**Application Manual**

This project uses Python3. Please make sure to run this project from the py-ig-analytics working directory. If there are any missing dependencies in your environment, you can install the missing packages like so: **pip3 install tqdm**

**py-ig-analytics**

Python project to perform the implementation guide analysis. This project consists of four python files:

* main.py
  + Main python module to run entire analysis from start to finish.
* getFHIRIGs.py
  + Uses qas.json and Simplifier.net API to download the FHIR IG's
* validate.py
  + Will first check to make sure that each package has both a package.json and index.json files.
  + Then checks to make sure the package.json has the mandatory fields ['name','version','description','dependencies','author']
  + While checking those fields it records what dependencies are in each package
  + Then checks resources present in the "package" folder other than package.json and index.json.
  + This also returns a list of resources and a list of resource types used in each package.
  + This outputs a csv to metadata/metadata.csv
* analytics.py
  + Cleans the metadata.csv that will be used for GitHub pages.
  + Creates a histogram of the status of all packages.
  + Creates a histogram of the dependency usage & CSV.
  + Creates a histogram of the top 10 resources present & CSV.
  + Creates a histogram of the top 10 resource types present & CSV.

To get output, please run **main.py** from the py-ig-analytics directory. In the root level of the project, you can find two new directories. **output** and **metadata**. The output directory contains the FHIR IG's while the metadata folder includes all of the analysis and histograms stored as CSV files and histogram images. To view results, open **index.html** in your browser or go to: <https://inferno-community.github.io/fhir-ig-analytics/>