

Potato plant classification App



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Presentation flow

- Project goal
- Data
- Process
- Demo / Sample prediction
- Further work



Project goal

- To help farmers who grow potatoes from economic loss because of two main disease.



Data

- Data gathered from Kaggle data science competition platform



Process

- EDA
- Data pre-processing
- Build the model
- Create an app



EDA

- 3 classes
Early_Blight
Late_Blight
Healthy
- 3 channel (RGB)
- 256 by 256



Early_Blight



Late_Blight



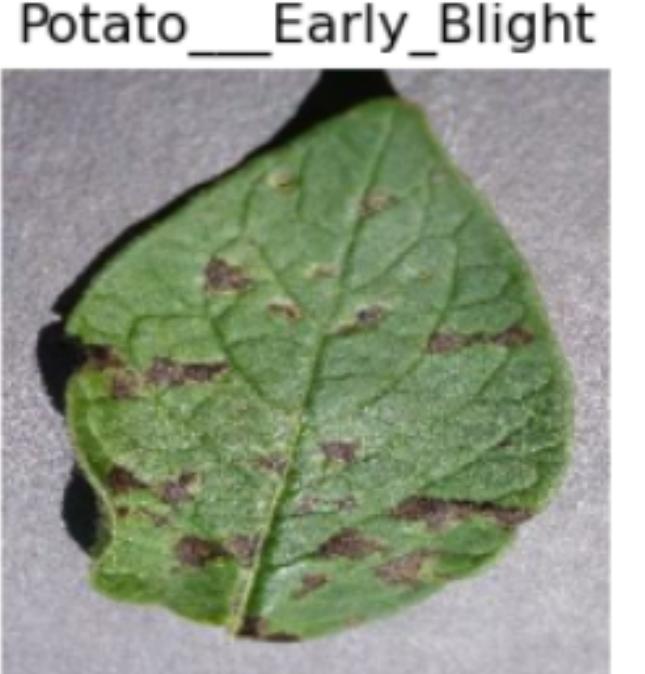
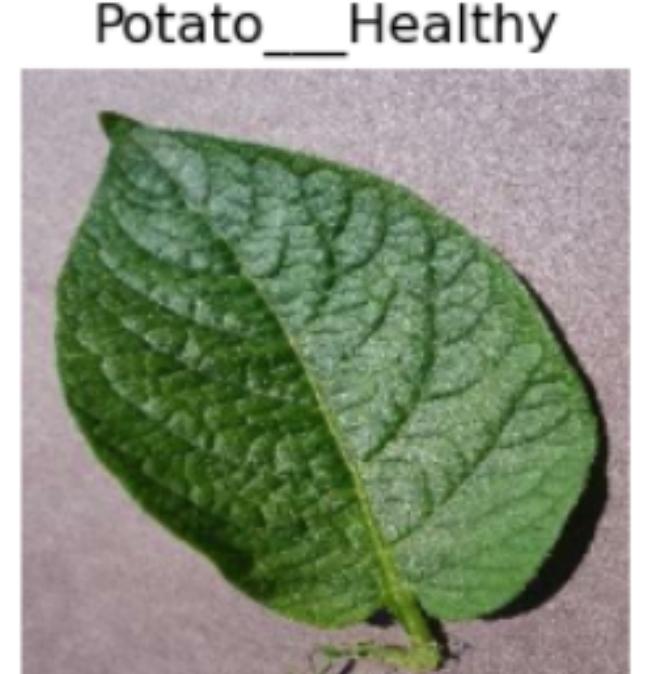
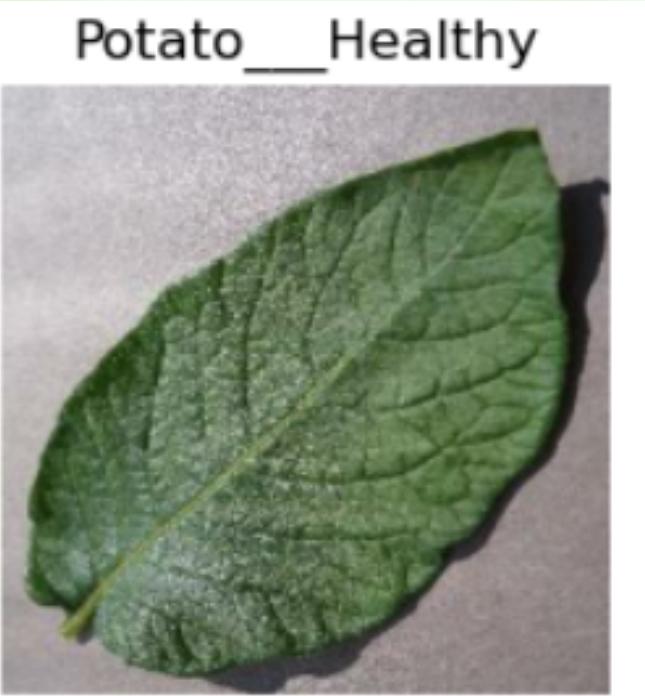
Healthy



It is difficult to tell the plant class type by just looking at it.



But it is true that most of the pure green leaf's represent healthiness of the plant.



ML Model

- CNN
- Best model 96% accuracy



Demo/Sample prediction

Actual: Potato Early_Blight,
Predicted: Potato Early_Blight.
Confidence: 99.99%



Actual: Potato Healthy,
Predicted: Potato Healthy.
Confidence: 99.95%



Further work

- Add additional factor.
- Optimize the model.
- Create fully functional mobile app.



Thank you for listening!

