Genome Hackathon 4.17

# MO

## Desc:

An API that will allow users to upload their genome data and compare it to a database of breast cancer patients.

## Structure:

* +RTP API
  + Log users in using this app and pull genome data
* Azure
  + (+ = build API endpoint for this)
  + Worker Processes
    - Pull genome data from +RTP when queued (\*)
    - Use Tensorflow to classify gene strand as cancerous or not (\*\*)
      * Pull test data from opensnp
      * <https://www.snpedia.com/index.php> to test genes
  + Queues
    - Genome ML prediction (\*\*)
    - Genome API pull Queue (\*)
  + Web Processes
    - Web interface page (\*\*\*)
* User Story
  + Login w/ Genome page (\*)
  + Select Genome strand (\*\*)
    - While loading, could ask user questions about health
      * No prediction, just show results and similarity
  + See chance of breast cancer on API (\*\*)

# Stretch Goals