

Python Project

Group: Mission to the Moon

```
urror_mod = modifier_ob
 mirror object to mirror
irror_mod.mirror_object
peration == "MIRROR_X";
mirror_mod.use_x = True
irror_mod.use_y = False
mirror_mod.use_z = False
 _operation == "MIRROR_Y"
 irror_mod.use_x = False
lrror_mod.use_y = True
 lrror_mod.use_z = False
  operation == "MIRROR_Z":
  rror_mod.use_x = False
 lrror_mod.use_y = False
  rror_mod.use_z = True
 melection at the end -add
   ob.select= 1
  er_ob.select=1
   ntext.scene.objects.action
   "Selected" + str(modifie
  irror ob.select = 0
  bpy.context.selected_ob
ata.objects[one.name].sel
 int("please select exactle
 -- OPERATOR CLASSES -
        .mirror_mirror_x"
```

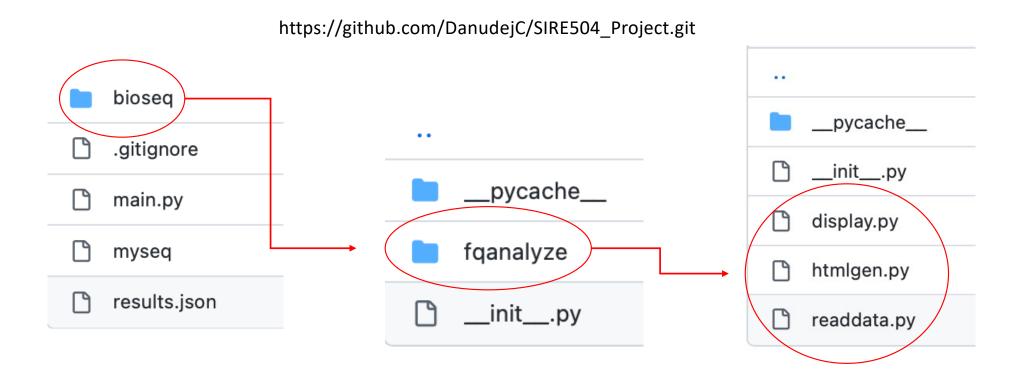
Overview

- Introduction to Program
- Function and code
 - Import .gz file and generate .json
 - Read length
 - Q-Score
 - Min, max, mean
 - Visualization to HTML
- Demonstration
 - Help
 - Analysis
 - Results

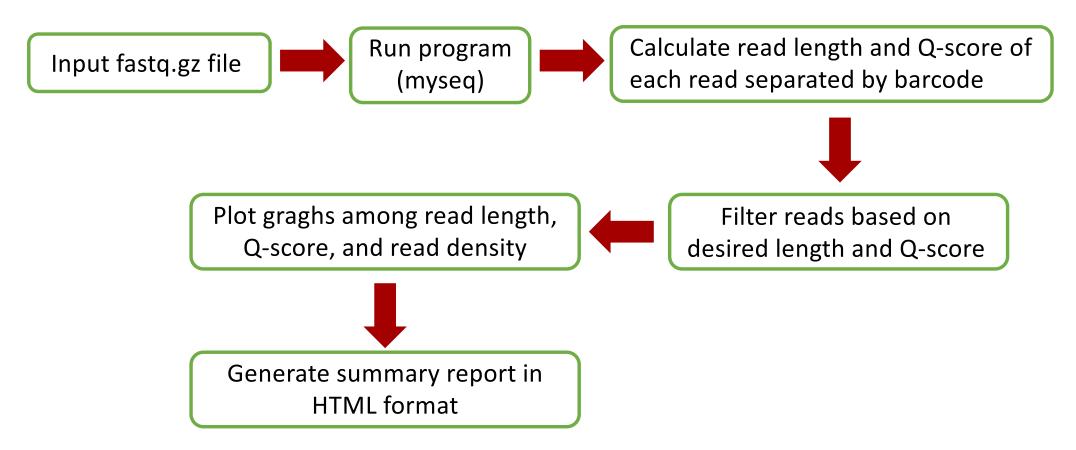
What our program (myseq) does

- Analyze read length and Qscore
- Filter reads based on read length and Q-score
- Plot graphs among read density, read length and Q-score
- Generate summary report in HTML format

Program package



Program Workflow



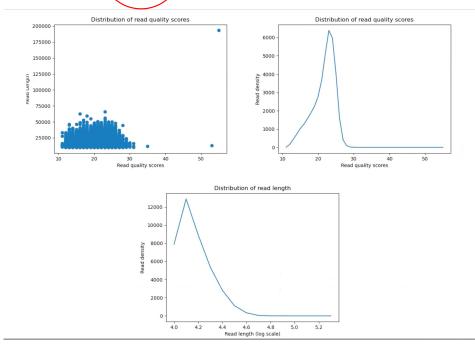
Program Outputs

To The Moon Project

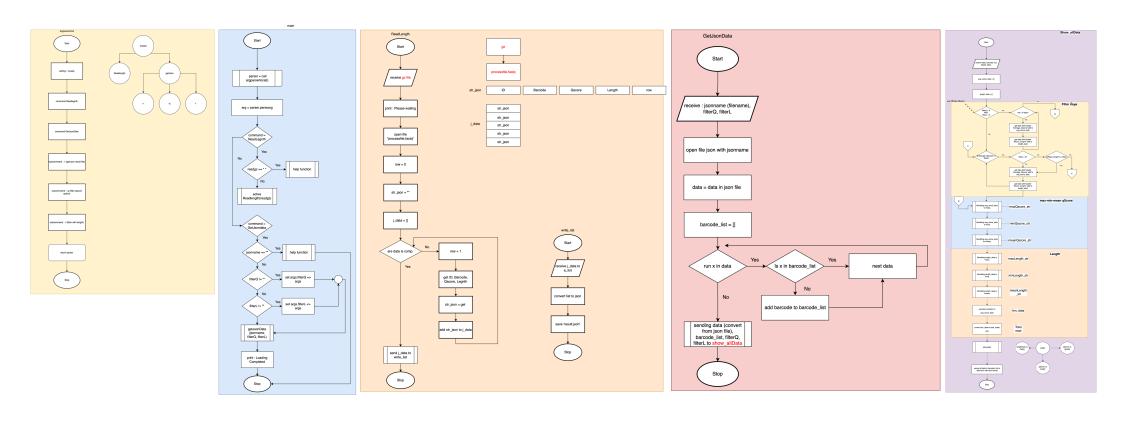
FASTQ Read Analysis Report.

Summary of read length and Qscores

Barcode	Tetal Reads	Max(Qscore)	Min(Qscore)	Mean(Qscore)	Max(length)	Min(length)	Mean(length)
ALL /	39,445	55.0	11.0	21.54	193,225	10000	15,556
barcode01	99,747	55.0	11.0	21.66	193,225	10000	15,138
barcode02	265,431	53.0	11.0	21.51	65,784	10000	15,658



Program Workflow (in details)



Coding

- Tone read file and find Read Length
- Kim Average Q-Score of each read
- Champ Filtering of Q-score and read length
- Trey Visualisation and report