

IBM Code Challenge 2020

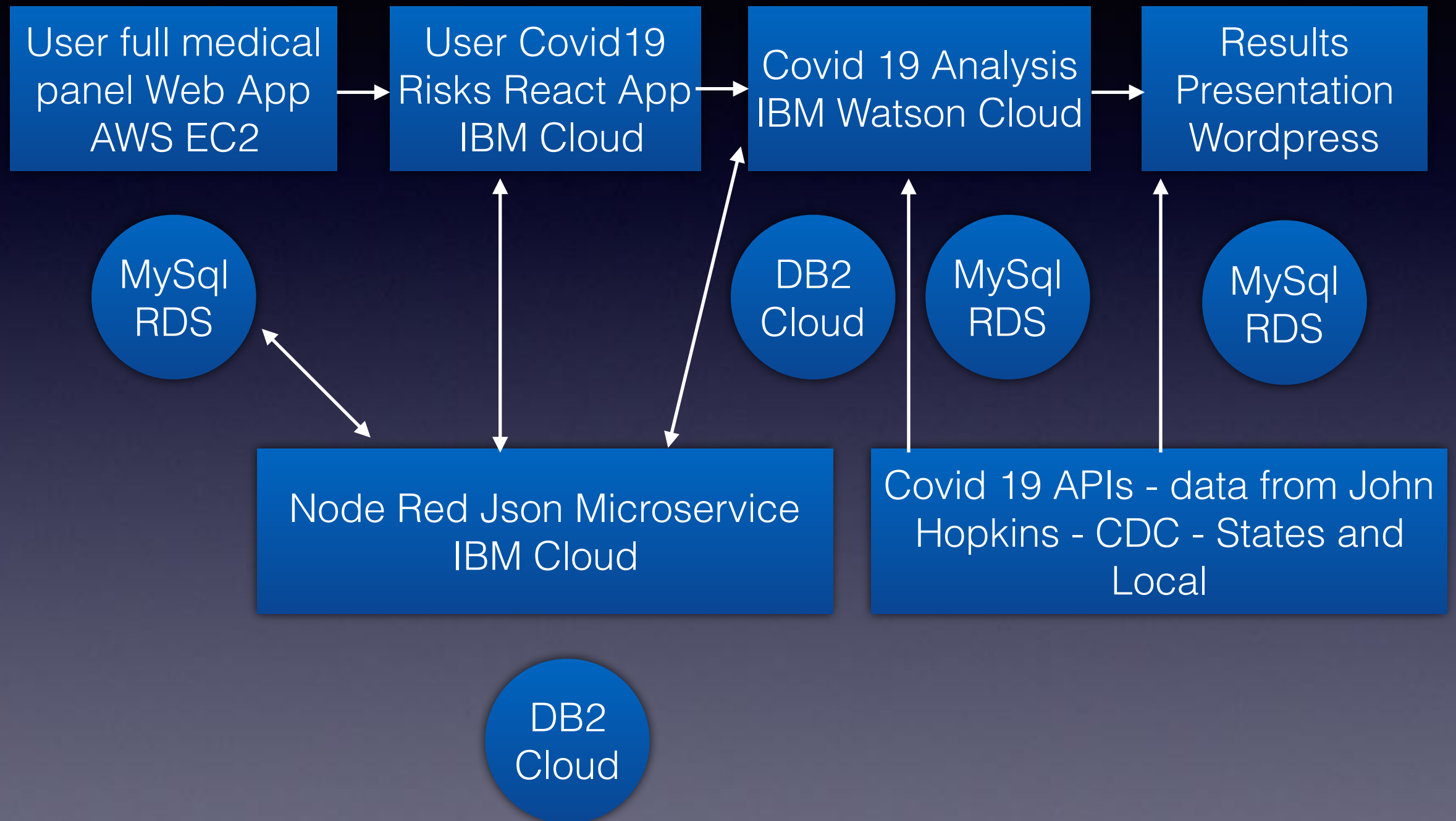
Covid 19 Risk Contact Spread Risk Assessor
Medical Risk Application
eParaTech LLC Team

Covid 19 Risk Assessor

Solution Feature Design

- AWS responsive Web App the User Contacts captured, optional Medical Panel Intake, secured MySQL database. Facing Users & includes Researcher support
- Calculate user's Contacts Risk Score. Risk for each Contact evaluated and Contact Risk Score calculated by Watson Analytics
- Calculate user's Covid 19 Medical Risk Score. Medical panel evaluated by Watson Analytics for Covid 19 risk
- Present "the backdrop" of Covid 19 prevalence in a User's Geographic Location, and the User's Contact's locations
- Present all Results on User Wordpress Portal - Risk Scores - Contact Spread and Medical risk scores, backdrop of Local Covid 19 Infection prevalence data, Articles on Covid 19, Research Results
- Extended user data is captured for Covid 19 risk conditions. Covid 19 risk conditions "Coaching and Guidance" A React App hosted on IBM Node Cloud & DB2 Cloud database
- Watson IBM Cloud - Jupyter Notebooks Analysis, IBM DB2 Cloud database, fed by MySQL, DB2, Covid APIs and data
- Covid 19 data and APIs, plus stored in DB2 Cloud

Solution Architecture



Wordpress Portal Network Solutions Hosted

- Solution is User facing - Patient or anyone in need of Covid 19 risk evaluation and guidance for Back to Normal
- Solution is Research facing - Researchers have access to Watson notebooks, Watson AI, and Covid APIs and Data. Population Health and Drug - Vaccine and Treatment research supported
- Rich Content Wordpress Portal presents results to user-Clients, and the research user

Roadmap and Maturity

- Solution is currently viable, running on 4 Platforms: AWS EC2 & MySQL, IBM Node Red, IBM Watson Cloud, Wordpress on Network Solutions (option to migrate to IBM Cloud)
- Solution Watson Analysis in Jupyter Notebooks, calculates 3 Covid 19 Risk Scores for the User, Medical plus Contact risk. Other Notebook and analysis will be created, brainstorming is fully supported by the Watson layer. Extended analysis for geographic risks, enhances our user contact tracking via employment profile, daily contacts, at risk worker or front line responder.
- AWS medical intake responsive Web Application & MySql is very mature, HIPAA Secured, Field Tested, and is licensed to IBM Code Challenge by eParaTech LLC
- **POWERFUL User Groups** - Form a Group and we evaluate All Contacts in a group of Users, Contact Spread risk across a Family, Group, Organization or Corporation - this is Essential for Back to Normal months ahead !!!