWS RDS and Non-Graph DB: Sample of the kind of Data

Patent RDS Sample					
State	Time	IP_Catagory			
PK state_id varchar(2)	PK time_id integer	PK ip_category varchar(20)			
city varchar(20)	current_timestamp datetime	healthcare varchar(20)			
state_name varchar(20)	timezone varchar(20)	computer_vision varchar(20)			
zipcode integer	Year varchar(20)	ed_tech varchar(20)			
country varchar(40)	Month datetime	ai_infrastructure varchar(20)			
state_lat floating point	Day datetime	business_intelligence varchar(20)			
state_long floating point		industrial varchar(20)			

Distance					
PK distance_id integer	PK company_id varchar(20)	PK investor_id varchar(20)			
current_lat floating point	company_city varchar(20)	investor_name varchar(20)			
destination_lat floating point	company_state varchar(20)	investor_city varchar(20)			
destination_lng floating point	company_name varchar(20)	investor_state varchar(20)			
radius_from_location integer	company_inv integer	investor_lat floating point			
	company_start varchar(20)	investor_long floating point			
	company_lat floating point	investor_fund_size integer			
	company_long floating point	investor_deploy datetime			

Company					
PK company_id varchar(20)	PK investor_id varchar(20)				
company_city varchar(20)	investor_name varchar(20)				
company_state varchar(20)	investor_city varchar(20)				
company_name varchar(20)	investor_state varchar(20)				
company_inv integer	investor_lat floating point				
company_start varchar(20)	investor_long floating point				
company_lat floating point	investor_fund_size integer				
company_long floating point	investor_deploy datetime				

Web App Server Node.js / Express.js



Front End / Vue.js / Nuxt / D3.js / Mapbox / Three.js

User Events and Interaction

User interaction including discovery tool for geographic clustering, node network exploration, and charting / visualizations. Search input for location (States), Drop down or on-hover for IP category (i.e. Computer Vision), and click events for charts.

NODE NETWORK

MAP

CHARTING

