SUSE

Analytics Edge Ecosystem Workloads - Google Summer of Code

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Contents

1 Read Original Draft here

https://drive.google.com/file/d/1MWzRoN5o8Y85iubXKw_dlvn4-AkX9-Mw/view?usp=sharing

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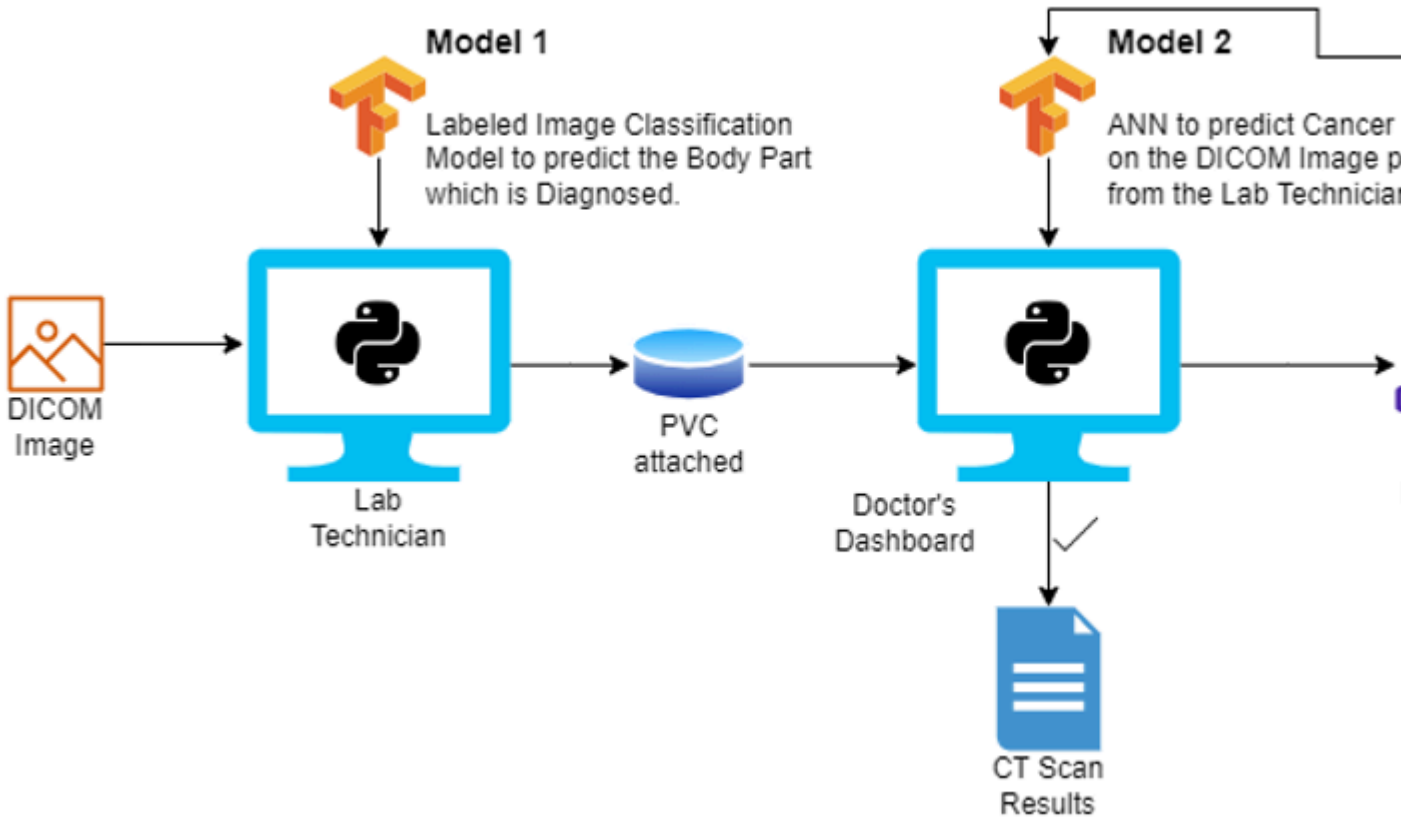
This static webpage to submit the Google Summer of Code work for final evaluation. It is intended to point out to the Application documentation and walkthroughs for the Analytics Edge Ecosystem Workloads - Healthcare project. The project is a part of the Google Summer of Code 2022 program.

3 Project Description

This Document will point out to the detailed approach undertaken to accomplish this project. The project is developed under mentorship of Bryan Gartner, Ann Davis, Brian Fromme and the SUSE organization.

This guide introduces the basic concepts and steps to install, configure, and use the Cancer Prediction System in a SUSE Rancher Kubernetes environment. It uses Convolutional Neural Nets (CNNs) to automatically recognize the complex patterns in imaging data, providing quantitative as well as qualitative assessments of data within a short period of time.

4 Project Architecture



5 Project Walkthrough

Visit this link to view the project walkthrough published on Youtube (https://youtu.be/Hy00J1eo-Q1c).

6 Project Repository

Project source code is available on the official GitHub repository OpenSUSE Rancher (Google Summer of Code 2022)- Healthcare (https://github.com/abhi-bhatra/ct_image_scanning).

7 Project Documentation

Documentation is published on official SUSE technical reference documentation website. You can also read the How-To start Guide available on the project repository. Visit this link to view the documentation published on GitHub at Getting Started with Cancer Prediction System on your cluster (https://github.com/abhi-bhatra/ct_image_scanning/blob/master/README.md#run-the-application).

Note

At the time of creation of the documentation, official documentation is under review by SUSE Team for grammatical and syntactical errors. Soon, it will be available on the official website. Hence, you can see the draft document of the project work here.

8 Other Documentation Links

- Unite Clusters with Rancher (https://www.linkedin.com/pulse/unite-clusters-rancher-part-1-gso-abhinav-sharma-he-him-/)
- Deploy Single Node Cluster using K3s or RKE (https://medium.com/@abhinavsharma332/deploy-single-node-cluster-using-k3s-or-rke-6fc9e6a38b66)
- Getting Started with Sample workload over Rancher (https://medium.com/@abhinavsharma332/deploying-wordpress-over-rancher-cb9539b1d7da)
- Empowering Machine Learning Application on Rancher (https://medium.com/@abhinavsharma332/empowering-machine-learning-applications-on-rancher-f4e368a9009)
- Orchestrate Machine Learning Model with Kubeflow (https://medium.com/@abhinavsharma332/orchestrate-machine-learning-model-with-kubeflow-11945e7801b5)

9 Project License

Project is licensed under the Apache License, Version 2.0. A copy of the license is available on the official GitHub repository (https://github.com/abhi-bhatra/ct_image_scanning/blob/master/LICENSE.md).

10 Project Contact

For any queries, please contact the author at the Discussions section of the official GitHub repository.

https://github.com/abhi-bhatra/ct_image_scanning/discussions

11 Project Acknowledgements

This project is a part of the Google Summer of Code 2022 program. The project is developed under mentorship of Bryan Gartner (https://github.com/bwgartner), Ann Davis, Brian Fromme and the SUSE organization.

12 Project References

- SUSE Rancher (https://www.suse.com/products/rancher/)
- SUSE Technical Reference Documentation: Kubernetes (https://documentation.suse.com/trd/kubernetes/)
- Preparing for the next wave of transformation (https://www.suse.com/c/preparing-for-the-next-wave-of-transformation/)

13 Project Disclaimer

This project is a part of the Google Summer of Code 2022 program. The project is developed under mentorship of Bryan Gartner, Ann Davis, Brian Fromme and the SUSE organization. The project is not an official SUSE product and is not supported by SUSE. The project is licensed under the Apache License, Version 2.0. A copy of the license is available on the official GitHub repository. For any queries, please contact the author at the Discussions section of the official GitHub repository.

14 Project Author

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15 Future Reference

https://github.com/abhi-bhatra/ct_image_scanning/issues