

C.A.R.E.

CAPSTONE DESIGN EXPO 2017

(Cohort Assessment & Retrieval Environment)

CS312 | Team members: Kyle Ellis, Payal Shah, Jordan Tang | Faculty adviser: Bridget McInnes Ph.D. | Sponsor adviser: Antonio Abbate M.D., Ph.D.

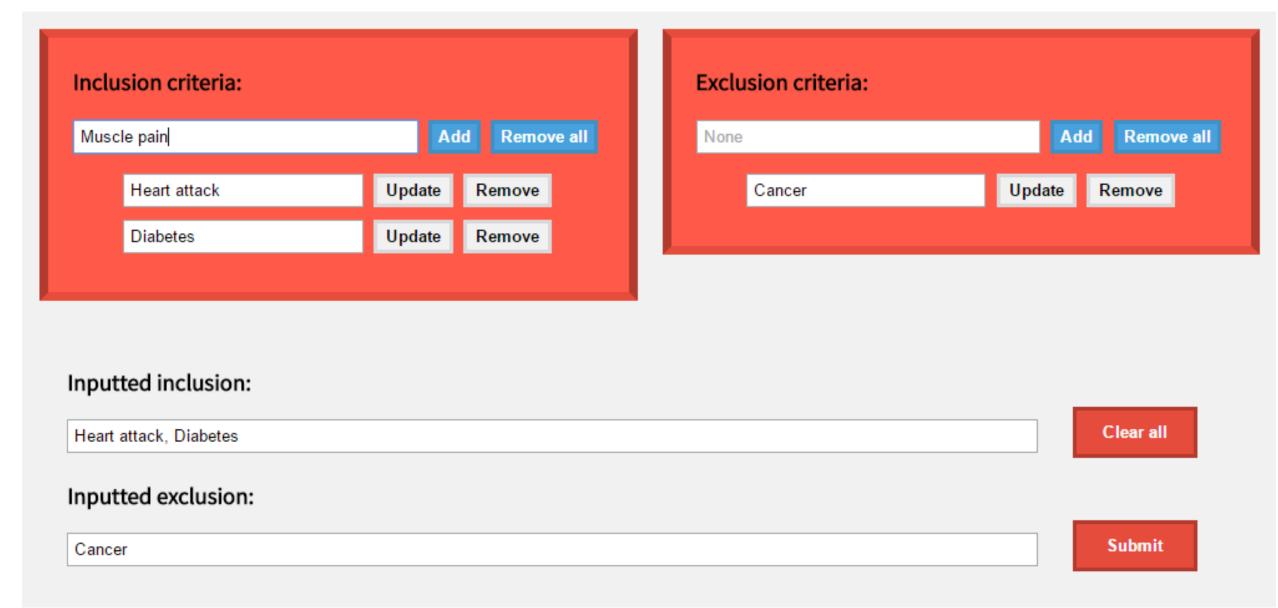
What is CARE?

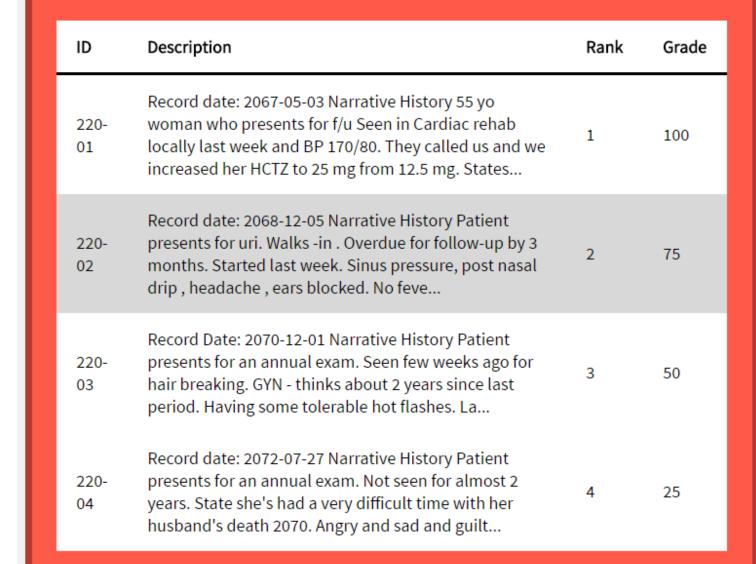
 A system that can easily identify and display which patients are best suited for a specific clinical trial based on their patient records.

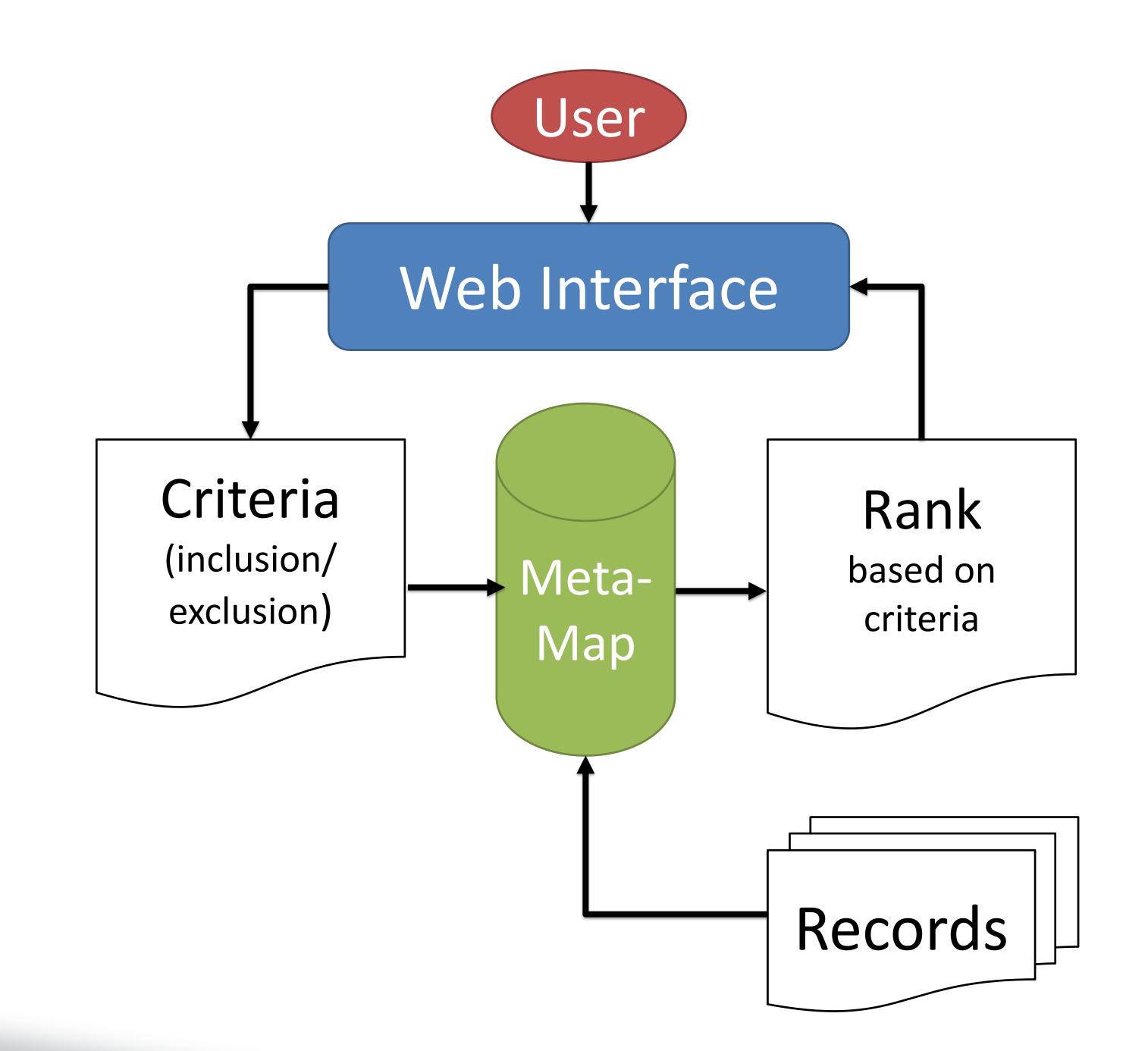
Project Background:

- During clinical trials, the identification of patients who satisfy a set of predefined criteria for the trial is instrumental.
- Distinguishing these patients on the basis of their clinical records is challenging.
- Data may be structured or unstructured, which can be very time consuming.
- One difficulty with this is data normalization; there are many ways to describe a single concept.
 - EX: Heart Attack and Myocardial Infarction both refer to the death of the heart muscle.









Advantages of CARE:

- Decrease the amount of time it would normally take for users to manually identify the best candidates for their clinical trials.
- The new system will operate more accurately and efficiently due to the automation of these previously manual processes.
- The system executes most of its processes in the background, making the user experience much smoother.
- The web interface presents information cleanly and in a manner that makes browsing records simple.

Technology Stack:



