

Health Care

PURPOSE

- ▶ The healthcare-react platform was developed by a team of experienced software engineers and bioinformaticians. The team has a deep understanding of NGS data analysis and they are experts in using cloud computing to accelerate the analysis process.

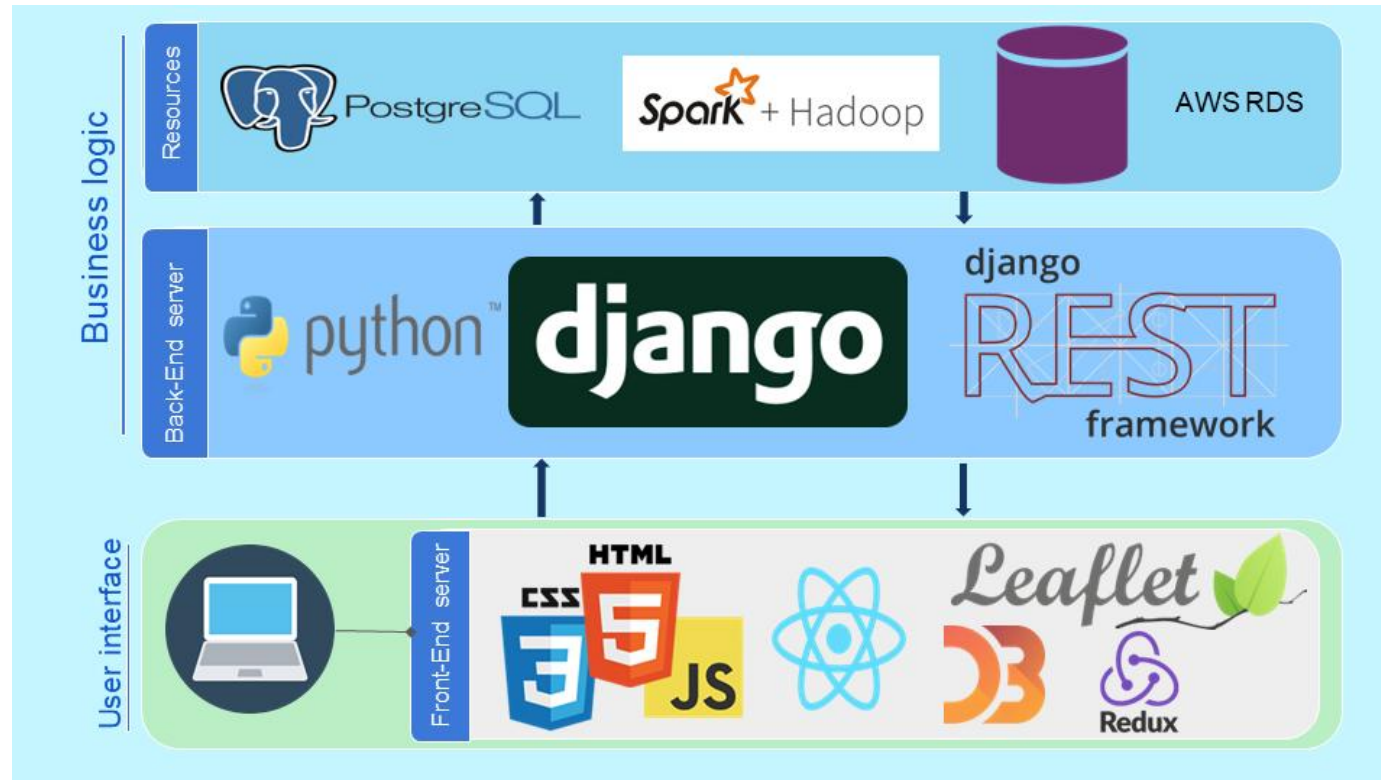
CLIENT

- National Cancer center (NCC)
- Korea Disease Control and Prevention Agency
- Korea Health Industry and Development Institute
- South korea
 - NCC is using 100 to 200 samples every day for analysing the data.
 - 3BIGS uses the platform for internal research and Development purpose.
 - Easily deployed in Amazon Web Services (AWS) and Google Cloud Platform (GCP)

3BIGS Approach

- ▶ The company used the healthcare-react platform to analyze the NGS data. The platform was able to perform both basic and advanced analysis, and it was compatible with all available sequencing platforms. The company was able to quickly and easily analyze the data, and they were able to identify potential drug targets.

3BIGS Approach



SOFTWARE SERVICES

- Customization of the platform to meet specific needs
- Integration with other software systems
- Training on how to use the platform
- User-friendly interface
- Compatibility with all available sequencing platforms
- Support for different data input formats

SOFTWARE SERVICES

- Integration with more than 8 publicly available databases
- Cost-effective: services can be cost-effective, as they can help researchers to avoid the need to purchase expensive hardware and software.
- Parallel Processing and Work Flow Management
- High-level cloud computing environment : The company can also provide cloud-based computing services for NGS data analysis. This allows researchers to access powerful computing resources without having to invest in their own hardware.
- Ability to perform both basic and advanced analysis

SOFTWARE SERVICES

- Ability to build custom pipelines
- Data analysis pipelines: The company can develop custom data analysis pipelines for specific NGS projects. These pipelines can be used to identify genetic mutations, analyze gene expression, and perform other types of NGS data analysis.
- Data visualization: The company can also develop data visualization tools that can be used to display NGS data in a clear and understandable way. These tools can be used to create interactive plots, graphs, and other visualizations that can help researchers to understand their data.
- Reporting and Exporting: Provide software services that allow users to generate comprehensive reports summarizing their genetic analysis results. Enable customizable report templates and exporting options to different file formats (e.g., PDF, Excel, CSV), ensuring flexibility and ease of interpretation for researchers, healthcare professionals.
- Integration with HUBIO platform

RESULTS

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Advance Analysis

Analysis Per Page: 5 + Add Advance Analysis

Filters

Search...

Project Type

--Select--

Select Analysis

--Select--

Search Reset

Complete Analysis Samples: 1

Name Of Advance Analysis: **Test**

Analysis Name: **Sam-Test-Hg19**

Created On: 26-4-2023

Variant Types

- ✓ Stop Lost
- ✓ Start Lost
- ✓ Stop Gained
- ✓ Intron Variant
- ✓ Inframe Deletion
- ✓ Missense Variant
- ✓ Inframe Insertion
- ✓ Inframe Deletion

Selected Variants: 26 / 26

Advanced Analysis Samples: 1

Name Of Advance Analysis: **TEST2**

Analysis Name: **Mutect_test2**

Created On: 5-4-2023

Variant Types

- ✓ Stop Lost
- ✓ Start Lost
- ✓ Stop Gained
- ✓ Intron Variant
- ✓ Inframe Deletion
- ✓ Missense Variant
- ✓ Inframe Insertion
- ✓ Inframe Deletion

Selected Variants: 26 / 26

Advanced Analysis Samples: 1

Name Of Advance Analysis: **TEST 1**

Analysis Name: **Mutect_test**

Created On: 5-4-2023

Variant Types

- ✓ Stop Lost
- ✓ Start Lost
- ✓ Stop Gained
- ✓ Intron Variant
- ✓ Inframe Deletion
- ✓ Missense Variant
- ✓ Inframe Insertion
- ✓ Inframe Deletion

Selected Variants: 26 / 26

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SnpEff Vsp Circos Sankey Anatomogram Ideogram Demographics Sunburst

SnpEff

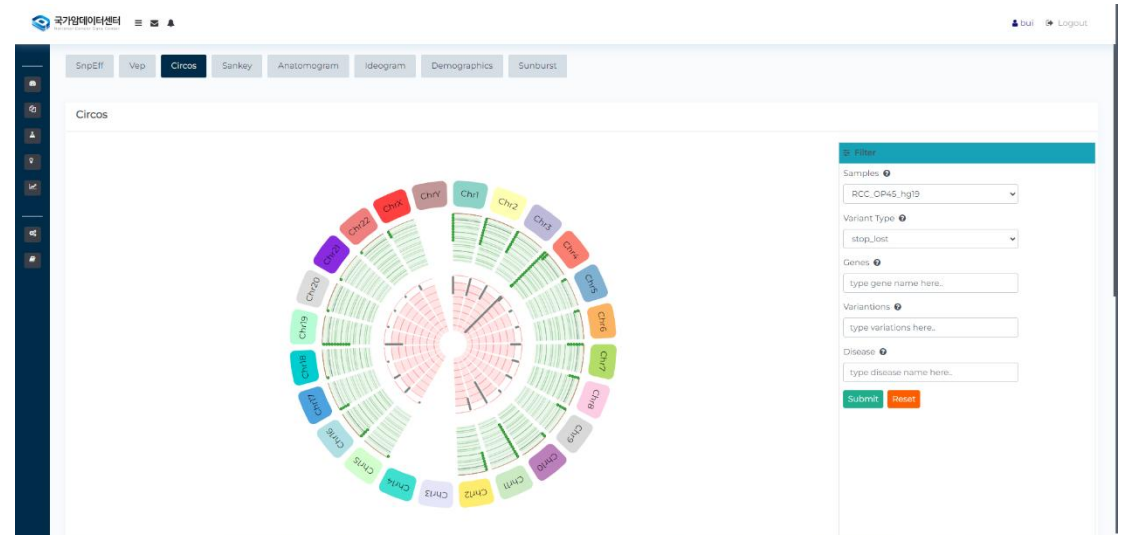
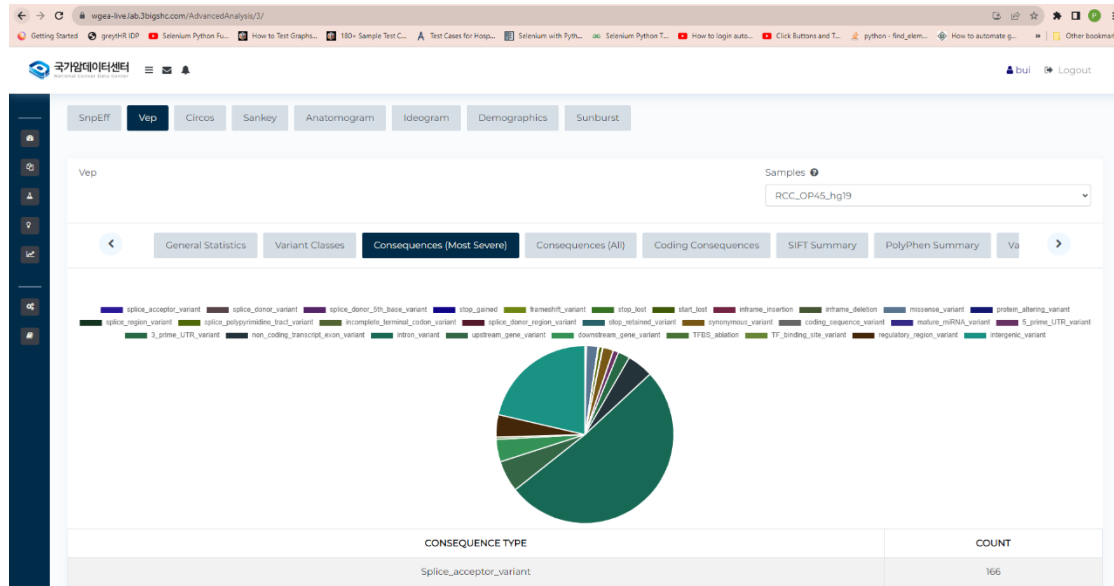
Samples: 1

RCC_OP45_hg19

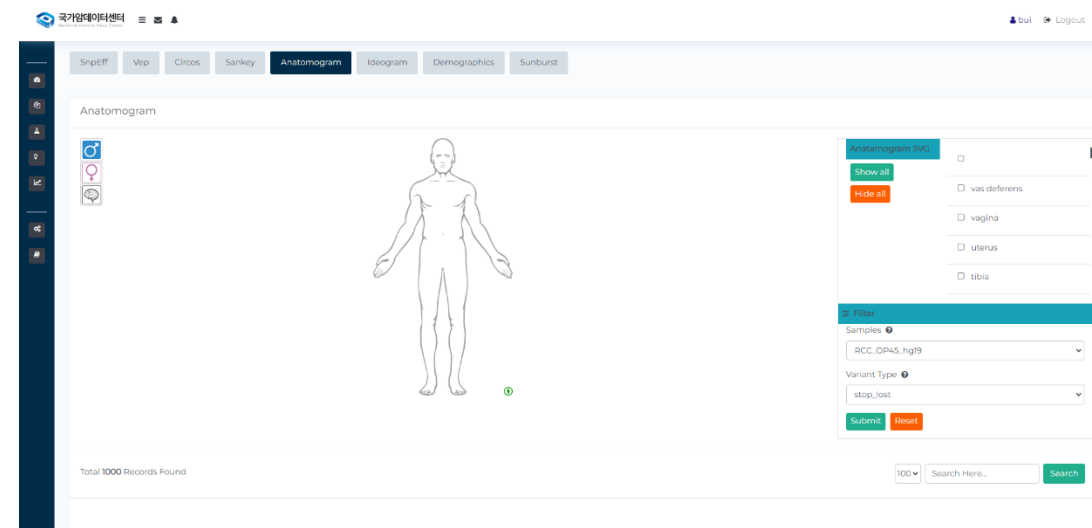
Summary Variants Rate Details Number Variants By Type Number Of Effects By Impact Number Of Effects By Functional Class Number Of Effects By Type

Genome	GRCh38.86
Date	2023-04-13 07:26
SnpEff Version	SnpEff 5.1d (Build 2022-04-19 15:49), By Pablo Cingolani
Warnings	379,005
Errors	21,138
Number Of Lines (Input File)	657,474
Number Of Variants (Before Filter)	658,985
Number Of Not Variants (I.E. Reference Equals Alternative)	0
Number Of Variants Processed (I.E. After Filter And Non-Variants)	658,650

RESULTS



RESULTS



RESULTS

THANK YOU